VREF Research Synthesis Project
Governance of Metropolitan Transport
Background Paper

GOVERNANCE OF METROPOLITAN TRANSPORT IN NINE COUNTRIES IN WESTERN EUROPE

By: Måns Lönnroth
April 2019

GOVERNANCE OF METROPOLITAN TRANSPORT IN NINE COUNTRIES IN WESTERN EUROPE

By: Måns Lönnroth

The purpose of this and four more papers is to better understand governance of metropolitan transport as an introduction to a VREF discussion on priorities of future research funding. Most academic studies on metropolitan transport discuss technologies and/or WHAT should be done; far fewer studies are concerned with HOW improvements in metropolitan transport in fact are carried out. Governance of metropolitan transport should be better understood.

This paper is one of five background papers for the VREF synthesis on comparative governance of metropolitan transport and how this is treated in the VREF portfolio. The second paper is a comparative study of Canada, the US and Australia. Two papers are on BRT in Latin America and India and one on BRT and para-transit in Africa.

This paper is based on nine countries in Western Europe: the UK, France, Germany, Austria, the Netherlands and the four Nordic countries. Two of these are federal countries and the remaining seven are unitary ones. The paper has a limited scope and is primarily about the governance of public transport and in some cases also about road traffic. Freight is not treated at all and the governance of urban place only briefly.

Governance is about the exercise of power and comes in political, commercial, legal and professional forms under formal rules as well as informal practice. The governance of metropolitan transport rests on the interaction between the politics of land use, property development and transport within a given constitutional framework. Geography and water can also be a formative factor.

Both this paper and the paper on Canada, the US and Australia are based on brief case studies that illustrate the various ways in how governance of metropolitan transport can be organized and how power is exercised. The assumption is that governance of both transit and road traffic can best be explained by how the permanent need for tax-based subsidies have been met over time depending on national constitutions and local and regional politics. Sometimes it is also possible to understand some of the interactions with land use regimes and their politics. A better understanding of how subsidy regimes and land use regimes are linked would require a deeper understanding of the relations between these two regimes and the property market and its financing. This is too complex a topic for this limited study but would deepen the understanding why some metropolitan transport systems evolve primarily along a motorway-oriented development while others evolve primarily along a transit-oriented development. In practice it is always both, but the relative role of one or the other differs substantially between metropolitan regions. One aspect is whether property values in fact reflect the quality of transit service or not, which again conceivably would differ between places and over time.

This paper is based on interviews and studies of written material in the nine countries. Each country-specific text has been vetted by the interviewees. The nine cases are more varied than the nine cases in the Canada-US paper and illustrate the importance of constitutions and in particular the role given to local authorities and to taxation at various levels of government; organizing principles with respect to markets and the state. Both papers illustrate the primacy of politics within given formal structures of governance.

A metropolitan region is commonly defined as a labor market region, where employers can search for employees over an entire region and people can search for jobs over the same region. As mobility evolves the

metropolitan region evolves. The capacity to adapt subsidy regimes to evolving boundaries is a key challenge for governance structures and are dealt with quite differently in different countries.
Certain topics are recurring through the nine countries and are worth reflecting on further. Examples are

- The financing of metropolitan public transport and in particular the extent to which other beneficiaries than the direct users are contributing. The UK, France, Denmark, Norway and Sweden are cases in point;

- What are the relations between land use regimes and subsidy regimes?

- Who will organize new mobility services and how will these be linked to existing public transport authorities. What is the role of confidential data on passenger trips in new business models?

- How will the continued electrification of cars in metropolitan areas be affected by the organization of the electricity industry and its links with the metropolitan transport organizations.

- What is the role of mayors as political actors.

- How is the role of place-making and non-motorized transport evolving.

- Together with the nine cases in Canada and the US: how can the variations between fare box recovery and annual unlinked trips per capita best be explained?

There are also country-specific topics that may have wider significance. Examples include:

- The UK: how will the ongoing devolution to and empowerment of metro-regions in the North of England play itself out in metropolitan transport.

- France: how will the French public transport operators develop new mobility services.

- Germany: the role of Deutsche Bahn and the German car manufacturers in new mobility services

- The Netherlands: will the Dutch provincial transport authorities primarily be takers of new mobility services or will they be active participants.

- Denmark: will the Copenhagen region catch up with other metropolitan regions in integrating the different transport operators?

- Norway and Sweden: how will road tolls and congestion charges develop?

- Finland: is there any chance than a strong software culture and freely available passenger data can stimulate small scale mobility service companies?

The following text consists of the nine case studies.

1 THE CASES IN ENGLAND/UK

- *The UK does not have any integrated metropolitan transport in the French or German sense. Railway companies provide metropolitan transport services but these are usually not integrated with local transport services. Transport for London runs a very good service in the 33 London boroughs but is no equivalent to Ile de France mobilités. The London metropolitan region extends to the channel coast but the rail or bus services are not integrated with TfL.*

The TfGM (Transport for Greater Manchester) does not have any equivalent to SYTRAL under the Metropole de Lyon for providing transport services. The UK is thus an outlier in the governance of metropolitan transport in comparison to other EU countries, Canada or even several regions in the US.

The UK's lack of governance of metropolitan transport is less by design and more by default. Is was not always so and there are signs of a return to 'before'.

The default has several causes some of which have deep roots in the organization of British society (for Britain, the term organization is more apt than constitution). But the main causes date back some 35-40 years.

The 19th century Manchester town hall is an illustration of the time 'before', a memorial to civic pride and the idea that collective action can deliver a common good. Greater Manchester ran for decades a public transport service for ten local authorities based on municipal bus companies around an extensive metropolitan railway network run by British Rail. Similar services existed in other large metropolitan regions outside London.

The idea of a municipally delivered common good was dismantled (more aptly: dynamited) in the early 1980's as one element in the drastic shift in UK politics that followed the economic crisis of the late 1970's.

Local governments are not protected by a constitution as in most other countries (except Canada, Australia and New Zealand). The central government and parliament can therefore treat local governments as they see fit. One consequence is that municipal debt is seen as a part of the national debt. This may not matter in normal times but it certainly does in times of economic crisis.

The central government dominates public life to a degree unheard of even in France and the institutions of municipal and metropolitan transport have been (outside London and Northern Ireland) been fragmented since the mid 1980's.

The Treasury's response to the economic crisis was to systematically dismantle the municipal tax base and control municipal borrowing. Doing away with municipal support for public transport was one step of many.

The central government also waged a 'Hayek-inspired' war against 'municipal socialism'. The directly elected metropolitan city councils that delivered local bus services were abolished and the municipally controlled bus services were opened up to privatization and deregulation. Anyone could run a bus-line, subject to general criteria, and set the fares. Bus services along profitable lines ran in parallel. Some ten cities that were sole owners of their bus companies nevertheless managed to keep these companies and run integrated services. Nottingham and Edinburgh did so while Glasgow, which had had a bus-service based on the Strathclyde regional council, saw a proliferation of parallel services along some routes and none on others.

In 1986 the government also dismantled the Greater London Council which had run the integrated London transport system up to 1984 when this had been taken over by the national government. The government started to run the underground and also the London bus system (and this with insufficient reinvestment). This central government micro-management is unheard of in other countries.

British rail was privatized and regional rail, which made up the bulk of what metropolitan transport there was, was put up for tendering.

Since then metropolitan rail has seen a spectacular passenger growth although the government appears to have increasing problems in finding private investors with a sufficiently long term perspective. Urban bus services outside London have stagnated or deteriorated but are still subsidised to some 60% including services for school children, people older than 60 years, and night traffic. A handful of companies dominate the market. London bus services which were not deregulated are thriving and largely run by international, state-owned companies (Keolis, Arriva, RATP-dev). The political priorities between rail and bus are explained by the fact that middle classes use trains but not buses.

So much for the lack of governance of metropolitan transport in the UK. Conditions started to change only with the new millenium and a reversal of policies and a stabilization of institutions may now be possible.

TfL (Transport for London) is widely respected for its professionalism and its creativity among its peers in major cities around the world. It draws on both the practical and academic talent pool of the English-speaking world and exports its alumni. TfL has a broader mandate than most of its peers but over a more limited geographic space than Ile de France Mobilités or MTA. TfL operates urban transport within the London area and not over the entire metropolitan region that the others do. TfL is as much a creation of politics as of professional planning and transport economics. It is about political science and traditional transport disciplines. The TfL and the directly elected mayor is a pair.

TfL unusually broad mandate was concieved in the late 1990's in a central government green paper by Labour MP Nick Raynsford, taken up by Tony Blair and for some years firmly resisted by the Treasury. Blair was interested in devolution (Scotland, Wales, London) and did see transport in London as a national issue. The proposal of a Greater London Authority with a directly elected mayor and a likewise directly elected assembly was approved in a referendum. Ken Livingstone, who was mayor up to 1986, was the likely mayoral candidate, deeply opposed by Blair and adamantly by the Chancellor of the Exchequer, Gordon Brown. But Livingstone outsmarted them.

The pair mayor-TfL was a radical break with the situation when the government ran both the Tube and the London buses. The Treasury was adamantly opposed to letting go of the control over the municipal finances and came up with a proposal to invest in the run-down Tube network through a PPP scheme that would have run for 30 years outside the control of the mayor. The Treasury gave in only when the scheme in practice turned out to be completely unworkable

It has been said that the pair mayor-TfL owes its creation as much to serendipity as to design. The change of government created the moment and the right persons grasped the nettles. The Bill is supposed to have been extremely complex and owes its passing to the fact that there were no other vested interests than the Treasury. So much for the idea of a 'best practice'.

The TfL mandate involves place as much as mobility and a part of the London road network as well as public transport. It involves walking and biking as well as buses and space for private cars. TfL controls traffic signals on all London roads. It does not control all the London roads, however; roads of national importance are under the central government and local roads under the boroughs. So bus lanes vary depending on who controls the roads. The boroughs control the parking on their roads. The mayor also works together with the boroughs on healthy streets, walking and bike lanes plus freight. The boroughs depend to some extent on TfL grants.

Besides transport the mayor's mandate also include planning for economic and social development including social housing in the form of a London Plan. The boroughs control the planning permissions but these are, for commercial developments, also conditioned on contributing to infrastructure investments. TfL also owns extensive amounts of land for property development.

The mayor is in constant negotiations with the boroughs over land use and with the property industry over access – and thus land value and thus the possibilities of economic contributions to investments in rail expansion.

The mayor-TfL pair is a good illustration of the power and the systems triangles. The power triangle is made up of the mayor, the TfL and the Treasury and the systems triangle of mobility, place and subsidies. The power triangle dominates the systems triangle. The mayor's ability to challenge the Treasury rests with a working systems triangle and alliances with London business and the boroughs.

The mayor has a strong position and decides the tariffs of public transport. The assembly can overrule his budget proposal only with a 2/3 majority.

The TfL total budget for 2017/18 amounts to almost 10 B£, 2/3 of which is for operations and 1/3 for investments. The TfL operating costs (excluding investments) amount to some 6,6 B£ which are met to almost 75% (4,9 B£) from fares and 12% from local business taxes (0.8 B£). Congestion charges amount to less than 3%. Central government grants for operations has been cut from previously 7% to now 3,4%.

The main weakness is the lack of a stable revenue from local taxes. This again reflects the Treasury's refusal to grant local authorities independent and adequate resources for local services. The local business taxes are in effect business property taxes which in turn can be volatile and are moreover dependent on central government rules for land value revisions.

The TfL investment program is almost 3B£ for 2017/18, almost 50% of which is for Crossrail. The investments are financed from a variety of sources including central government grants, special funding for Crossrail and borrowing. The Treasury sets an overall limit on local authority borrowing, even if the GLA and other local authorities now are allowed to issue municipal bonds.

The mayor and the TfL now face some critical years. The central government grants for TfL operations have been cut more quickly than planned for by TfL and will be zero from 2019 onwards. The TfL is also for the first time ever experiencing a fall in passenger volumes over the last year (2017). The implications for revenues and organization of new mobility services are also uncertain.

TfL had a stable future when the London population and property values increased together with ridership and revenues and the Treasury was moderately benevolent about the investments plans. Today the future is less stable. The government is redirecting resources to Northern England, the property values underpinning council and business taxes look more uncertain and the mayor has promised to freeze the tariffs. The TfL will not be able to cope with these issues on its own and the mayor will need all the political skills for multi-level and multi-stakeholder negotiations that he can muster.

Crossrail will, when in operation, increase the Underground capacity with some ten % and should also increase revenues. It is much too early to say whether the TfL ridership stagnation is temporary or structural.

Moreover, there is a huge need for Crossrail 2, and, who knows, also 3 and 4. These investments are the equivalents of the Paris RER network of the 1960's and 1970's. London certainly needs these equivalents. Crossrail 2 can concievably be financed through special contributions by London business through location value but this will need agreements between business, the central government, the boroughs and the mayor. Congestion charges may have to be revisited, but the revenues would have to increase fourfold just to make up for the shortfall from the Treasury cuts.

A stable taxation base for local authorities would solve many problems but looks distant with a government obsessed with Brexit. Governance for London urban transport without adequate and stable financing is inherently unstable.

TfL is an island of coordination, integration and planning in an ocean of deregulated fragmentation. Transport for London is about London and not the metropolitan region which stretches to the Channel coast, Southend and Colchester. The polulation would, depending on definitions, include anything between 13 and 20 million inhabitants. Extending the role of a directly elected mayor would be completely unthinkable. From the point of view of transport efficiency an equivalent to Ile de France Mobilités or the Berlin-Brandenburg VBB would make sense, but this again would be such a powerful political entity that the central government is most unlikely to allow it to happen. The TfL may over time convince the railway companies to accept the oyster card but not much more. Perhaps there is more to the government's resistance to stable funding for TfL than just concerns for overall tax levels. The governance borders between London and the rest of the metropolitan region will remain.

A governance model for integrated metropolitan transport services in England outside London may emerge over the next few years, however, as a handful of metropolitan regions have opted to create what is called 'combined authorities'. This institution was created in 2009 and the new government accepted a proposal from the ten local authorities in the Manchester region to create a 'combined authority' with competences for police, fire brigades and transport. The Manchester region is growing in population, in economic weight and more generally as a place for walking and biking and not only driving. A proud city is coming out of the shadows of a London dominated by the finance industry. The TfGM – Transport for Greater Manchester – was set up in 2011.

Then came serendipity. George Osborne as chancellor launched the 'Northern Powerhouse' to stimulate economic development and proposed as part of this that a combined authority - a CA - could have a directly elected mayor together with an indirectly elected assembly. Negotiations with the Manchester CA followed and with a chancellor in need of a political success a deal was struck: the CA would accept the idea of the elected mayor provided the central government accepted that an area-wide franchised bus service could be an alternative to the line-by-line deregulated bus services. This franchised bus service could then have an integrated fare system with an extended tramway (operated by RATP) and later perhaps also the regional train services. The Manchester region then elected as the CA mayor Andy Burnham, a senior labor politician and one time Treasury junior minister who had stood and lost against Corbyn as party leader.

Andy Burnham will have to negotiate a path through a legal minefield and create a case law with the bus operators for how to create an area-wide franchise system out of the present line-by-line system. If he succeeds the TfGM will become the body of governance for metropolitan transport in greater Manchester – much like Metropole de Lyon in France. If he succeeds other CA's will most likely follow. He is well equipped for the task: a united CA, strong political support and a savvy operator. If anyone can succeed he can. He will be watched.

There now appears to be a political momentum for doing away with the anti-local authority legacy of the mid 1980's. The growing perception is that cities matter also as places. Business leaders are willing to support local governments.

Thus it appears that Britain is slowly rediscovering the need to reinvent governance of metropolitan transport outside London as one of the many virtues of local collective action. The big unknown is the central government's and the Treasury's view on municipal financing in times of Brexit. Governance of metropolitan transport will be stable only with stable funding and local taxation.

2 THE CASES IN FRANCE

- *The governance of metropolitan transport in France is as uniquely French as its equivalents in the UK or in Germany are uniquely British or German. French governance of metropolitan transport is innovative, in part extremely ambitious and also evolving. It is about mobility and access, about place and quality of city life, about industrial policy and also about the reorganization of the French territories. It reflects a French tradition of the active state that is different from the British or German traditions.*

French cities have pioneered bike share services which since then have spread around the world. They are developing tram systems on a scale that both transform the cities and form the basis for industrial development. The main French transport companies Keolis (which is a subsidiary of SNCF), RATP Dev or Transdev are all wholly or partially state-owned and operate urban and surburban transport networks both in France and globally. Frenh governance of metropolitan transport is about cities, transport and internationalization of the French economy.

The governance of metropolitan transport is also about an ongoing political and administrative devolution from the traditionally centralized French state and society. This devolution started conceptually in the late 1960's and began in earnest in the 1980s. Local and regional competences over urban planning housing, transport and so on gradually increased as did the financial resources.

This devolution is still work in progress and France now has 18 regions, 21 metropolitan regions, more than 100 départements and 35 000 municipalities (some of which are quite small).

Governance structures for metropolitan transport have to promote compromises between widely different perspectives, interests and professional competences. Politics is the final arbiter and the major cities are critical.

The political role of the mayors is uniquely French. The constitution built around a strong presidency reduces the importance of the parliament. An elected mayor of a large city – or a president of a region - therefore also has a national stage. Many mayors have been appointed prime ministers or to high ministerial offices. Mayors are politically visible to a higher degree than e.g. in the UK.

Metropolitan transport is one of the most – if not the most – important dimesnions in this ongoing devolution to and empowerment of cities and regions. While the region is the transport organizing authority for rail and interurban road transport, the major cities

The Budget for 2018 in Million euros:		
Versement transport	349	39%
User fees	246	28%
The owners (as above)	199	22%
Loans	45	5%
Others incl state (loi grenelle)	48	5%
Total	**887**	

have the concentration of political power and financial resources that can make the metropolitan regions economically and socially attractive. Cities like Lyon, Lille, Marseille, Toulouse, Bordeaux, Montpellier, Nantes illustrate this.

The political power in metropolitan transport is based on core funding from a unique French invention: *the versement transport.* This was first established for Paris and has been successively extended outside Paris. It allows designated authorities to raise taxes on the salary sum of employers above a certain size at and spedified rates that diminish with density.

Paris is a special case. The French state has over the centuries been wary – at times afraid – of the potential power of the Paris population. Paris was only in 1977 allowed to elect a mayor as part of the devolution described above. Nevertheless, the French government has always been directly involved in the governance of metropolitan transport in Paris and now the region. More about this below.

The French mayors have built metropolitan transport around a synthesis of mobility and place. Mobility between the core city and the suburbs in order to achieve the agglomeration effects of the metropolitan labor market; and place as in urban renewal and quality of urban life: pedestrian zones, dedicated bus lanes, bike lanes and tramways. The French mayors have been among the most conscious and most successful in Europe in this synthesis.

The mayors have used the funding opportunities of the versement transport and recent legislation (Loi MAPTAM) to organize city transport into metropolitan transport based on regional associations of local authorities.

Lyon is generally regarded as quite successful and is also an experimental case in regional reorganization into Metropole de Lyon.

SYTRAL is the organizational authority for public transport and is responsible for tendering the traffic buses, metros, trams and regional trains in the Lyon metropolitan area, the region of Auvergne-Rhone-

Alpes and an association of smaller municipalities. SYTRAL provides 1,7 million daily trips to 1,7 million inhabitants in the Rhone department and a total of 293 municipalities. The aim is to extend coverage also to parts of nearby departments. The SYTRAL board consists of 23 elected members from Metropole de Lyon, 4 from Region Auvergne-Rhone-Alps and 4 from smaller associations of municipalities.

The 28% share of user fees is above the average in France (17%) but low in comparison with many other cities/countries. There are even some places in France that have opted for no fee at all. This again reflects social policy.

The region Auvergne-Rhone-Alps consists of 12 different departements with a total population of some 7,5 million. It was created from by the central government in 2015, is one of 15 regions and has a directly elected assembly.

La metropole de Lyon was also created in 2015 and consists of 59 municipalities. It has a directly elected council with broad responsibilities for economic development, culture plus parts of education. Perhaps it will take over more competences from the municipalities who then will shrink in importance.

The PDU – plan de deplacements urbains – is a legally required mobility plan for urban areas. In Lyon, it is developed by SYTRAL. The PDU is the expressed synthesis of mobility in the region and place in Lyon.

The power triangle is made up of SYTRAL, its main owner Metropole de Lyon and the city of Lyon. The mayor of Lyon has a decisive influence but nevertheless has to reach agreements with the suburban municipalities about the overall budget and the tariff level. The suburbs usually have a different political majority than the city so the mayor's skills to reach compromises are important. SYTRAL is a power in its own right with considerable professional competence. The main budget post (versement transport) comes with no strings attached. The French state has a direct but limited role through the Loi Grenelle, which offers state subsidies for certain transport investements (trams, BRT etc). A state approved project has a higher probablitity of receiving favourable financing from the EIB.

The Lyon power triangle has worked well and SYTRAL will continue to add new metros and trams. Breaking down the silos between roads and public transport and make the Metropole also responsible for roads would be a possible next step. The really big challenge will be to develop mobility services for both "first/last mile" of the center-periphery mobility and the suburban-suburban mobility. The French operator companies Keolis and Transdev will do their utmost to develop these markets and establish themselves nationally and abroad.

The unique exemple of Paris regional aera

Paris and the Ile-de-France region are the exception to the role of indirect governance by the French state. The French state, the city of Paris and the Ile-de-France region (12 million inhabitants, almost 20% the French population, 6,2 million jobs and 30% of GNP) are now involved in a massive development to make the region globally competitive and with a dual emphasis on mobility and place. The city has a huge problem with traffic-caused air pollution and aims to reduce car traffic in the city proper and stimulate city life, walking, biking, public places and more generally quality of life through many different instruments including parking and parking fees.

There is one Regional Council, 8 Départements including the City of Paris, one Métropole (including 11 territories), 53 intermunicipalities and 1,277 municipalities. The co-governance between the state, the city and the region is simplified by the gradual convergence of views between the city and the region and between the left and the right. Somewhat simplistically the left used to talk about housing and public transport and the right about roads. The region – led by the right - is now shifting towards a massive development of periphery-periphery public transport and property development. Previously quite conflictual relations between the suburbs and the city with its near suburbs are now less so.

The French state has always been directly involved in organizing metropolitan transport in the Paris region. RATP was created by the French state in 1948 and is still the main operator in the Paris city. It is also present in Italy, the UK, Brazil, China, India, South Korea, the Philippines and so on. Ile-de-France-Mobilités (former STIF) was originialy created by the state and is now the region's designated public transport authority and wholly owned by the Ile-de France region, the city of Paris and departments of the region which thus also have to contribute to the budget.

The region Ile de France has a directly elected council and its president is a nationally recognized politician. She is the chair of Ile-de-France-Mobilités. Its governing council consists of persons from the region, the city of Paris plus the concerned *departements.* The annual budget (2016) is of some 9.4 B euros of which some 14% is for investments. Fares make up 28% and contributions from *versement transport* some 50% with the remaining parts contributed by the region, the departments and the municipalities. Ile-de-France Mobilités also receives some contributions from driving fines, parking fines and also part of the tax revenues from fuel taxes in the region.

The region is now engaged in a massive network expansion with each new line (metros, tramways etc) co-financed by the owners and the *versement transport.*

Moreover, the French government and the region has agreed on a five year program (2015-2020) for large scale infrastructure investments co-financed by the state and the region. The total annual sum amounts to some 2.4 B euros. Regarding this program, 60 projects (RER, metro, tram, T Zen) are under Ile-de-France Mobilités supervision.

Ile-de-France Mobilités has three main operators: RATP, SNCF and Optile (the association of private bus companies in the region). Both RATP and SNCF are heavy actors but also rather techocratic ones. The latter is also more oriented towards developing its TGV network. Neither has any experience in co-development of properties and public transport. So the French government returned to the Paris region and decided that a huge development project should be carried out by an entirely new organization: SGP (*Société Grand Paris*).

SGP is a wholly owned state enterprise for financing and operating the new metro network for the region (200 km of driveless metro lines) outside the existing metro system for a cost of 35 billion euros. The idea is to co-develop real estate and public transport and finance the latter through harvesting the location value, much as in today's Hong kong. The SGP is the first really serious such project in Europe or the US since the suburban rail and tram companies developed suburbs in the late 19th and early 20th century. The RATP is scheduled to take over the infrastructure part of the SGP (and, one assumes, its operating costs).

SGP is a massive investment project and also important for the Olympic games. The timetable may be stretched out but the SGP is 'too big to fail'.
The following three issues should be watched during the next few years:

- *How will the SGP evolve and over what time perspective? Will the idea of location value capture spread also to the second tier cities and if so under what kind of legislation?*

- *French operating companies are unusally well equiped to positioning themselves for new (and electrified) mobility services. How will they cope and where will the competition come from?*

- *Will the French electricity industry be capable of adapting to an electrified metropolitan mobility market?*

3 THE CASES IN GERMANY AND VIENNA

- *Understanding the governance of metropolitan transport in Germany starts with understanding the constitution of the federal republic of Germany.*

The German constitution is different from the constitutions of other federal countries such as the US, Canada or Australia. If the US constitution is designed to avoid another George III through a system of checks-and-balances, the German constitution is designed to avoid the kinds of economic and political derailments that plagued Germany during the first half of the 20th century. The design aims to promote economic and social stability through an interlocking set of mechanisms such as enforced cooperation between the federal level and the Länder, political accountability through rolling electoral cycles on the three levels, legal accountability through a constitutional court, tax raising controlled by the federal level and tax spending through necessary agreements between the federal level and the Länder. It is also a constitution that allows for – and a political culture that actively encourages – cooperation. The governance of metropolitan transport illustrates this quite well.

The constitution also regulates taxation rights. Länder and cities have limited taxation rights but Länder can tax sales revenues and cities can tax property and business. Frankfurt is richer than München and receives 4 times the business tax per capita. Berlin has a problem with its lower overall per capita income.

The governance of metropolitan transport in Germany is built around three silos: the public transport silo which in turn is based on the metropolitan VVB, *Verkehrsverbund* in German (transport alliance in English); the road silo which in turn is based on the federal, Länder and city levels of roads which in turn have interlocking sets of financing mechanisms; and last but not least land use planning. The last silo is sometimes but not always coordinated with the first public transport silo. This text will explain how the three silos are interrelated.

The VVB has evolved over the last 50 years into efficient, flexible, dynamic organisations which come in different forms in different regions. A VVB is an alliance of transport authorities and/or transport operators that supplies a metropolitan region with seamless public transport services according to the slogan 'one ticket, one fare, one system'.

Part of the efficiency is due to the fact that the VVB is a public transport silo only with strong links to city administrations and elected leaders.

Two dates are important. The first date is the late 1960's when the Hamburg transport operators voluntarily organized an alliance – a VVB. München adopted the same principle before the 1972 Olympics and Stuttgart followed in 1978. The idea spread further in Germany and then to Vienna and its surrounding federal states in mid-1980's. Switzerland followed but that was it. The second date is 1993 when the federal government decided to 'regionalize' Deutsche Bahn and turn local S-Bahns and regional trains into regional profit centers under the responsibility of the federal states. This led to a second wave of VVB's. All large German cities are now served by VVB's.

The core of the Hamburg VVB was a legally binding agreement between the transport operators to share data about journeys and travellers in order to be able to set common fares and share the revenues according to the cost structure of the different operators. This core agreement was part of a deeper core idea: only coordination could expand revenues. A well-designed agreement will increase markets and thus the revenues to be shared.

This deeper core idea is in turn part of yet another even deeper core idea: effective competition is best built upon regulation. According to this idea free competition disrupts markets and only managed competition will increase the markets. This is why the VVB concept is not exportable - other countries look upon competition in other ways.

The VVB was and to a large part still is built upon four conditions:

- The idea that only managed competition can increase total revenues;
- The big German cities have organized their services in integrated 'Stadtwerke', which allows for cross-subsidies between e.g. energy and transport;
- The mayors of the large cities are directly elected which allows for strong political mandates and potentially strong political leaders;
- DB, Deutsche Bahn (the state railway), is present in all the big cities with the S-Bahn on multiple lines.

The first VVB in Hamburg was agreed between the transport operators as a 'company alliance', one of which was the city-owned transport company. The DB proved to be a powerful midwife for this agreement with the overall goal to expand the market so that the members could avoid becoming dependent on subsidies from the city.

Over time this did not work out, and the necessary subsidies forced the city leadership to take a more active part. Over time the Hamburg VVB was transformed into an alliance between the transport authorities of the city, the neighbouring counties (Kreise) and the two federal states of these counties, Schleswig-Holstein and Niedersachsen.

Today's VVB's are organized in different ways. Many VVB's that started out as company alliances have followed Hamburg and morphed into authority alliances. A few have remained company alliances and some, such as the Stuttgart VVB, is a mix of an authority and company alliance. The concept is both flexible and effective in managing the need for subsidies: statistics are treacherous, but according to the trade association VDV both the number of travellers and the share of operating costs covered by fares have increased over time. Subsidies for operations and reinvestments are managed by the member cities and the Länder. Subsidies for capacity expansion are managed in another but connected silo.

The idea that 'competition works best when it is managed rather than deregulated' is hardly exportable. This German idea is different from the Anglo-Saxon idea that 'competition works best when deregulated' as in Thatcher's deregulation of metropolitan transport in England in the 1980's (except that she did not dare to pursue it in London). It is also different from the basic concept of the internal market in the EU, which in turn was based on Schumann's idea that politics and markets should be kept separate in order to reduce the risk of politics dominating the markets. It is also different from the French concept of the relations between the state and the market, which is much more directly interventionist.

This German idea is expressed in what is called 'ordoliberalism', which literally means 'ordered liberalism'. This again grew out of German experiences over decades that social and economic forces depend on each other and that each could destabilize the other. Unregulated markets could destabilize democracy and politics could in turn destabilize markets. Democracy and markets must therefore be mutually regulated in a firm legal order and the German economic actors are involved in many more and much deeper cross-actor agreements than what is usual in other countries. Since this could be close to cartels the state has to be ever watchful. 'The social market economy' as expressed in the foundation of the Federal Republic in 1949 is the recognition of this mutual dependency between social and economic forces.

The VVB's are outflows of this philosophy about the interdependence of the market and politics. The following pages will look into four regions with different structures: Stuttgart, the Rhein-Main region, Berlin-Brandenburg and finally also Vienna.

3.1 The Stuttgart region and the VVS (Verkehrsverbund Stuttgart)

• *Manfred Rommel – a former mayor - captured the somewhat schizophrenic situation in Stuttgart transport quite well: 'people should buy a Mercedes, leave it in the garage and take the Stuttgart tram'.*

Stuttgart is the home of Daimler, Porsche, Bosch and numerous other car component suppliers. Stuttgart's number of cars per capita is nearly twice Berlin's. An urban motorway with three lanes each separates an excellent art museum – Staatsgalerie – from the city pedestrian area. Stuttgart also had its local Robert Moses.

The governance of Stuttgart metropolitan transport is divided into the usual silos. One takes care of a very good public transport system and has a rather unique governing structure. Roads are governed in another silo. Place as in quality of city life is governed by the local authorities. What transparency and cooperation there is between the silos is the responsibility of politics.

The roots of the public transport silo reach back to days of the Kaiser with the Stuttgart tramways founded in 1878 and an extensive local railway system. For many years after 1945 the public transport system was, like in other German large cities, a fragmented mix of trams, trains, public and private bus lines each with its own tariffs and time-tables.

Inspired by Hamburg, and with the DB (Deutsche Bahn) as the driving and organizing force, an agreement was signed agreed between DB, SSB (Stuttgarter Strassenbahnen AG), and the plethora of suburban bus-companies to work towards an integrated tariff and timetable system under the umbrella organization of VVS (Verkehrsverbund Stuttgart). The VVS is a public-private company (PPP) and a public transport authority (PTA). Both operators and local authorities are members (Stuttgart city, five counties, the federal state of Baden-Württemberg (abbreviated to the BW state), the SSB, the S-Bahn (a subsidiary of DB) and the DB for regional trains).

The VVB's (Verkehrsverbünde) are public transport oriented only and without any formal links to land use or place more generally. The municipalities of the Stuttgart region therefore went one step further and organized in 1994, based on BW legislation, a parallel organization for coordinating public transport investments and land use through the VRS (Verband Region Stuttgart). This is based on the regional S-Bahn company and the regional bus companies and is governed by a directly elected assembly. The VRS develops regional land use plans in parallel with its investments in regional traffic infrastructure. If the VRS finds that a municipal plan contradicts the regional plan the VRS can veto this plan. The municipality can challenge this veto and the final decision rests with the BW state regional authority (Regionalpräsidium). Only Hannover has a similar body.

The VVS is both a clearing society and a time table coordination society. The VVS operates, as do other VVB's in Germany, a very complex system for re-distributing ticket revenues between the operators according to agreed-upon criteria. It does not itself procure operators, since this is done by five counties and the city of Stuttgart. The VVS also collects passenger statistics, which provide essential information for market analysis for the operators.

The overall amount of money for operations and reinvestments amount to some 800 M euros of which some 500 M euros come from tariffs revenues. The remaining 300 M euros is covered from a variety of sources including the federal government (for students and handicapped), the BW state, city and counties.

The BW state and the local authorities are to a very large extent financed by block grants from the federal level, which has the overall task of deciding and collecting taxes. Local authorities have only very limited taxation authorities.

Investments below 50 M euros are covered to 50% by the BW state and the rest is picked up by the operators. Investments above 50M for expansion etc are covered by federal money (60%), BW state money (20%) and the rest from the local operators.

The VVS is a successful organization with an increasing number of passengers. The VVS now has a stable political support but this was not always so. The Stuttgart city is governed by a green-red-red coalition, with a directly elected green mayor. The conservative opposition largely agrees with the majority on VVS issues. To some extent this is a generational question within the CDU, to some extent it is about political strategy. The BW state is governed by the greens in a coalition with the blacks, so the Stuttgart blacks cannot diverge too much even if they would want to.

The BW greens have grown at the expense of the SPD and are seen to be more pragmatic than many of their colleagues in other federal states. Their main competitor today is the CDU.

The greens are pushing for a tariff reform along the lines of their Vienna comrades, but this is still in discussion. The VVS' worry is that increasing deficits would reduce autonomy since subsidies must be guaranteed for years. Tariffs are also higher than in Vienna.

The reduced political divide is helped by the fact that Daimler as the dominant car producer also is developing new mobility services (MOOVEL) in cooperation with VVS operators.

The city council is likely to support Daimler in this and do what it can within the legal means to favour Daimler in the competition with e.g. Uber. The council would like to see the city to be at the forefront in mobility services developed by the German car companies and/or public transport operators.

For now there does not appear to exist any major threats to the VVS, its market shares and its financial position. The VVS is busy with its expansion program together with the VRS.

There are so far very inconclusive discussions about new sources of revenues such as location value. No concrete ideas yet.

One uncertainty concerns the implications of the restrictions on diesel cars with less than EU6 standards.

Striking a compromise between place (as in quality of city life) and mobility (as in agglomeration effects plus the interests of the car industry) is left to the political parties. They appear to be slowly move towards more emphasis on place but the legacy of the local Robert Moses's is still strong.

3.2 The Rhein-Main region and the RMV (Rhein-Main Verkehrsverbund)

- *The Rhein-Main region is a polycentric region with Frankfurt, Wiesbaden, Darmstadt, Offenbach and other major cities, a population of 7 million and 160 different operators. 2/3 of the German railway transport runs through the RMV region.*

The RMV revenues have more than doubled and passengers have increased by some 1/3 since 1993. It is the third largest VVB in Germany.

The governance structure is different from the monocentric VVB's. Wienerlinien decides in VOR, Stuttgart Strassenbahn in VVS, BVG in VBB etc. Not so in RMV. The governance structure is based on 11 cities and 15 counties (Kreise). They are all represented on the RMV board together with Land Hessen and with one vote each. Consensus is necessary across the region and across the political parties (red and black are the biggest). The disadvantage is slow decision making! The Frankfurt mayor is the chair. Tendering is done by the cities and the counties. The Frankfurt city transport company (Verkehrsgesellschaft) is one operator and is part of the Frankfurt Stadtwerke.

RMV was founded 1995 out of a group of smaller VVB's including a Frankfurt one, with different tariffs, schedules and no common standards for funding. One big problem is that Schaffhausen in Bayern is not a member, but the complication is that Bayern has a different type of operator contacts than Hessen (brutto rather than netto).

Most of the German VVB's were established after 1995 after the federal government decided in 1993 to regionalize Deutsche Bahn, which in turn was necessary because of the need to organize urban public transport in the former GDR. This also illustrates the importance of DB as a key actor. The regionalization implies that each DB region is one profit center and needs to create its own market which in turn means that creating an integrated system with other public transport modes are necessary.

RVM cooperates with the RNV (Rhein-Neckar VVB) with Mannheim in Rheinland Pfaltz and also with VVB's in Baden-Württemberg. The system is flexible, except with Bayern.

The tariff recovery rate is some 56% (across all buses, heavy and light rail plus subways) and among the highest in Germany. Recovery rates are NOT easy to compare, due to different ways of accounting. The remaining 44% are covered by various streams which all originate with federal funds to the Länder and to the cities. Very difficult to compare and almost impossible to understand! Tariffs and subsidies cover costs of operation and reinvestments but not major infrastructure.

Investments in roads and streets are dealt with in a separate silo according to whether roads are federal, Länder or city streets. 'Place' as in 'place vs mobility' is dealt with by the individual cities. How well this works depends on the internal organization of the city

Major investments for capacity expansion are in rail and mainly DB for regional trains and S-Bahn. Money for investments above 50 M euro is shared project by project between the state Hessen, the federal government, cities and counties plus operators.

The problem with major infrastructure investments is not money but implementation! Planning, consultants, engineers ... there is no capacity for large scale infrastructure investments right now. There are huge needs in and around Frankfurt. Infrastructure investments! Frankfurt needs tangential/circular S-Bahn!

Frankfurt is a very car-oriented city. No stringent parking policy, no congestion charges, no park-and-ride. The car industry still dominates German politics, but possibly the diesel issue, air pollution and the slowly increasing interest in place vs mobility could change this. Wiesbaden has the highest car density but still a good public transport.

The thinking about new mobility services must evolve. The big competition will be between US software companies (Google, Uber etc) and European companies. Data is key – RMV will NEVER provide Google and others with raw data! All VVB's should have one common idea!

The BIG question is who will organize the new mobility services in the EU. The individual VVB's are too small but DB is a party in every VVB. SNCF is oriented towards TGV's rather than metropolitan transport. The federal ministry cannot force DB against its will. The DB must see the need itself and act!

The German car industry could be the key. The industry is seriously thinking about its future markets and Daimler and BMW are experimenting with new mobility services. The diesel scandal, air pollution and electrification could speed this up.

An alliance could emerge between the VVB's, which have the data, DB which participates as operator in every major VVB, and the German car industry which is rethinking its business. Neither can do it on its own, but together the three would be an almost unbeatable group. Data is key! TfL has the data in the UK and several state-owned operators present (as DB through Arriva) and one could see a broader alliance including TfL. The major French operators, also state-owned, could have an opportunity if they have access to the data. Could also be part of the European alliance against the US software companies and the Chinese state-owned companies.

What to watch over the coming years:

- First/last mile and new mobility services: the VVB's produce data that would be crucial for potential organizers such as DB and/or German car manufacturers.

- EU competition legislation: the German idea of managed competition is alien to the Commission's understanding of the role of competition;

- New revenue sources: the VVB's are subsidised out of taxes by the cities and the federal states. New sources will be needed but the present thinking is still very vague.

3.3 The Berlin and Brandenburg VBB

- *Governance of metropolitan transport is always special when the region is a capital region and Berlin is the most special of them all. The only capital even remotely close is Vienna.*

Berlin shares with Vienna a railway network once meant for an imperial power. While there is a certain nostalgia for Vienna in the neighbouring countries there is not very much of that for Berlin, which was and still is a peripheral city in a smaller Germany. Add that the present Berlin is made up of two only partially overlapping transport systems and is surrounded by Brandenburg, one of the poorer federal states. Berlin is special indeed.

Berlin was very lucky that the capital was moved from Bonn to Berlin, even if the majority in the Bundestag was quite small. A massive investment program followed in offices, rail infrastructure and the autobahn network.

Berlin presently has some 3.4 million inhabitants. The population is now slowly increasing at about somewhat less than 1% per year. Berlin still has a lower GDP per capita than the German average. The economic situation is not easy. Brandenburg has a relatively stable population of some 2.4 million with an increasing concentration around Berlin.

The VBB is unique in size and includes the city/Land Berlin, the metropolitan region Berlin (which extends into Brandenburg) and the rest of Brandenburg. The VBB borders on Poland and has transport links to several Polish cities.

Governance of metropolitan transport is, as usual, done in silos but the Berlin one is somewhat different. The VBB (Verkehrsverbund Berlin-Brandenburg) occupies one silo and the Berlin infrastructure for public transport and roads occupies another together with urban development, land use and the environment in one government ministry run by one minister (called Senator). The Brandenburg part is more traditional.

The VBB networks and time tables are coordinated. The no of travellers has increased some 1.7% and fare revenues about 4.6% per year between 2007 and 2017. The fare box covers slightly less than 50% of the total operating costs but is significantly higher for Berlin only. The shortfall is covered by a variety of sources from the two federal states which in turn come from federal sources as part of the agreements between the federal government and the federal states in the general 'Finanzausgleich' plus the 'Regionalisierungsgesetz', which is specific for public transport.

The VBB governance structure reflects political realities rather than population size. The VBB is a limited company owned to 1/3 by Berlin, 1/3 by Land Brandenburg and 1/3 by the 14 counties and 4 cities of Brandenburg. It is an alliance of all the transport authorities which together have 41 different operators, some private and some public. Deutsche Bahn controls all the rail infrastructure (regional trains and S-Bahn) with the S-Bahn/Berlin as a wholly owned subsidiary. The DB is the major operator in the VBB. Public transport in Berlin (except S-Bahn) is operated by the BVG, a city-owned company which runs the U-Bahn, trams and buses.

The governance of metropolitan transport in the Berlin region has three main challenges:

First and foremost: the future financing of both operations and investments, which largely depends on the transfer of funds from the federal level to the regional. This takes place within the usual negotiations between all the federal states and the federal government. There have not been any serious discussions of other potential sources of revenues (congestion charges, location value, business taxes...).

Second, coordination of policies for urban form, land use and place development in the Brandenburg and the Berlin parts of the metropolitan region. The Brandenburg part is only a limited part of the state. Policies do differ between the two parts.

The reunited Berlin is following a by now well-known pattern of shifting from a car-dominated policy during the first post WWII decades to a more place-oriented policy. The tram system in the former eastern part fits into this together with bike paths, pedestrianization etc. The Berlin car ownership per 1000 inhabitants has accordingly dropped from 358 to 327 between 2000 and 2013. Brandenburg has seen a slight increase in car ownership to 516/1000 in 2010. After unification the state of Brandenburg started out with improving road quality and highway access to Berlin but is now moving towards the Berlin perspective based on rail and protection of large green areas.

Berlin and Brandenburg have developed a unique form of joint planning department. The most important reform, however, was internal to Berlin and consisted of amalgamating the four different administrative sectors of transport (including operations), construction, urban development and environment into one sector for urban development and environment under one political leadership. The previous different sectors were frequently controlled by different political parties which did not facilitate coordination. This amalgamation could be done in Berlin since Berlin is both a city and a federal state; there the Berlin boroughs are overseen by the city government when it comes to land use to an extent that is much more difficult to achieve in a federal state with two distinct levels of government. Similarly important, the transport infrastructure planning rests with the urban development and environment ministry and not with the transport authority.

Third, new mobility services. The VBB has decided to pursue an open data policy and thus create better opportunities for new mobility services with the long term aim to stimulate complements to the existing services. This would in turn require revising existing legislation. Other VVB's have so far decided not to open their data for external actors. It remains to be seen who the new actors will be.

4 THE CASE OF AUSTRIA AND THE VIENNA REGION

- *The roots of today's Vienna metropolitan transport and its governance and deep politics lie in the empire and its dissolution. The extensive railway network is a heritage of the empire when the city was the centre of a large network of cities in what is now central and eastern Europe.*

The Vienna vision is a synthesis of quality of mobility and quality of place: travel times and quality of life. A vision where Jane Jacobs won over Robert Moses. There were a few years after the occupation ended in 1955 when the local Robert Moses's were planning urban motorways in Vienna as well. But the moment passed.

Metropolitan transport in the Vienna region demonstrates the primacy of deep politics. Deep in the sense of building professional institutions and robust stakeholder alliances over many electoral cycles; politics in the sense of using these institutions and alliances during each electoral cycle to implement visions as well as maintain and strengthen them.

The deep politics of Vienna goes back to the dissolution of the empire and the subsequent borders. Vienna found itself a red city in a black, conservative ocean (well, the lake of Austria). The social-democratic Vienna decided it wanted to do things its own way. During the 1920's and early 1930's it was called 'municipal socialism', which continued after the seven-year break. The present synthesis of mobility and place is the result of 'deep politics' - a consistent policy of a city led by the same political party since 1945.

The story of governance is also a story of political alliances. Austria is a federal country; Vienna is both a city and a state; and the surrounding state is conservative. As on the federal level, so on the regional – red and black cooperated. So the red city of Vienna with a population of some 1.6 million and the black state of Lower Austria and the red/black or red/green state of Burgenland with a total population of the same size agreed to create a joint organization for metropolitan transport: VOR for Verkehrsverbund Ostregion. VOR was created in the mid 1980's during the times of the iron curtain. VOR now borders on Hungary, Slovakia and the Czech Republic. Bratislava in Slovakia, which was part of the greater Vienna region before 1914, now has a population of some 800.000 and can be reached through the VOR integrated ticketing system.

VOR is a joint stock company owned by the three states (Vienna 44%, Lower Austria 44% and Burgenland 12%). Vienna is a minority owner and its main interest is to stimulate commuters to Vienna to use public transport.

VOR organizes public transport networks outside Vienna with a ticketing system that is integrated with Vienna's and tenders for integrated bus services based on area concessions. Rail services are operated by the ÖBB (national rail) under an agreement. Operators include the national and regional railways, state-owned bus companies as well as privately owned ones (the usual state-owned international bus companies are not on this market). Funding for operations and reinvestments comes from fares and the states; the latter are in turn funded by block grants from the federal government since Austrian municipalities and federal states have very limited taxation rights. Major rail investments are covered by the ÖBB.

Vienna public transport is organized by Wiener Linien, a city owned company that runs trams and the U-bahn and outsources only part of the bus networks (again according to the Vienna political tradition to run things itself). Operations and reinvestments amount to some 800 million euros and are to some 2/3 covered by tariffs and the remaining part by the city (in turn covered by federal grants). Subsidies for students and apprentices come from the federal government and for retired people from the city of Vienna.

Investments for underground expansion (2016: 200 M euros) are shared equally by the city and the federal government according to an agreement from 1979 with the city share partly coming from a special tax on companies (2 euros/employer/week) which brings some 60-70 million euros. Investments for tram and busses ((2016: 238 M euros) solely from the city (but indirectly from the federal government).

The tariffs system is a story of its own. After the election in 2011 the reds agreed to a coalition with the greens, who demanded a tariff of 1 euro per day or 365 euro for an annual ticket. The loss in revenues were at least partly covered by increased travelling, but the need for subsidies nevertheless did increase. The 1 euro/day symbol also makes it difficult to raise the tariff and increase the recovery rate.

The tariff policy is part of the overall politics of place and mobility. Other parts include a strong policy of pedestrian streets, which started in the 1970's when the U-bahn was introduced, a high frequency public transport and an increasingly restrictive parking policy. This latter also illustrates the role of political alliances: restrictions were first started in the city districts dominated by the blacks and now has broad support. Vienna now consistently ranks on the top tier of quality of life indexes over cities.

The vision of a synthesis between mobility and place has so far been well implemented. Public transport market share is increasing and car market share is declining. Biking is increasing although still on a low overall level. There is apparently very little political pressure to build motorways from Lower Austria into Vienna. The federal government is building a motorway around the city.

Vienna's population continues to grow and is expected to reach some 2 million around 2023-25. Housing will have to be built and linked to public transport but this should be doable in a city which controls land use, planning permissions and transport. The population in Lower Austria is slowly concentrating to areas with good public transport access to Vienna.

Four aspects to be watched for the coming years:

- A possible shift in black-black federal politics. Vienna is heavily dependent on federal transfers, not the least for investments in new infrastructure. The municipal elections in 2020 will give some indications also for the coming federal elections in 2022.

- Will city budget pressures force a revisit of the 1 euro/day annual ticket?

- Will Bratislava become a commuting city? Living costs are lower and railways good.

- Who will organize new mobility services?

5 THE CASES IN THE NETHERLANDS

- *The Netherlands now has two metropolitan transport regions after some thirty years of deliberations and experimentations but this overall structure nevertheless still appears to be work in progress. The two regions have different governance structures, dedicated grants from the central government and two rather different histories. Transport in other parts of the country is organized by twelve provinces.*

The Netherlands has experimented more than most countries in setting up governance for metropolitan transport and probably for three reasons. First, in a densely populated country the demarcation lines between metropolitan regions are even less obvious than in other countries. Second, the Netherlands is a country with deep roots of democracy and perhaps also the most centralized. Third, and related to the second, there is a deep respect for the historical three-level structure of local, provincial and central levels of government.

Today's structure thus has fourteen transport authorities:

- Rotterdam-den Haag metro-region (the MRDH);
- The Amsterdam region with the VRA
- And one in each of the twelve provinces.

The Dutch government started to think seriously about governance of metropolitan transport in the mid 1980's. After considerable discussions between stakeholders – known as 'poldering' in the Netherlands – the country ended up some 25-30 years later with the Amsterdam region and the Rotterdam-the Hague region. The latter is still an experiment. The Amsterdam structure emerged out of discussions between the municipalities and the two provinces Noord-Holland and Flevoland in 2007. It is built around two institutions: an Amsterdam transport authority (VRA) founded by 16 municipalities of which Amsterdam is the dominating one was created by the Amsterdam metropolitan region (MRA) founded by 36 municipalities (which include the 16) and the two provinces. The Amsterdam transport authority VRA is in charge of tendering for public transport as well as for maintaining road infrastructure for private cars, goods, bicycles etc all based on funding from the central government. MRA is responsible for land use, spatial planning, planning for major transport infrastructure investments, economic development. The boards are appointed by the founding municipalities and provinces.

The VRA budget consists of user revenues plus a block grant from the central government based on geographic and economic data. This budget should cover operations, reinvestments plus additional investments under a certain level. User revenues cover some 40 % of this budget.

The Rotterdam-the Hague transport authority (MRDH) emerged out of discussions between 23 out of 60 municipalities in the Zuid Holland province in 2014 upon the invitation/urging by the central government as a deliberate alternative to the province. The MRDH is operational since 2015. This authority is in charge of public transport tendering and roads based on dedicated block grants from the central government. User revenues cover 30 % of this budget. It also has a mandate to stimulate economic development based on funding by the member municipalities (the latter part is only some 1% of the total budget). Land use and spatial planning is the responsibility of the province Zuid-Holland, which also has a transport authority for the remaining part of the province. This province was, somewhat surprisingly, not involved in the setting up of the MRDH. The MRDH is a provisional organization and will be evaluated in 2024 in order to decide whether to be renewed in 2026. The two cities have the majority of the population but not the majority of the votes in the governing assembly. The two (appointed) mayors alternate at being chairs every two years

Transport for the rest of the very densely populated country is organized by the directly elected assemblies of the twelve provinces. The country is held together by the national railway system and one common tariff system decided centrally (based on a fixed price for the start of a trip and then a km-price which can vary between authorities). Transport funding for the twelve provinces comes out of the overall funding from the national government in the form of a block grant based on geographic and economic data. Major infrastructure investments above a certain level are co-financed by the central government according to strict cost-benefit criteria in order to maximize mobility. The influence of local conditions – and local politicians - is therefore limited. This is broadly accepted also by the municipalities in the two metro-regions. The central government accepts the fact that metropolitan transport is also about place making, and in particular about biking. There appears to be a relatively robust balance between place and mobility. The central government concentrates on rail and road.

The process leading up to the creation of the two metropolitan transport authorities was anything but straightforward and with three partial explanations.

The first explanation is that the Netherlands is a densely populated country. Defining what is a metropolitan region in Canada, France, the UK, Germany, Scandinavia is relatively straightforward when major cities are far apart. Not so in the Netherlands, where cities are close and the rail network between them very good. It is much less clear how labour market regions should be defined.

The second partial explanation is the unique Dutch political process. The Netherlands is an old nation-state with a unique history of democracy. The 'nation' in the Dutch nation-state emerged in medieval times and organized around democratic institutions for the management of water. Holland first emerged out of the Hapsburg empire re as a republic of provinces and cities in the late 16th century. The provinces were disbanded as a consequence of the Napoleonic wars and the 'state' in the nation-state was created. This state reinvented the provinces after some fifty years and then gradually transformed itself into a highly centralized and technocratic state.

Two aspects illustrate why the Netherlands is the most centralized state in Europe. First, lower levels of governments have very limited fiscal autonomy. Almost all taxation is decided by the central government and then distributed to provinces and municipalities. Second, mayors of municipalities are not elected by the municipal councils but appointed by the presidents of the provinces upon recommendations by the directly elected municipal councils based on a list of candidates pre-selected by the president of the province. The presidents of the provinces are in turn appointed by the central government after recommendations by the directly elected provincial assemblies. Mayors and province presidents are appointed for six years which is longer than the electoral period of four years. One wonders whether a Ken Livingstone, a Jacques Chirac or a Willy Brandt would ever emerge out of local Dutch politics.

The Netherlands has three plus one levels of governments: central, municipal and provincial (based on the historical provinces) plus the water management boards. The last form of government is the oldest and has by many been seen as the origin of the Dutch synthesis of consensus-oriented democracy and technocracy. Water management in Holland was originally built both on local democracy in the polders and on a professional technocracy. Many have also argued that the propensity for technocratic central planning has grown out of the need to manage water. That the Dutch democracy is 'consensus-oriented' is not an empty characteristic and is endowed with a special term: 'poldering'.

Poldering, centralization and technocracy may make for a meandering political process but it is also possible to see them as mutually supportive. 'Poldering' will have to be based on commonly accepted concepts; technocratic structures based on agreed-upon professional skills and standards are well suited to deliver these concepts; and a centralized government necessary for implementing the conclusions of the poldering process. Poldering and centralization go hand in hand as long as the technocracy also is a listening one.

This again has deep roots – for most part of the 20th century all investments in water management was prioritized by a cost-benefit analysis and this has been carried over into the transport sector. Science-based water management is something of a founding myth of the Dutch society and this myth has radiated out to other sectors including transport. The metropolitan transport aspect of this is that the transport authorities are mobility-only authorities with the goal to reduce travel times. The role of the central government in deciding on major transport infrastructure is accordingly based on traditional cost-benefit analysis. The organizational consequence is a well-defined transport silo within the central government.

This principle works well when the defining characteristic is mobility as measured in travel times. In this silo the CBA becomes not only necessary but also a sufficient tool.

The principle risks breaking down when transport is not only about mobility but also about land use, urban design and more generally about place. Place is about integration of different considerations and does not lend itself to CBA. Neither the language nor the concepts are there and nor the quantitative models. The technocracy has to be a listening technocracy.

The third partial explanation for the two metropolitan transport authorities could, against this background of poldering, centralization and technocracy, also be seen as the default result of a failed centrally decided political process that aimed to create not two but seven metropolitan regions.

Various governments have over the decades tried to reorganize public transport as automobile use grew and labour market regions expanded. In 1985 the then central government made cooperation between municipalities compulsory for regions with 'major coordination problems' and also opened up the possibilities for municipalities to ask for the creation of new regions. A period of experimentation followed.

The next step came in 1994, when the then central government made it compulsory for municipalities in seven 'city-regions' (Amsterdam, Rotterdam, the Hague, Utrecht etc) to cooperate on spatial planning, transport and regional development and to create 'city-region transport authorities' as alternatives to the existing provinces.

These seven metropolitan regions existed since the

1950's as loose associations of municipalities. In 1995 the then central government proposed that the 'city-provinces' for Amsterdam, Rotterdam and the Hague should have directly elected assemblies. This was massively rejected in a referendum. The central government went back to the idea of an association of municipalities.

In 2005 these city-regions were made permanent by a new law. However, these seven city-regions were perceived by some as a threat to the ancient provinces and the regions never gathered sufficient bipartisan political backing. A new (center-right) government thought an additional territorial organization was one level too many and in 2014 disbanded four of the seven city-regions and turned transport over to the provinces. The municipalities of the Amsterdam region agreed to continue with the city region with the two organizations the VRA and the RMA. The municipalities of the two city-regions of Rotterdam and the Hague agreed to merge the regions into one – the MRDH – for a 12-year trial period, which amounts to two successive mayoral periods.

The MRDH governance structure has the marks of a compromise between two cities without any tradition of working together. Rotterdam and the Hague are of roughly equal size, with different economic structures. Rotterdam is a European port with considerable freight transport and the Hague is the administrative centre of the Netherlands. The MRDH has a staff of some 100 persons in total.

The OECD has carried out a major review of the MRDH as part of its program on territorial governance and is not quite convinced about the viability of the MRDH. According to the review the region is "not a historically, culturally or economically cohesive area" and administrative and political culture moreover differ. Unemployment is higher than the national average, commuting between the two cities is low Little support, it is said, exists for cooperation for a common good. The MRDH needs to establish a partnership with the province.

The review also notes that there are many other actors with partially overlapping mandates in the region - "institutionally crowded" is the phrase used. The MRDH has a limited time window to demonstrate that it can make a difference and add value that the province of Zuid-Holland could not.

The contrast between the Rotterdam-the Hague city region and the Amsterdam city region is quite large. The MRDH was deliberately created besides the province of Zuid-Holland while the Amsterdam metropolitan region – which is larger than and thus includes the Amsterdam transport authority region – was created out of a deliberative process within the province of Noord-Holland. The aim of the Amsterdam transport authority VRA is to gradually expand and ultimately cover the whole of the MRA region. The Amsterdam metropolitan region – the MRA - is a voluntary association between 36 municipalities and the two provinces of Noord-Holland and Flevoland. This region has roughly the same population as the MRDH but political cultures differ between these two provinces and Zuid-Holland. Internal 'poldering' can apparently deliver quite different outcomes.

Whether the MRDH and Zuid-Holland can learn from the VRA and the MRA is the big question. According to the OECD review the central government in fact established a 'facilitator' with the task to mediate between the MRDH and the province of Zuid-Holland, thus underlining the fragility of the MRDH.

The present Dutch structure with two plus twelve transport authorities appears to be quite flexible in terms of day-to-day operations and there is also a considerable amount of cooperation between the different authorities. Day-to-day operations represent the positive side of poldering.
Three issues for the future are worth thinking about.

First, whether the present structure is an innovative structure. High quality day-o-day operations is necessary and increasingly insufficient. There is, for instance, very little discussion about e.g. location value capture or involving private property developers in the financing of transport infrastructure or indeed making private car users contribute to financing public transport operations. The difference between the Dutch structure and the TfL is worth noting: the TfL is responsible for both the functions of the VRA and the MRA, or the MRDH and the province, and is generally seen as highly innovative in both day-to-day operations and in thinking about the longer term.

Second, how to shape new mobility services. The Netherlands has neither an automobile industry thinking about new forms of mobility – like France, Germany or Sweden – nor transport authorities like TfL. The Dutch transport authorities may very well be takers of new services rather than developers.

Third, the viability of the MRDH. The MRDH will need to demonstrate to its founding municipalities, the Zuid-Holland province and the central government that it can add value compared to the default option of turning the transport authority over to the province. Much will depend on whether the two (appointed) mayors can mobilize the necessary political skills.

6 THE CASES OF THE FOUR NORDIC COUNTRIES

Denmark, Finland, Norway and Sweden, collectively the Nordics, are seen as the most successful countries in coping with globalization. It is widely accepted that this is due to the synthesis of innovative business and universal welfare services supported by high taxation levels. High quality metropolitan public transport services supported by the middle classes fit into this Nordic pattern. At the same time, governance of metropolitan transport differs considerably.

Local authorities in all four countries have broader taxation rights than the other five countries in this study. Only Sweden has regional counties that also have taxation rights. In terms of organization of metropolitan transport Denmark and Sweden are two outliers while Norway and Finland are closer to the German idea of a public transport alliance between local authorities and/or counties. The governance in the Copenhagen metropolitan region is structured around the individual local authorities while the three Swedish metropolitan regions are structured around directly elected county councils. Norway is a pioneer in Eurpe and North America in gradually building broad political support for tolls on cars as a source of financing metropolitan transport. Sweden is a pioneer in organizing integrated metropolitan transport and managed through a big political gamble to establish congestion charges. Finland and Helsinki are pioneers in making data available. Metropolitan public transport is still fragmented around Copenhagen which, on the other hand, is a world leader in non-motorized transport and in shaping places.

6.1 The Oslo region

- *The governance of metropolitan transport in the Oslo region has two characteristics: first, investments are largely financed through road tolls and, second, the public transport authority, RUTER, for the Oslo city and Akershus county is a stock company owned by the city and the county of to 60/40. RUTER is a tendering organization financed by tariffs and subsidies from the owners for operations and, together with the central government, responsible for large scale investments through road tolls.*

RUTER serves some 1.3 million inhabitants in the Oslo metropolitan region with a population of some 1.6 million. The annual no of trips is some 230-240 per capita and is rising faster than the population does. The remaining part of the region is primarily served by the Norwegian state railways (NSB) with its own ticketing system. RUTER has stated that it would prefer to have also the NSB local trains under its umbrella but NSB has so far said refused.

RUTER is a surprisingly new organization and went into operation only 2008.   The idea of RUTER – if not the name – goes back to the early 1970's when the county, the city and the central government planned to create a jointly owned public transport company for all public transport including the local rail service (owned and operated by the national railways). At the last minute, however, Oslo backed down since it did not want to give up control of its local public transport company (Oslo Sporveier).

Three decades and one generation later the idea was resurrected and RUTER was created, this time without central government owner participation. RUTER plans and tenders for all public transport in the region except the railways. It is a tendering organization rather than an operating one and owns the three information systems of ticketing, real time information plus passenger data. There is an ongoing discussion about whether the operators have enough room for innovation and creativity or run the risk of becoming passive partners.

RUTER is a company with a clear distinction of responsibility between the political owners and the professional organisation. The RUTER board is appointed by the owners and consists of independent experts and laymen. The company has skilfully built a brand and is well appreciated by riders and more broadly by the Oslo and Akerhus middle classes which in turn have ensured broad and bipartisan political support also for the necessary subsidies. The operating costs are to some 55% covered by tariff revenues and the rest by funds from the two owners plus a contribution from the tolls from the Oslo road toll system. The investments for large scale infrastructure are covered by the toll system. The owners contribute their share of the subsidies out of the municipal taxes of which one share is based on a fixed percentage (decided by the parliament) of personal income and one share is based on local property taxes. So far there has not been any major disagreements between the political parties (in contrast to, for example, Canada and the US).

The Norwegian road toll system is well established since some thirty years. The first Oslo package (Oslopakke1) was originally introduced for funding specific road projects in Oslo (and in other cities) with broad political support. It is the most successful metropolitan transport financing project in Western Europe.

The second Oslo package (Oslopakke 2), introduced the idea of also contributing to the operations of public transport. Since this coincided with the launching of the RUTER, the company got off to a flying start with new bus services.

The third investment package for the Oslo metropolitan region, Oslopakke 3, has raised the contribution to the operations of RUTER and now amounts to almost 9% of the total operating costs. The argument that road traffic is a beneficiary of public transport and therefore should contribute to the costs of operations appears to have been accepted. It is decided by the national parliament and includes both roads and public transport. It is financed partly by road tolls and also by toll rings around the city.

RUTER is a dynamic and innovative company but it does not have any leverage over land use and property development. These are still the prerogatives of the local authorities and are, as usual, heavily influenced by the property industries and their financial backers. There is nothing like the Copenhagen finger plan or the Stockholm joint planning of subways and land use. Two topics should be watched. First, the need to maintain bipartisan political support, which in turn will have to be built upon the alliance between the urban and the suburban middle classes. The first indications of a political split have surfaced when the right-wing party has protested that road tolls are used also for transit. It will in particular be important to follow whether subsequent Oslo packages will raise the contribution to the operating costs. Second, which role, if any, RUTER should and/or will play in developing new mobility services. Both topics will depend on upon RUTER's skill in political marketing, branding and organizational evolution as well as on who the main European actors will be.

6.2 The Stockholm region and the other two regions in Sweden

• *The governance of metropolitan transport in the Stockholm region and in the other two metropolitan regions have three unique characteristics. First, transport is not only urban/suburban but also peri-urban and rural. Second, the governance of metropolitan transport can only be understood through the dual structure of Swedish territorial organization. Third, Swedish regional counties are the only counties in Europe with independent taxation rights.*

The Stockholm region has followed a very different path from the Oslo or Helsinki region. Stockholm pursued, in contrast to Oslo but in parallel with Copenhagen, transit-oriented development for many decades based on a 'Vienna municipal socialism' idea consisting of city owned-land (also in local authorities outside Stockholm), city-owned housing companies and city-owned subways. This idea started to break down, however, in the 1960's as the population grew also in the suburban local authorities outside the city, as car use grew and as some suburban local authorities opted for motorway-oriented development instead. The result was a major reorganization of metropolitan public transport as well as a major road investment program which in turn led to the collapse of the Stockholm model for transit-oriented development.

This reorganization was in turn based on a dual reorganization of the regional structure of the Swedish state and of the directly elected counties in the Stockholm metropolitan region. The Swedish state is organized in provinces with regional state agencies for coordinating central government policy and with boundaries that stretch back to the 17th century. The counties were mainly responsible for health care and other forms of care plus some areas of education. They have the same geographical boundaries as the provinces and have directly elected assemblies and have direct taxation rights over the inhabitants. Before the reorganization Stockholm was both a state province, a city and a county. The local authorities surrounding Stockholm were also organized in a county and subject to a state province. The reorganization established in 1971 a new state province and a new county out of the previous two provinces and counties. The new county was urban/suburban/periurban as well as rural.

The new and enlarged county made it possible to create an entirely new and integrated public transport system (inspired, it was said, by the Hamburg Verkehrsverbund), called SL. The Stockholm link between transit and land use was broken, however, since the local authorities who agreed on creating the expanded county refused to give up their authority over planning permissions over land use. At the same time the new public transport company also obtained a secure subsidy base in the direct taxation rights of the county.

For the next thirty years two parallel land use/transport paths evolved. Some local authorities opted for motorway-oriented development and urban sprawl and others continued with subway and commuter-train-based land use development. Conflicts over road investments started to grow between left and right and a stalemate established itself. SL now has some 385 annual boardings per capita with its operations covered to some 50% through revenues from riders and 50% from county taxes. Major investments always involve central government co-financing. SL now is a tendering company only.

Topography exacerbated the conflicts over urban motorways but also pointed to a solution. Stockholm is built on a number of islands and there are lakes everywhere. Room for expanded motorways into the city center was not there.

The solution turned out to be congestion charges for entering the city center, which is geographically well defined and only accessible by a very limited number of points. The charges are for constitutional reasons national taxes.

The congestion charges were strongly opposed by the motorway-oriented suburbs. During a seven-month trial period in 2006 the congestion charges in fact reduced the car traffic into the city center and also to some extent outside the city. Travel timed were shortened and a subsequent referendum in the city – not the suburban local authorities – gave a clear bipartisan support. The logjam broke up and hitherto blocked major infrastructure investments were agreed, partly based on revenues from the congestion charges. Population forecasts further concentrated the minds and a bipartisan view gradually emerged to return to the transit-oriented development and expand the subways linked to new housing. The congestion charges have since been raised and also widened geographically. The Stockholm region has arrived to where Oslo was a couple of decades earlier.

The governance of the Stockholm metropolitan transport system is evolving outside the Stockholm county. Regional rail connects cities in surrounding counties with Stockholm, expands the metropolitan labour market and relieves the housing pressures within the Stockholm county. An integrated tariff structure has been agreed.

Two topics should be watched over the coming years. First, whether SL has the organizational capacity and creativity to meet new conditions. The dividing line between politics and professional autonomy is fuzzier than in Oslo and financing all the new investments and their operations will be a heavy burden on politics. Second, whether SL as a tendering organization should have any role in organizing and stimulating new mobility services that can co-exist with and even strengthen the present rail-based system. The jury is still out on SL.

The organizational transition of metropolitan transport occurred later in the other two Swedish metropolitan regions, since the territorial administration of the Swedish state first had to be changed. These territorial boundaries still reflected Sweden's conquest of Danish and Norwegian provinces in the mid 1600's.

The Gothenburg metropolitan region – 'Västra Götalandsregionen' in Swedish or 'the western region' for short – was established as a new county only in 1998 out of three different counties (one of which was an old Norwegian province) and the city of Gothenburg. Public transport was only reorganized in 2012 with one tendering company – Västtrafik - owned by the new county and with somewhat less than 50% of the annual boardings passengers of SL.

The region, the city of Gothenburg and the state is involved in a large investment program to some 40% financed by congestion charges introduced in 2013. The charges were approved by a very broad political coalition in the Gothenburg city council and then by the national parliament. They turned out to be hugely controversial, however, not the least since they are meant to finance a railway tunnel under the city which itself is highly controversial.

The Scania county in southern Sweden was created in 1997 when first the two state provinces (again reflecting the defense lines against a possible Danish invasion) were amalgamated and then also the two counties together with the city of Malmö into a new county. This reorganization was triggered by the construction of the Öresund bridge between Malmö and Copenhagen and the subsequent opening of the Öresund train system between a number of Swedish cities (including Gothenburg) and Copenhagen. Again, organization precedes transport. The Scania public transport authority is an administrative part of the Scania county and has roughly 1/3 of the annual boardings of SL. The Scania metropolitan region is a polycentric region with an existing rail network that now is being expanded and financed by the National Transport Administration. The first tram line is built in Lund and additional lines may come.

6.3 The Copenhagen region

- *Governance of Copenhagen metropolitan transport has distinctly different priorities compared to the other Nordic countries. Somewhat overstated, metropolitan Copenhagen is a world leader in place and a west European laggard in public transport integration*

.

Copenhagen is well known for the finger plan for transit-oriented development and for Jan Gehl, one of the wold's foremost thinkers and doers when it comes to creating places for people in cities (rather than cars). Copenhagen has over the decades placed a much higher priority on biking than the other Nordic capitals and is world famous for its high share of biking as place creation.

The finger plan was created in 1947 and is a transport and land use plan for the greater Copenhagen area. The palm of the hand is the densely populated city and the five fingers are based on the regional commuter train lines run by DSB, the Danish state railways. The original Finger Plan had five fingers – each finger a major commuting rain line – and now has a legal status under the Ministry of Environment. It is developed together with concerned municipalities and is frequently but not always followed by them. The Ministry could conceivably enforce the plan but the government has chosen not to. A sixth finger has been added lately in the form of a metro-based development area extending from Copenhagen towards the Kastrup airport.

The Copenhagen metropolitan public transport system has some 170 annual boardings per inhabitant, which is less than half of SL in the Stockholm region. The system has seen major reorganizations over the decades. The present organization appears to be less by design and more by default, as the then Danish government in 2007 decided to reduce the number of local authorities – which have the rights to raise taxes to cover their services - by two thirds and at the same time reduce the role of the regional levels of government with many of their functions taken over by the local authorities. Since then, neither the operators nor the local governments have been able to agree on an alliance of the German kind, as the Oslo and Helsinki regions already have. The Swedish model with an organizing county council with its own taxation rights is also not possible. It remains to be seen whether the present governance structure of metropolitan transport with its weak integration is viable.

The present governance structure for public transport is organized around three operators and one (very weak) umbrella organization. The three operators are DSB (the national railway); Movia, which primarily is a provider of bus services and owned by the municipalities in the region; and the Metro company, which is owned by the Danish state and the cities of Copenhagen and Fredriksberg.

The DSB runs regional trains as well as the commuter trains, which runs mainly in Copenhagen and on which the finger plan is based. Tariff revenues cover roughly 50% of the operating costs and the state covers the deficit. Its investments are decided and financed by the central government. The individual local authorities tender bus services with Movia in their respective areas and based on their willingness to subsidize the service. Movia also provides inter-municipal bus services provided the local authorities in question can agree on the routes and their funding. Movia is owned by the 45 local authorities in the region and by the two regions for Själland and the capital. The Movia board is elected from an assembly where each local authority has one voice, regardless of the size. Copenhagen and the two regions are always members of the board, and the important decisions require that two of the three permanent members are in favour. The local authorities can raise taxes but the regions are financed via block grants.

The metro company invests in and operates the metro lines. Operations are largely covered by fare revenues while investments are supposed to be covered by land development as in a classic DOT (Transit-Oriented Development) scheme. The state is a partial owner since the state owns considerable amounts of land in the region. The metro company is now in the middle of major expansions with several new metro lines under construction. The city of Copenhagen may thus be saddled with a considerable debt burden over time.

There is since many years a unified tariff but the structure is not easily understood by passengers. The principles for sharing revenues among e.g. DSB and Movia or between Movia and the Metro company are complicated. Integrated train-bus services, transfer terminals and inter-municipal bus routes are difficult to organize. There is an informal mechanism for integration in the form of a standing committee of operator CEO's (the 'directors' cooperation') that rely on consensus. Every CEO has a veto right. The formal organization DOT ('Den Offentlige Transport') responsible for coordination has a very small staff and no mechanisms of enforcement.

In terms of outcome the service provided could be worse, however. The weak integration is to some extent compensated for by a much more careful attention to place and not the least that each local authority has economic incentives to design the bus routes so as to maximize ridership and revenues.

There is nevertheless considerable criticism and several studies have been made about how to increase integration primarily between train and bus services, not the least by the Capital region (one of the two regions that own Movia). There is no lack of international models for how this could be done based on the existing operators and local authorities, but DSB has so far not been interested and the central government appears unwilling to force the issue. Stalemate remains.

6.4 The Helsinki region

The governance of metropolitan transport in the Helsinki region is relatively similar to the Oslo region and also the most similar of all the Nordic regions to the German model of Transport Alliance *(Verkehrsverbund)*. As in the case of Oslo, it also had a very long gestation and found its present form only in 2010 after a decisive intervention by the national government. Public transport is organised by the HSL (Helsinki region transport) for at present 9 local authorities in the greater Helsinki region. And yet there is something not quite yet finished about the organization.

The greater Helsinki region is defined as the metropolitan commuter area, has some 1.5 million inhabitants and consists of some 14 local authorities. HSL is an association of nine local authorities with some 87% of the overall population. The remaining local authorities are small and largely rural. HSL is governed by a general assembly, where Helsinki has 50% of the votes, two others have some 40% and the rest is split among the remaining six local authorities. The local authorities outside HSL but within the greater Helsinki region can join later when and if they want. Helsinki city is the dominant partner. Seven of the fourteen board members are from

Helsinki (including the chair). In 2017 there were some 375 million boardings made on HSL transport.

HSL is responsible for public transport planning, procurement, operations and for the integrated ticketing system. HSL proposes investment decisions but is not involved in them, since they are the responsibilities of the state (for rail) and the member local authorities. All large-scale infrastructure investments involving the central government are decided on a case by case basis. The principle is that half the operating costs should be covered by tariffs and the remaining part by general taxes from the local authorities. HSL is also responsible for overall transport planning for the greater region.

The Helsinki city is the operator of the metro system and the tramways. All bus services have been competitively tendered and are operated by more than 10 mostly privately owned companies. The state railway company operates commuter trains until 2021, when the first tendered contract will commence. HSL coordinates all operators.

The local authorities are responsible for land use planning and construction permits. The ownership structure should guarantee that public transport infrastructure and land use is coordinated.

HSL has a clear logic to it and the only surprising thing is that it took such a long time to set it up. Only a reorganization of the existing regional cooperation made the HSL possible.

For several decades an association of Helsinki and the three adjacent local authorities was responsible for transport, waste management, environment protection etc. Public transport was divided into inter-municipal transport and intra-municipal, with different locally owned companies providing the service. The local authorities were never capable on agreeing on integrating the inter and intra traffic or on unified fares within the common ticketing system. In the end the national government forced a solution on the local authorities and split the transport part from the original association. Helsinki and five adjacent local authorities formed the HSL but subsequently first one and then two additional local authorities joined.

HSL has one other characteristic together with RUTER: all data are publicly available. Maybe new mobility services will be organized by Finnish software companies.