Urban Mobility in European Cities 2020+

Introductory remarks and hypotheses for working group sessions 1 and 2
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The views expressed in this paper do not necessarily reflect the views of the European Commission.

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Preliminary remarks

Aim and scope of this paper

The following hypotheses and assumptions provide a basis for discussion during the two working groups sessions of the first Pro.Mode conference. They attempt to bring together relevant developments regarding demography and economy in Europe and particularly in European cities as well as their likely impacts on urban mobility. The intention is to show in which way different processes currently at work mutually influence and reinforce each other.

Part A of this paper deals with changes in framework conditions for urban mobility on a European and national level. The second part (B) aims at developing an idea of possible outcomes on the urban level. Part C further breaks these down onto the level of urban mobility. Furthermore, the fourth part (D) attempts to bring the preceding points together, following a particular train of thought.

It has to be noted that no attempts are being made here to clearly formulate scenarios or forecasts and discuss the possibility of each coming true. Thus, the following assumptions are meant as an inspiration to further explore the subject in individual cities.

Working group methodology and objectives

The discussion in the working groups will follow a future-workshop-approach in order to strengthen dialogue, to explore the future picture in European cities, making use of the broad knowledge and experience of the participants from the many cities represented.

The aim of the first working group session “Types of users and their needs” is to develop a clear picture of the scope and extent of the demographic and economic transformation processes currently at work, and about their effects with regard to urban mobility. It is therefore hoped to identify certain groups of the population, the mobility wishes and needs of which might differ from those of today.

Working group session 2 will focus on possibilities and obstacles to meeting the users’ mobility needs. It therefore addresses the supply side of transportation as well as the question of possible instruments and concepts for dealing with the transport impacts of demographic change.

Guiding questions

Guiding questions for the first session therefore are:

1) Are the outlined developments of significance for all European cities?
2) With regard to transportation, which are the groups of urban transport users that policy should focus on?
3) Which changes in transport needs and demands will arise regarding these groups, based on the altering framework conditions in which their daily mobility takes place?

Guiding questions for the second session therefore are:

1) Which are the most relevant framework conditions for future urban mobility supply?
2) Which are the concepts and instruments that are needed in order to cope with mobility changes resulting from demographic and economic developments?
3) Building on the outlined future demands, what are the actions needed to satisfy transport needs?

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Hypotheses for future trends

Note: The following hypotheses and assumptions are neither supposed to be complete, nor do they pretend to be entirely unheard of. However, they are relatively unique in that they bring together important issues from various spheres of consideration and filter them down with regard to their impacts on urban mobility.

A. Potential future developments in Europe

Demographic disparities

1. The population of Europe will shrink considerably in the next few decades. On average in the EU, by 2050 population numbers will have fallen by nearly 14 %. Linked to this is an increase in older people (over 65 years old) which is now 15 %, to make up more than 30 % of the total population. The proportion of children and young people will fall from 20 % to 16 %.
2. However, individual EU member states and even regions within one member state will be affected to very different degrees by demographic change. Whereas some countries (for example Ireland) will continue to grow, or else will only decline minimally (France, UK and others), other countries will have to come to terms with population losses of up to 25 % (Germany, Italy, Czech Republic, Hungary). All in all, the southern and central European countries - at least in terms of magnitude and rapidity - will be most severely affected by demographic change, whereas northern and western Europe will change the least.
3. Due to demographic and economic reasons, labour migration into Europe will grow. At the present time the proportion of people with an immigrant background in several European cities is higher than 40 %. This immigration will be concentrated on the relatively speaking more prospering regions. In this way, not only will demographic disparities increase further, but also the composition of populations will alter considerably.

Economic or commercial disparities

4. In conjunction with the increase in demographic disparities, economic divergences will also increase. It can be anticipated that national economies will become even more specialised within the European internal market as a result of comparative advantages. Convergence will occur primarily in the 'commercial heart' of Europe, whereas the EU periphery is likely to fall behind.
5. The reduction of crude oil production will lead to an increase in energy prices, which in turn will affect national economies as a whole. While this holds true for all European nations and likewise for the majority of economic sectors, it will most severely affect weak national economies and energy intensive sectors, such as transportation.
6. Linked to these divergent economic developments, there will be increasing differences in labour markets. Even today there are widely divergent trends in for example unemployment figures and numbers of those in employment. Whereas in the majority of Eu member states the labour force participation rates are going up and rates of unemployment are shrinking, such labour market difficulties have increased in some countries to a major degree (Germany, Poland).

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Social and public welfare disparities

7. If the trends of the last decade continue, differences in social and welfare systems will increase in a major way. Even at the time of writing a good 25 % of the population in Europe is near to the poverty line - with great regional differences (Ireland: 33 %, Sweden 16 %, before transfer payments). In a number of the new EU countries, but in particular in Germany, vulnerability to poverty has increased greatly in the last decade. Although transfer payments, at least in the EU of 15 countries, are comparable in amounts (in absolute terms and in relation to GNP), yet the risk of falling into poverty is relieved by means of national welfare systems to varying degrees.
8. Vulnerability to poverty in individual social groups varies considerably, between regions as well. In Germany and Ireland, for example, children and young people are in danger of falling into poverty, in Denmark, UK and in Poland the risk is greater for elderly people. Immigrants are disproportionately at risk in some countries including Belgium, Germany, Spain.
9. Associated with the increase in the risk of falling into poverty is frequently an increase in income disparities. Such disparities (between higher and lower income groups) have widened, in some cases in a major way, in central European states, and to some extent in the EU of 10 countries (primarily in Germany), whereas in western European countries (with the exception of Ireland) they have diminished. In conjunction with the increase in such disparities is a decrease in the middle-income groups.

National budgets

10. National budgets will develop in varying directions due to varying economic and demographic developments. Countries with high outgoings due to ageing populations and a high level of debts/deficits are in contrast to countries which also have high outgoings due to ageing populations but with a satisfactory budget position. Countries with balanced budgetary positions have implemented changes in the national old age pensions systems at an early stage.
11. Developments in social and welfare systems are proceeding in different ways. A change in emphasis from state provision to those provided by the employer and/or the employee can be observed in some of the 25 EU member states, for example Denmark, Slovakia. In contrast to that, other countries such as the Czech Republic or Germany have increased state provisions.
12. Nation states / local authority bodies in a number of countries will re-define priorities (faced with empty public purses). As a consequence, there will be an increase of conflicts concerning (re-) distribution between nation state and local authority levels in a number of countries.

B. The European Metropolis in 2020+. Some assumptions.

1. **Demographic change** has become a reality in most cities. The proportion of people under 18 has decreased considerably due to declining birth rates. People aged between 60 and 80 now make up the largest share of the population. However, cities still continue to attract people from the outside. Thus, migration, both domestic and international, remains at least stable, and in some cities is even increasing. Therefore, major cities are not as badly affected by the decline in total population as rural areas or smaller towns. Nevertheless, demographic change does not stop at the migrant population. A considerable number of seniors in 2020+ have an immigrant background, and their culture, religious and cultural roots also determine their behaviour as pensioners.

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2. The **group of senior citizens is very heterogeneous**. In itself, the group consists of people of varying ages ranging from 60 to over 90, who contrast greatly different regarding their aims, wants and abilities in life. Furthermore, the differentiation of lifestyles which began in the 1980s now causes even seniors of the same age with the same circumstances in life to think and behave unlike each other. Further differences result from varying financial means. Those able to afford now comfortable and active retirement contrast with the rest who had been less fortunate or less far-sighted. Old-age poverty has, indeed, become a major problem.

3. **Urban sprawl** has slowed down over the past 10 years. This is thanks to more severe planning provisions, but also to less housing pressure as well as a shift in residential location preferences of the population. A lot of active senior citizens prefer to live closer to or even in the city. Families with children, however, are still moving to the fringes of the city.

4. The **socio-economic structures** of the cities have by and large continued to exist in the same way and, moreover, they have become more set over the years. Thus, hitherto socio-economically weak urban quarters continue to create problems for urban policy, even more so as the existing steering mechanism often fall short of initial expectations.

5. **Urban economies** have more or less come to terms with the restructuring of global economies. However, some cities have been more successful than others in finding a new position within the network of global cities. European cities are now centres of innovation, science, communication, administration, services and the arts; production and manufacturing processes, however, take place somewhere else.

6. The economic changes together with the shifts in population structure have also led to the emergence of a different **workforce** as regards both size and structure. The number of people in the labour force has decreased, while at the same time the job market has become more differentiated. On the one hand, highly qualified men and women are in ever great demand; and consequently it is possible for them to earn a high income. Likewise, low-qualified, low-paid jobs in the service sector also offer employment for a specific segment of the population. On the other hand, however, the traditional 'middle segment' in the job market has shrunk considerably, mainly because of drops in production and manufacturing.

7. Because of continuing unemployment and the labour force having been downsized anyway, tax revenues have decreased over the years. Additionally, the large number of elderly people cause enormous costs for the social and health sectors. **Public budgets** are virtually incapacitated by the mismatch between income and expenditure, and public spending in all sectors has needed to be reduced considerably.

8. The number of employees with more than one job, of those in **part-time or temporary employment** has increased along with more flexibility and liberalisation in European labour markets and will continue to grow in the future.

9. Even though the total number of people in the labour force has declined, **unemployment** has not ceased to be a problem. Unemployment rates had fallen around 2010, yet they began to rise again once the process of economic restructuring had come to a close. They now remain relatively stable at around 10 %. Those mainly affected are people formerly working in the productive sector as well as low-qualified employees, whose job perspective is uncertain and precarious.

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C. Local transport in 2020+. Some assumptions.

1. **Costs of transportation** have increased mainly due to enormous increases in prices for crude oil. Another reason for increasing transport costs lies in cuts in public spending. As a consequence the share of transport costs on the family household budget increased dramatically for many population groups.

2. Other **transportation technologies**, such as the hybrid car, bio-fuels, gas-fuelled vehicles, etc., have increased their market share, however, they are not yet as popular as developers and producers have hoped

3. In some cities, construction of new and maintenance of existing infrastructure, such as roads, railways, etc., have been **privatised**. The user-pays-principle is applied for an increasing number of new investments. Environmental provisions, such as environmentally protected zones, congestion charges, high taxes, car parking management systems, etc. have in those countries/cities where they have been put into effect further contributed to increasing costs of private car use. Because of the costs, a lot of especially less-well off people as well as seniors with a modest pension do not own a car any more – driving licence notwithstanding.

4. **Public transportation** has also seen an increase in prices, for approximately the same reasons. Despite political and administrative efforts to cope with ever-present financial crises in the public budget, of which outsourcing of tasks is but one, some cities are not able to finance maintenance of their infrastructure at all. This applies first and foremost to smaller cities and towns, and to rural communities. Yet major cities also have to make decisions where necessary works can not be carried out due to financial constraints. The same holds true for the subsidisation of services. Despite increased tariffs, transport operators are not able to cover their costs. The cutback in subsidies from the city has – in more cases than one – caused some peripheral areas to be cut off from traditional public transport.

5. The structure of **travel demand** has changed in terms of activities to be carried out, trips and time. All in all, the demand for transport has stagnated or decreased. The number of trips has decreased and transport demand is distributed more equally throughout the day. Heterogeneous mobility demands in senior citizens, shrinkage in the 'captive residents' (young people, so called) as well as the fact that the level of motorisation in women reached a similar level to that of men have contributed to this development.

6. The changes in travel demand led to a revision in **public transport and infrastructure provision**. Public transport faced increasing financing and supply problems caused by the demand changes. New forms of services have been introduced with an orientation towards more efficiency and cost effectiveness. Third sector organisations play a significant role in service provision, especially in providing transport services in certain residential areas or for groups with special needs.

7. Last but not least, changes in travel demand have **relaxed traditional pressure on infrastructure.** Furthermore, these changes challenged standards in infrastructure and services to which we had become used.

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D. Possible effects of demographic and economic change with reference to traffic and transportation

Changes in significant framework conditions and basic transportation effects at urban agglomeration level			
Change category	**Framework condition**	**Effect**	**Effect on transport**
Demography	fewer people		reduced demand for transport
	fewer young people, more older people		fewer 'captives', reduced public transport demand
	more foreign-born people /inhabitants with an immigrant background		
Spatial structure	slowed-down population outflow to city margins, in some instances reverse flow into cities	decelerated (social) segregation and functional concentration	less rapid increases in journey distances / length
Socio-economic developments	increasing energy prices		higher mobility costs
	weak economic growth	real income growing only slowly or stagnating	
	more pronounced income disparities		in some instances a reduced mobility budget
	higher proportion of income for health insurance, (old age) pension provisions		Reduced mobility budget amongst the active population
	higher leisure budget at (various) periods of life		demand for transport becoming more disparate unbundling of transport demand(s)
Public budget	need to reduce deficits		reduced transfer payments (support) for public transport financing

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Implications: alterations in demand (combinations of relevant impact factors)			
Change category	Alteration	Effect	implication
Demography	demographically determined alteration in demand	losses in PT	increase in pro-capita costs due to operational reasons;.
		reduced public subsidies	reductions in services provided
		Vicious circle	increased losses due to higher user costs and poorer service provision and changing demand and so on
Socio-economic developments	economically determined alteration in demand	on balance	less car traffic, more PT, more non-motorised transport;
		to some extent	relinquishing mobility
		advance for	increase in comfort (attractiveness) for car traffic
Spatial structure	alteration determined by spatial structure factors / determined by behaviour:		is growth in traffic and transport more powerful than contraction due to demography and economics?

Consequences for traffic and transport policy			
Transport infrastructure	restraint with regard to infrastructure developments in road and rail contexts	(risk of bad investments)	even though there is still slight transportation growth
Public passenger transport	ensure continued demand for local public passenger transport through spatial structural means	(ensuring capacity use)	
	differentiation in local public passenger transport provision with respect to maintaining loyalty among optional users		
Non-motorised transport modes	improving conditions of use / service for non-motorised means of transport		

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Berlin in the year 2020+: trend, goal or illusion?			
Public transport	more PT	outcome of consistent (resolute) inner city spatial development (orientation towards rail transport),	compared to private motor vehicles: more attractive cost movement / progression, of shift by former car users (driving/owning a car is too expensive),
		more flexible types of service	
		improved integration between various service providers	
Non-motorised transport	considerably more non-motorised transport	outcome of demographic and cost developments,	underpinned by improvements in environmental conditions and infrastructure provisions
Motor car traffic	considerably less motor car traffic	outcome of cost development, income developments,	underpinned by regulatory law elements (environmental protection) and efficiency-raising measures (car sharing, etc.)

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