Successful Travel Awareness Campaigns & Mobility Management Strategies

SIXTH FRAMEWORK PROGRAMME

Project no.:	**518368**
Project acronym:	**MAX**
Project title:	**Successful Travel Awareness Campaigns and Mobility Management Strategies**

Integrated Project

6.2 Sustainable Development
1.6.2 Sustainable Surface Transport Objective
3.1.1.1.3 Advancing Knowledge on innovative measures in urban transport

Title of Report:

WP D
Working Stage: Analysis

Cross national comparison of integration of sustainable transport, mobility management and land use planning in 10 European countries

		Date of preparation:	**7 February 2007**
Start date of project:	**1 Oct. 2006**	Duration:	**36 months**
		Version:	**1.4**
		Prepared by:	**NU**
		Checked by:	**UM**
		Verified by:	**ESTC**
		Status:	**Final**
		Dissemination level:	**external**

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2008)

MAX - Introduction

MAX is the EU's latest framework research project on Mobility Management (MM) and Travel Awareness (TA) in transport. Four thematic Work Packages (WP) will link these topics to develop products of use to MM and TA practitioners:

- WP A New approaches and innovative campaigns in MM
- WP B Development of a new behaviour change model and a prospective assessment tool
- WP C Linking MM to Quality management - leading to MM certification
- WP D Integrating planning and MM

Accompanying Work Packages 1-5 will integrate the research efforts. MAX started in October 2006, the State of the Art analysis will be finished in April 2007 and the main research will be carried out over the following 18 months.

Previous EU research on MM has in the main studied MM and TA separately, but MAX aims to link them to demonstrate the synergies between them and, importantly, to develop products that will be of wider applicability and usefulness than the pilot demonstrations that tended to predominate in earlier projects.

A special focus is on new Member States, as reflected in the partners from 16 EU countries, 4 of them new Member States. The consortium will provide excellence, know-how and experience from various disciplines, including marketing, psychology and social science. The main results will be translated into the most important languages of these countries, while the final conference will be in the largest new EU Member State, Poland, in the city of Cracow, in September 2009.

Austrian Mobility Research, AMOR (project leader) – AT

Mobiel 21vzw, M21 (leader WP A) – BE

ILS – Research Institute for Regional and Urban Development GmbH (leader WP B) – DE

University of Piraeus Research Centre, UPCR (leader WP C) – GR

University of Maribor, Faculty of Civil Engineering, Uni MB (leader WP D) – SI

Agencia Municipal de Energia da Almada, AGENEAL – PT

City Council of Almada, Almada – PT

Aristotle University of Thessaloniki, AUTH – GR

Centre National de la Recherche Scientifique – Délégation Rhone-Auvergne, CNRS-LET – FR

Compagnia Transporti Laziali Societa' Regionale spa, COTRAL – IT

Cracow University of Technology, CUT – PL

Eric N. Schreffler, Transportation Consultant, ESTC – US

Equipo de Tecnicos en Transporte y Territorio SA; ETT – ES

FIT Consulting SRL, FIT – IT

Stad Kortrijk, Kortrijk - BE

Lyle Bailie International Limited, LyleBailie – UK

Napier University, NU– UK

Austrian Standards Institute, Ö-Norm – AT

Synergo, R. De Tommasi + W. Schenkel, synergo – CH

Tallina Linn, Tallinn – EE

Timo Finke Consult Aachen, TFC Aachen – DE

Traject nv, TRAJECT – BE

Trivector Traffic AB, TRIV – SE

University of Central Lancashire, UCLAN – UK

Otto-von-Guericke-University of Magdeburg, UMAG – DE

University of Giessen, Institute for applied and empirical social research, Uni Gießen – DE

Vilnius Gedimas Technical University, VGTU – LT

http://www.max-success.eu

Table of Contents

1 Introduction

1.1 Purpose of this report

WP D concerns the better integration of Mobility Management (MM) with Land Use Planning (LUP), as it appears from some member states' experience that the LUP process can provide points where MM can be leveraged into new developments and renewed developments. A review of the current level of knowledge and practice set out in the WP D State of the Art report showed that there is relatively little knowledge about how to develop and implement this area of MM practice in the majority of member states. Therefore, the WP D research plan set out a number of steps whereby knowledge of this area could be increased, with the overall objective of producing useful guidance for planners and developers in all member states on how the LUP system can be better used to secure more MM.

This report presents the results of the first part of the research (Working Stage Analysis 1): it compares the integration of sustainable transport and mobility management with land use planning in the MAX WP D member states and also in Ireland and the Netherlands (a total of ten countries). A common analysis framework was developed and this was used by all partners to analyse two aspects of their land use planning systems: firstly, the degree to which sustainable transport is an objective integrated within the planning system as a whole; and, secondly, how far MM is seen as an outcome of the building permission process for new/expanded/renewed developments. As explained in the next section, the first of these two aspects was seen by the WP D team to be an essential precondition of the second.

The report is structured as follows: after the glossary, Chapter 2 attempts to define the integration of (sustainable) transport and land use planning. Then the report adopts the structure of the analysis framework to provide a summary of the country reports submitted by partners. Broadly, this is as follows:

- Firstly, governance structures and planning laws and other instruments are compared.
- Then, the level of integration of (sustainable) transport within the land use planning system is considered.
- The third section considers the degree to which MM is, or could be, integrated into the land use planning system in general and the building permission process in particular.

At each stage, the report draws out commonalities and differences and tries to categorise and prioritise these and, amongst those states where sustainable transport and MM are already well integrated into land use planning, to explain why this has occurred.

The report's conclusions compare all the countries reviewed in terms of the supportiveness of their planning systems to the overall objective of better integrating mobility management and planning. This helps to identify countries where the planning system is already supportive; where it could be made more supportive, or where examples of good practice already exist that could be spread more widely; and those countries where significant changes in policy and practice need to be brought about before MM can be more systematically integrated into land use planning. In terms of barriers to this integration, the most significant are identified.

1.2 List of abbreviations

E(I)A	Environmental (Impact) Assessment
EPOMM	European Platform on Mobility Management
LUP	Land use planning
MM	Mobility Management
MOST	Mobility Management Strategies for the next Decades
PT	Public Transport
SoA	State of the Art
SUTP	Sustainable Urban Transport Plan
TA	Technical Annex
T(I)A	Transport (Impact) Assessment (for a new development)
TAPESTRY	Travel Awareness, Publicity and Education Supporting a Sustainable Transport Strategy in Europe.
TDM	Travel Demand Management
TP	Travel Plan
WP	Work Package

2 Integrating Transport and Land-using Planning: definitions

WP D is concerned with integrating MM and LUP. However, it is argued by the WP team that a key **pre-condition** for this to occur is that transport planning and land use planning are generally more integrated as well. Based on the findings from Working Stage 1, it appears that this integration should work both ways: the land use planning system needs to acknowledge that it can influence the achievement of sustainable transport objectives, but there is also a need for transport policy to recognise and engage with the role of the LUP system in achieving sustainable transport objectives. Therefore, instruments such as sustainable urban transport plans (SUTPs) may also be an important pre-requisite. It is the purpose of this section of the report to explain what this integration means in practice.

Rather than try to define once more the integration of transport and land use in order to bring about lower levels of car use, previous EU projects in the LUTR cluster (see www.lutr.net) were reviewed. Particularly useful definitions and visions were found from the ECOCITY, SCATTER and TRANSPLUS final reports; how they defined this integration is summarised here.

2.1 Key characteristics of the integration of transport and land use planning

Transport or spatial planners, when considering the LUP system as a means for the achievement of sustainable transport, look to it to produce urban structures that reduce the need to travel, especially by car, and provide better conditions for sustainable transport modes (public transport, nonmotorized modes). The literature shows that there are a number of recognised ways that it is thought that such an objective can be brought about, and modelling (in projects such as SCATTER – see WP D State of the Art report) and some empirical examples such as the development of the City of Copenhagen have shown that this can indeed be the case. Key amongst these are the following:

- A poly-centric urban structure where basic needs can be accessed in local centres, with easy access by public transport and cycling to other higher-order centres.
- Medium and high land use densities with a mix of different uses rather than rigidly separating these uses since, if they are separate, people must travel further to access them.
- Development, especially the kind of development that generates lots of trips (e.g. offices, shops – but also housing) should be concentrated at nodes and along the corridors of the public transport network or at the very least in places that have the potential to become public transport nodes. These areas (nodes and corridors) should be identified in strategic and local plans, possibly by the use of accessibility measurement. Thresholds of (public transport) accessibility could then be set, such that certain types of development are discouraged or not permitted in areas where accessibility levels are below the threshold.
- Re-use of brownfield sites rather than permitting new development on green field sites, as the latter course of action adds to less sustainable urban sprawl.
- When new development is planned, its transport impacts should be assessed and its location should take into account its transport needs. If the transport impacts of the development are predicted to be too large in the chosen location then a different location may need to be selected.
- Parking standards that limit the amount of off-street parking required to be provided with new developments in order to new parking to restrain car use to and from new developments.

For their implementation to be most effective, all the mechanisms above should be supported by their explicit inclusion in policy documents from all levels of government that are involved in the LUP process. However, as shown by other sections of this report, it is still sometimes possible for LUP to effectively support sustainable transport objectives at the local level, even if the national is less supportive – Amsterdam and Munich are examples of this.

In addition, institutionally and organisationally, if planning and transport are to be better integrated, it may be necessary to make organisational changes to ensure that transport planners and land use planners work together more closely, and to ensure that land use planners know what transport planners are trying to achieve. This can be the case even if they already work for the same organisation, as they are still likely to be working in different sections/departments with different points of view.

The degree of cooperation is best measured by the division of powers in the preparation of joint strategies. Two extremes of cooperation between departments relevant for sustainable transport can be identified:

- no cooperation: informing other departments only when a draft policy, plan or programme has been submitted to the city council or parliament;
- full cooperation: defining joint visions of the future, leading to joint actions, formulated in strategies, which are jointly initiated and subscribed to by the involved departments.

In between these extremes lies the procedure of informing other departments at an early stage and commenting on draft papers on an ad hoc basis at low level, high level or ad hoc joint task group level, or informing working groups at low or high level in the administration (EEA, 2001).

Supporting measures

To support these land use measures and policies, complementary transport policies are necessary. If cities, regions and/or countries do not have a clear objective to achieve sustainable transport, MM is not on their agenda and consequently the same goes for integration of transport with LUP and MM. For example, it may be necessary to strengthen nodes and/or create new corridors in the public transport system by opening new routes and lines, or increasing service frequencies. Improved cycling and walking environments are necessary if the physical proximity of homes and other activities, brought about through the LUP system, is to result in greater levels of walking and cycling. In certain countries (e.g. the UK and Ireland) it is possible for the public sector to make agreements with and/or impose conditions on new developments such that developers pay the cost of all or some of the transport system improvements that are associated with the development. Parking policy is one of the most important supporting measures as it has a key influence over how people travel.

The projects in the LUTR cluster also recognised that land use planning alone is a slow-acting measure that, on its own, is likely to have relatively small impacts on people's travel behaviour – especially as real incomes rise, since this makes physical proximity a less important factor in people's choice of destination. Therefore, the projects identified that it is important to support the integration of transport and planning with measures that influence the real cost of travel, making car travel more expensive, and/or alternative modes cheaper.

2.2 Conclusion to this section

The earlier work reviewed for this report concluded that in many EU countries and Switzerland, the integration of transport and land use planning still remains largely suboptimal, and many of the policies and measures mentioned in this section are not in place. Nonetheless, WP D argues that it is crucial that such integration is in place at the wider level if the integration of MM with the LUP system is itself to take place. For example, if a location is not accessible by public transport, and lies far from the public transport network, the promotion of public transport through MM measures is unlikely to work.

3 Common analysis

3.1 Introduction

MAX WP D evaluates how far transport and LUP are integrated in partner member states, and then does the same for the integration of MM and LUP. In order to gather data that are as consistent and therefore comparable as possible, common frameworks for analysis were developed. They are based on initial thoughts on analysis criteria contained in the WP D Research Plan, which themselves refer back to the original criteria for analysis as set out in the Description of Work section of the MAX proposal. These frameworks also identify the gaps in knowledge that were highlighted by the State of the Art review for the work package. They thus have a rational basis and have permitted a structured analysis that forms a solid base for the next work stages in the work package.

The analysis frameworks were first applied to two countries (the UK and Switzerland) where the integration of both transport and LUP, and MM and LUP are believed to be relatively advanced at the current time. Once this work had been written up and agreed, it was then be used to guide the analysis in other partner countries. The advantage of this approach was that those undertaking the research in other countries had available to them, not only the frameworks, but also the "answers" to the criteria in the frameworks as they apply to one or two countries. This was intended to make accurate and consistent analysis easier for these other partners.

3.2 Analysis framework: governance frameworks and planning instruments

3.2.1 The governance framework in which transport and land use planning take place

It is very difficult to compare levels of governance across countries. However, in this report, an attempt is made to define them as follows:

- National or federal government – the highest level of government in a country.
- The state (Germany) or autonomous community (Spain) – the next level down – does not exist in all countries, and its competencies vary considerably from country to country. The nations that make up the UK have been classified at this level.
- Region – the next level below, covering a smaller area – again, this does not exist in all countries. Examples here include provinces in the Netherlands, Poland and Spain, cantons in Switzerland and counties in Sweden. In addition, the administrative districts that exist only in some German states can be seen as a form of region.
- Sub-regions. These exist in Switzerland and the Netherlands – the Amsterdam region is an example. In Germany, the county can be described as a sub-region which covers the area of its member municipalities and takes over functions for LUP depending on the state planning law (big municipalities cover all tasks by themselves and are known as a county-free town). In England, Counties exist in some areas, and they correspond to this level.
- Municipality. There are no countries where some form of municipality does not exist.
- Sub-municipality. These appear only to exist in Lithuania.

In all countries there are at least two levels of government involved in planning, and in most, three. Germany and Switzerland have four levels of government with a role in planning. Table 3.1 attempts to show which levels are involved in planning in which countries (for clarity, the sub-municipality has been omitted). There is no clear relationship between the number of levels and the degree to which sustainable transport is a declared or actual outcome of the land use planning system: for example, Ireland has basically two levels of government, as does Slovenia, but the two countries are different in terms of how the planning system is used (or not) to promote sustainable transport. In Slovenia, in spite of some supportive national policy, there is almost no practical use of the LUP system to try to achieve sustainable transport objectives and MM, whereas in Ireland, there is some use of the LUP system in this way. Likewise Switzerland has more levels of government than the UK but both are active in integrating MM and LUP. Instead, the key appears to be the degree to which all these levels effectively work together and that policies made by one are put into practice by another. Where one level of government – particularly the lowest (municipal) level - can run its local LUP system without much reference to higher levels of government, as in the Netherlands, Lithuania or Sweden, for example, then this can work against the LUP system being integrated with sustainable transport and MM. The independence of the local level in such cases does mean that a particular municipality can, if it so chooses, try to integrate LUP with sustainable transport and MM, but such examples are few and far between (e.g. Amsterdam and the Hague in the Netherlands, or some cities such as Lund and Stockholm in Sweden). Where there is policy and/or legal support for such integration at the national and regional level, as in the UK for example, then this supports lower levels of government in working to bring that integration about.

Table 3.1 Levels of government with a statutory (legal) role in planning in each MAX WP D partner country

	CH	EI	ES	GER	LI	NL	PL	SE	SI	UK
National	X	X	X	X	X	X	X	X	X	NR
State	DNE	DNE	X	X	DNE	DNE	DNE	DNE*	DNE	X
Region	X	DNE	NR	X**	X	X	X	NR	DNE	X
Sub-region	X	DNE	DNE	X**	DNE	X	DNE	DNE	DNE	DNE*
Municipality	X	X	X	X	X	X	X	X	X	X

X = has statutory legal role
NR = exists, but does not have statutory legal role in LUP
DNE = this level of government does not exist in this country

- **generally in most of the country – some exceptions exist*
- *** only if granted the power by state law*

Across the WP D partner countries, governance varies on a scale of centralised to very decentralised. A common theme in most countries seems to be relative independence of local level, particularly in making planning (building permission) decisions. This independence is least in the UK and Slovenia (the latter because an agency of central government grants building permission even at the local level), and most in countries like Germany, Lithuania and Poland. If we see Switzerland and the UK as those states with the most developed tradition of integrating sustainable transport and planning, and MM and planning, then it is difficult to argue that the level of centralisation affects how far these things are integrated – Switzerland has a strong tradition of political independence at the municipal but especially cantonal (County) level, yet also much integration of transport and LUP. However, a clear relationship between levels of government, and an ability for higher levels of government to take a role in LUP decisions, does seem to be important – in the UK, Ireland and Switzerland it is possible for planning decisions made by the municipality (lowest level of government) to be over-ruled by a higher level of government, and higher levels of government have a day-to-day involvement in building permission decisions for, at least, larger developments.

3.2.2 Planning instruments that exist

By planning instruments this report means those elements of the LUP system that planners can or must use when coming to decisions about the shape of land-use plans and about building permission decisions. WP D is interested in such instruments because they are the basis of the LUP system and it is through their use, and their

possible adaptation, that sustainable transport objectives can potentially be achieved, and MM integrated. As might be expected, there is a wide range of planning instruments. However, from within these national differences, common categories do emerge:

- National law governing the making of plans (in some cases this may be passed by the level of government below the very highest level e.g. the Land (state) in Germany).

- National law governing the grounds on which building permission should be granted and how/whether conditions can be attached. Again, this may be largely the responsibility of the state/autonomous region level, as in countries such as Germany and Spain.

- National planning strategies and planning policy guidance, although these do not exist in every country. Their purpose is to guide lower authorities when they make land use plans and in their decisions on granting building permission. These can have an important role in stimulating the integration of MM and LUP. In the UK and Ireland, for example, national planning policy guidance has been critical in achieving this.

- Statutory land use plans; often the only one is the local (single municipality) development plan and/or a plan covering an area less than the whole municipality. They are usually the most important instrument in deciding whether or not building permission should be granted for a development. In certain countries, what would equate to a local plan in another country is divided into two parts: for example, in Germany, there are local land use plans covering a municipality, and detailed site development plans covering smaller areas. There is a similar situation in Spain, whilst in Slovenia, the local land use plan is divided into two discrete sections, the strategic part, and the detailed part showing where specific land uses should go. In Sweden, detailed plans are often drawn up for certain parts of the municipality, as is also often the case in Germany, Spain and Slovenia.

- Plans at the level of the province/state/autonomous community exist in some countries and where they do they are statutory, but the link between them and municipal plans is often not clear. Countries that have a greater tradition of actually implementing land use policies for more sustainable transport seem to have a stronger link between national planning strategies, regional/state level plans, and local plans. Where regional plans exist, these often lack power, although there are exceptions, such as in England in the UK, where regional plans are important.

- National or state environmental laws. These can or have the potential to play an important role in stimulating MM at the level of building permission for a new development.

- Parking standards. In most states, these are set locally and as minimums, but can be limited in certain circumstances. In Switzerland and the UK they are set as national maxima (in the UK, only for larger developments); in both these countries it is typical to reduce these maxima in areas of higher public transport accessibility. In both the UK and Switzerland, national maximum parking standards are not legally binding, but there are strong reasons for municipalities **not** to ignore them. In Germany there are many examples of developers paying money to the municipality instead of providing parking on site; this money is then used to fund park-and-ride or public transport infrastructure (but not services). In addition, some municipalities in Germany, Sweden and the Netherlands do use reduced parking standards as a MM measure, but this varies by locality.

- Assessment of the transport impacts of new developments (sometimes as part of the Environmental Impact Assessment (EIA) procedure). This instrument, because it requires consideration of the trips that will be generated by the new building(s), has the potential to also therefore consider how the vehicle trips could be managed/reduced, although at the current time it appears that only Switzerland and the UK (and in a limited manner, Ireland) use it in this way. Some Traffic Impact Analysis (TIA) is however carried out at least to some extent in Germany, Spain, Sweden, Slovenia and Poland, but in the main the purpose of this is to

ensure that the road network can cater for the vehicle trips that will be generated, rather than as a means of managing the transport demand from the development.

Legal and theoretical scopes, functions and contents of each instrument vary quite widely. However, there seem to be no patterns emerging in this variation to explain why sustainable transport is more or less an objective of the planning system in different member states. Where there is a possibility for both states or autonomous communities *and* national governments to pass competing laws on planning, this can confuse the situation and make the pursuit of sustainable transport policies a little more difficult.

3.2.3 Degree to which sustainable transport is an objective or an outcome of the LUP process and how it is achieved

We can see three groups emerging here. Firstly, those where there is very little recognition of sustainable transport as an objective of land use planning. In this group we see Lithuania and Poland. In the latter, for example, there is almost no understanding of the word mobility, and land use planning policy does not consider sustainable transport as a possible objective. Then there is a larger group where in policy statements, especially at national level, the benefits for sustainable transport of policies such as increased development densities, high densities at transport nodes, and development along transport axes, are all recognised and encouraged. These include Slovenia, Sweden, the Netherlands, to an extent Germany and, increasingly, Spain. Here, in theory, these policies should make their way from national and state level statements into local plans, but often do not due to local political pressures. The key reasons why local politicians are reluctant to be seen to be restraining development are, firstly, a fear of deterring development that brings employment; and, secondly, a desire to increase the local tax base.

Another reason why they may not be put into practice is because transport policy is not itself orientated towards sustainable transport objectives, as in Slovenia, for example. Thus there is no pressure from transport planning officials on their land use planning counterparts to consider the sustainable transport impacts of their decisions. Then there is a final group where these policies seem to be put into practice, at least to some extent. These include Switzerland, the UK and (to a much lesser degree) Ireland.

This begs the question of why this situation has come about in these countries. In the UK, this is due to a strong political steer from central government on this policy from the mid 1990s onwards, due to concerns about urban sprawl and traffic congestion, especially in southeast England. The UK system has, since 1947 at least, had a high degree of central influence over local planning policy and decisions, so this national policy has made its way into local policy and practice. Ireland's planning system derives from that of the UK and there is considerable interchange of transport and planning professionals. Since economic growth in Ireland has led to massive traffic congestion in larger towns and cities, there has been some consideration of UK methods to deal with this. In Switzerland, these policies are enacted due to a long tradition of environmental protection and promotion of alternative modes of transport, especially public transport.

In the three countries mentioned in the above paragraph, there is emphasis within the making of regional and local plans on orienting development around the existing or planned transport system, and especially the public transport system; and on using the plans to reduce the need to travel, especially by car. This means that development that generates a lot of trips, such as offices and shops, should supposedly be located where it can be served by public transport, and the land-use plans should indicate this. In this way, development of these types of land uses should be encouraged to locate in areas where its users can take public transport or slow modes. The degree to which this works varies due to local political pressures, but in making local land use plans in the UK and Switzerland, municipalities have a legal duty to show how they have taken into account higher level regional plans and national guidance. This helps to ensure some level of consistency between the planning levels, and that the developments that will generate the highest number of trips are often (although by no means always) located in areas that are better served by public transport.

Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in LUP? Are there any conflicts between policies at different levels of government?

As noted above, policy on integration varies considerably across the countries surveyed, but there is a general pattern of national and state level policy being supportive of integration, but local land use plans and building permission decisions being less so. In this sense, there is a policy conflict, even in Switzerland, where some communes (municipalities) seek to reduce the emphasis on sustainable transport and MM in LUP in order to create conditions in their area that they perceive to be more attractive to developers – so the emphasis placed on MM still varies from place to place, and there are some clear "leaders" in the field, such as the City of Zurich or the Canton of Berne. Still, even here, the problem remains that municipalities compete with each other to attract new developers.

In general, there is functional disintegration between the bodies responsible for transport planning and those responsible for land use planning. In national and state level governments, these functions are split – in the Netherlands, to take one example, between the Ministry of Transport on the one hand and the Ministry of Environment and Spatial Planning on the other. More locally, it is often the region that has an important role in the provision of (public) transport, yet almost no competence in LUP – Sweden, parts of Spain such as Madrid and Barcelona as well as the Netherlands are examples of this situation. Only at the local level are the local plan process, the building permission process and the provision of local transport infrastructure normally the responsibility of the same body, that is, the municipality, but there are often strong departmental divisions within these organisations that hamper joint working. It was notable that in Spain the completed analysis framework emphasised the view that a new emphasis on, and funding for, Sustainable Urban Transport Plans could play an important role in facilitating greater integration of LUP and sustainable mobility. Other partners repeated this view, but it is only in Spain where, at the current time, the government is actually taking steps to introduce SUTPs.

Policy outcomes sought from integrating sustainable transport, MM and LUP, and whether they have been achieved

Those completing the analysis frameworks were asked whether any policies exist in their countries that seek any of the following outcomes from the LUP process, since these outcomes are generally seen to be those that will increase the use of sustainable modes of transport:

- A poly-centric urban structure.
- Medium and high land use densities with a mix of different uses.
- Concentrating trip generating development along PT corridors/at nodes. Nodes and corridors identified in strategic and local plans, perhaps by the use of accessibility measurement.
- Re-use of brownfield sites.
- Transport impact assessment including changing sites if one is unsuitable on transport grounds.
- Maximum parking standards.

As noted above, *policies* supporting most of these aspects exist in many states. However, the degree to which they occur in practice varies considerably. Ireland, Slovenia, Switzerland, Spain and the UK carry out transport impact assessments for new developments or new development areas, although only the UK and (sometimes)

Sweden and Ireland take these to the next step and use these as a tool for Mobility Management. (In Switzerland, EIA acts as a stimulus to consider the transport impacts of new development, and MM as a way to manage these.) Most countries have parking standards set either locally or in national building codes, but the idea of using parking restraint as a way of managing travel to and from a development is not common – this is only seen in Switzerland, the UK, Ireland, some cities and developments in Sweden and in certain German cities (e.g. Munich). The re-use of brownfield sites is supported by planning policy and put into action in many of the countries under study, including Poland, Slovenia, Germany, the UK and Switzerland; this is helpful to MM insofar as brownfield land is often already integrated into the urban fabric and transport network, but it does not mean that MM will automatically be implemented at these sites.

Very little work was found in any of the countries participating in the study that considered developers' views and attitudes to these types of policy. In the UK, in Scotland, prior to the introduction of national maximum parking standards in 2003, the Scottish Government commissioned work to assess the impact on inward investment of such parking standards, and concluded that the impact at a national level would be minimal. The redevelopment and re-use of brownfield land and the return of people to city centres in the UK, Switzerland, Ireland and the Netherlands, amongst other places, shows that developers do not reject outright such policies but have been able to work within them and to continue to profit.

In addition, there is clear evidence from some developments in the UK and Switzerland where MM has been built into the building permission process that travel to and from these developments is less car-dependent than at other similar developments where MM was not part of the process.

Organisational/institutional integration to encourage LUP and transport integration

There are considerable barriers to this kind of integration in many states. Perhaps the greatest is the relative autonomy/independence of the lowest level of government over planning decisions – both in terms of the content of local plans, but also regarding decisions over granting building permission. Even where national or regional policy guidance exists that encourages the incorporation of MM into the LUP and building permission process, local authorities may choose to ignore or interpret it in a very broad way. This is due to market pressures: the need to attract more business, and residents, and a political perception at the local level that municipalities are in competition for development. In addition, there is a lack of strong regional planning in states such as Slovenia, Lithuania, Sweden, the Netherlands, Ireland and Germany. Several states also indicated that they have little tradition of transport planners and land use planners working together or communicating with each other, and that this works against integration.

3.3 Integration of MM and LUP in the building permission process

This section of the report considers the actual process for a developer who wants to build, redevelop or extend a building, and the scope for introducing MM measures within that process.

3.3.1 The detailed steps in the building permission process (intention > planning > construction > building is in use);

This section of the analysis framework considered the planning instruments and levels of government that play a role in the building permission process, and the influence of these both in theory and in practice.

In general, the most important planning instrument in making a decision over whether to grant building permission is the local plan or its equivalent; the municipality has to be satisfied that the building that the developer wants to build conforms to the requirements of the local plan. In some countries, such as Germany, Slovenia and Spain, the most local plan (*Bebauungsplan* in Germany) is quite prescriptive: it defines allowed

uses, height of buildings, maximum number of floors, and sets building lines and building boundaries etc. If the proposed building follows these rules, building permission has to be granted; if it does not, the plan has to be changed. In other countries, such as the Netherlands and the UK, laws exist to allow flexibility where an application is not in line with the land uses shown in the local plan. In several countries, for building permission in areas that are already significantly developed (e.g. to build on a vacant building lot on an otherwise developed street) it may not be necessary to go through the full building permission process.

In some countries there are other higher level plans and guidance that need to be taken into account in the building permission decision. The regional plan is important in the UK and especially in Switzerland, for example; in many building permission decisions in Switzerland, the regional authority plays a direct role, alongside the municipality, in considering the planning application. In Slovenia the planning decision is taken, not by the municipality, but by a national level agency – this is the only one of our ten countries where this occurs but, even here, the most important factor in deciding whether to grant planning permission is conformance of the application with the local plan. In general, however, the decision on whether or not to grant building permission is largely or exclusively the responsibility of the municipality and cannot be directly influenced by other levels of government.

Other factors that influence the building permission decision include, variously, the following:

- The size of the development (sometimes measured in terms of how much traffic it will generate). Larger developments often merit special/different treatment both within plans, and in the building permission process. In Switzerland, for example, the canton plays a much more active role in dealing with applications for building permission for large buildings than for smaller, and there are certain categories of development (e.g. large shopping centres) in which the canton has a considerable influence over the building permission decision – although the final decision still rests with the municipality. This is to ensure that the impacts of such developments – which will be felt region-wide - are mitigated.

- Infrastructure provision – municipalities in many countries wish to be satisfied that, before the building opens, utilities and road and footway infrastructure is in place. In some countries such as Poland and Lithuania this is limited to ensuring that the development is connected to existing infrastructure; in Ireland, the UK, Switzerland and Germany it could mean that developers pay to upgrade off-site infrastructure that will be put under pressure by the additional impact of the development or the provision of car reducing infrastructure, such as pedestrian connectivity to bus stops, bicycle parking or preferential carpool parking locations.

- The environmental impact of the development. This is taken into account in Sweden, both in terms of local plans, and in actual planning decisions – the national level does have the power (albeit it is rarely used) to overturn local decisions on local plans and building permission where it feels that national norms on the environment may be threatened by the plan and/or development. In the Netherlands, larger buildings need environmental permits as well as building permission before they can open, and some municipalities (e.g. Amsterdam) use the environmental permit as a means to lever in mobility management in that organisation. (There is currently (Feb 2008) a Task Force in the Netherlands considering whether this way of requiring MM should be made mandatory nationwide, since the environmental permit system applies to existing as well as new developments.). In Switzerland applicants for developments with more than 300 parking spaces planned have to deliver an environmental impact assessment study. These are evaluated by the cantonal authorities and if the environmental impacts are considered to be too high it can require a reduction in the number of parking spaces sought by the applicant. The environmental impact assessment study is a part of the building permit process.

- Parking provision. In many countries, such as Spain, the Netherlands, Germany, rural Ireland and Poland, the municipality will normally have to satisfy itself that at least the stipulated minimum amount of parking is being provided by the developer.

In the Netherlands and Sweden, the development of land also requires a separate agreement between developer and local authority on how that land is going to be used and how the developer will pay for the common costs of the development (e.g. waste treatment, new roads inside the development). This year (2008), a part of the new Dutch planning law will allow local authorities to require contributions from developers for infrastructure that is not on the site, including cycle paths and public transport infrastructure, and to refuse development permission if such contributions are not paid. This is a strengthening of the current situation, where developers make limited contributions to infrastructure.

3.3.2 What flexibility do these instruments offer in order that MM can be included, and what is their ability to support, hinder or allow MM and supporting measures?

The country analyses completed by the partners show that certain instruments offer the potential to include MM, *given sufficient political will*. For example:

- In Sweden, in the contract between developer and local authority that governs the development of land, there is scope to include requirements for MM.
- In Spain, the traffic impact assessment of sites that is already undertaken could be expanded to include other modes of transport and MM for managing transport to the site.
- In Poland, it seems that it could be a legal possibility to require of developers the provision, not only of roads into the development, but public transport and cycle infrastructure as well; and possibly to limit parking provision in addition.
- In Germany, Slovenia and Lithuania, building permission could be granted subject to conditions such as the provision of free trial bus tickets for new residents of an area, or the installation of bicycle parking, or the provision of a free bus by the developer. The latter case has already happened in Vilnius in Lithuania.

In the Netherlands there are already isolated examples of contracts between authorities and developers regarding MM in new business areas, in particular. For details of one example, see the Goudse Poort case in the OPTIMUM2 project www.optimum2.org. Those involved in this example noted that particular challenges in brokering such a contract include the changing priorities of developers, as markets change; and trying to persuade local authorities to adopt new, previously untested ideas such as contracts.

This is encouraging, insofar as it shows that there are avenues via which MM and the integration of sustainable transport with the LUP process could be pursued. However, as German and Swedish partners pointed out, in most cases, while these opportunities exist, their use is far from systematic and often dependent on there being particularly interested members of staff and/or politicians in a given municipality, who will then pursue this opportunity.

3.3.3 How does the integration of MM in the building permission process work in those countries that do it already?

The countries in which this process has developed beyond an *ad-hoc* approach are the UK, Switzerland and, possibly, Ireland. In the UK, since the early 1990s there has been a tradition of carrying out transport impact assessments (TIAs) to predict and then cater for the increase in traffic caused by a new development over a certain size. A typical size would be a development that will generate 100 or more one-way trips in a typical peak hour, although in particularly congested locations, a smaller development would still require a TIA. Whilst

TIA is not a legal requirement, it is taken very seriously. Its use is supported by government (and the national roads agencies), and the decision on whether or not to grant building permission can often be dependent on the transport impacts and how they will be managed. One of the reasons why national government may take the building permission decision out of the hands of a local council could be if it feels that the TIA results have not been sufficiently taken into account. The main reason that MM has been built into the TIA and building permission process is due to national planning guidance issued by the national government, which is also an important consideration (although not a legal requirement) in building permission decisions. The 1999 edition of this guidance, PPG13 Transport, was the first to mention the idea of developing travel plans (site based mobility plans) as part of the TIA and building permission process. Prior to this, however, some more forward-thinking local authorities were already doing so, particularly if they were responsible for economically buoyant and congested areas. The use of MM in the building permission process is now quite well institutionalised in many local authorities. This is not to say that its implementation is straightforward nor that it always achieves the desired results; but to suggest MM as part of the building permission process is no longer seen as a novel and risky undertaking.

Ireland is at the same kind of stage at which the UK found itself 5-10 years ago: there is considerable national policy guidance supporting the use of the LUP system to bring about sustainable transport objectives, but only the most forward-thinking local authorities have so far taken this to the stage of bringing MM into building permission decisions. However, this type of integration is now supported by national guidance such as that issued by the Irish National Roads Authority (NRA) in October 2007 (see http://www.nra.ie/Publications/RoadSafety/file,10782,en.pdf). Sweden is at a similar stage also. Thus in these countries, national government is giving a policy lead on the integration of MM with LUP, directly through planning guidance but also via increasing emphasis on Sustainable Urban Transport Plans, but local authorities have a great deal of flexibility in how they choose to interpret such guidance.

In Switzerland, there are a number of factors that together bring about the use of MM in the building permission process:

- The special land-use plan, which covers an area smaller than the local land use plan, and is typically produced for large new developments such as regional shopping centres, as well as for the revitalisation of districts or for new employment zones. This offers the opportunity to specify the accessibility of the site and to make contracts with landowners about MM in any development on the site.

- Normative national maximum parking standards, including reductions in these maxima in areas of higher public transport accessibility. These standards are restraint-based – that is, they will not provide enough parking for everyone who wants to drive to a development. They act as a strong national framework for the amount of parking to be provided at new developments.

- The right of objection for environmental organisations, such as the Swiss Transport and Environment Association, who can and do suggest conditions with which new developments should conform. This includes conditions related to MM.

- Environmental impact assessment for developments with more than 300 parking spaces; if this finds that thresholds for impacts will be exceeded by traffic generated by the development, then MM would often be used to mitigate these impacts.

There is a national framework for MM for urban agglomerations in Switzerland and this is reflected in cantonal (regional) and local plans. The involvement of the canton in building permission decisions also raises the importance of MM in these decisions. In this way, the application of MM within the process has become a regular activity rather than something applied on an *ad-hoc* basis by a small number of municipalities.

3.3.4 What are the most important factors in integrating LUP with sustainable transport and MM?

It appears from the foregoing analysis that there are a few key factors that assist in bringing about this integration on a more systematic basis. The most important are:

- National and/or regional guidance/policy that reinforces the idea that such integration should occur.
- The existence of a nationally-recognised system of assessment of the transport impacts of new developments.
- A clear operational link between national/regional guidance and both the making of land-use plans, and the building permission decision. This effectively means that higher levels of government have to have at least some level of control (or the threat of control) over the content of plans and building permission decisions made by lower levels of government.
- Political will at the level where the building permission decision is made to incorporate MM into that decision. This may result from the presence of particular politicians in a given area, or a desire among all politicians in an area to respond to economic growth pressures to protect quality of life and the environment, or a combination of the two.

This does not mean that in countries without these factors in place, MM cannot be integrated into LUP and the building permission process; as we have seen, there are opportunities already for it to be brought about in several of the WP D partner countries. However, for this integration to be more widespread and systematic, the above factors are seen to be very important.

3.3.5 In which countries could small changes stimulate significantly the integration of MM and LUP?

Table 3.2, below, provides a summary of the supportiveness of the ten countries' land use planning "environments" towards the integration of MM and LUP. A high score indicates a high level of supportiveness. It can be seen that Spain, Germany, Sweden, the Netherlands and Ireland appear to have *relatively* supportive environments for greater integration. The new member states that are represented in the table may face a much greater challenge in integrating MM with their LUP system, largely because the recent changes in their planning systems and economies have resulted in a very confusing situation (in the case of Lithuania), a lack of skilled planners available, and an even greater emphasis on economic development outcomes than in the older member states.

Table 3.2 Supportiveness of partner states' LUP environments to integrating sustainable transport, land use planning and MM

	National planning policy	National planning law	National land use plans	State or regional planning policy	State or regional planning law	State or regional land use plans	Local land use plans	Govern-ance structure	Local transport plans	Building permission process	Transport impact assessment process	Parking standards	Freedom of municipality to operate independently	Total	Total as % of max
CH	3	3	3	3	3	3	3	3	3	3	3	3	3	39	100%
EI	3	3	3	n/a	n/a	n/a	3	2	3	3	2	2	2	26	87%
ES	3	2	2	3	2	2	2	2	3	2	3	1	1	28	72%
GER	3	2	3	3	3	3	1	1	2	2	2	1	2	28	72%
LI	3	1	1	n/a	n/a	n/a	1	1	2	2	2	1	1	15	50%
NL	3	2	2	3	n/a	3	1	2	3	1	2	2	2	26	72%
PL	2	2	3	2	2	2	2	2	3	2	2	2	1	27	69%
SE	3	2	3	3	n/a	3	1	2	3	3	2	2	2	29	81%
SI	3	2	2	n/a	n/a	n/a	1	1	2	1	3	1	2	18	60%
UK	n/a	n/a	n/a	3	3	3	3	3	3	3	3	3	3	30	100%

3 – supportive
2 – neutral impact
1 – unsupportive, works against MM
n/a – not applicable

Definitions in the table
Planning policy – non-binding statement of what LUP should seek to achieve e.g. city of short distances in Germany
Planning law – laws governing how the planning system works and the role of specific levels of government and instruments
Land use plans – plans guiding or setting out in detail how land must be developed, which land uses should go where
Governance structure – levels of government, which level is responsible for what functions, and their interrelationships
Transport plans – local or national plans for transport e.g. SUTPs in Spain
Building permission process – the process of granting planning permission for a specific development
Transport impact assessment process – the process of predicting and then planning for the traffic or transport that will be generated by the development
Freedom of municipality to act independently – to what extent does a municipality have to take into account guidance/policies/plans of higher levels of government when making a building permission decision? Higher independence assumed to be less supportive of integration.
Parkig standards – degree to which they are and can be used as maxima

To increase the chances for successful integration of MM and LUP in these countries, the most important factors for success need to be addressed, as per Section 3.3.4, above; in addition, and in the shorter term, certain countries could capitalise on the flexibility offered by existing planning instruments, as per Section 3.3.2. To do this, MAX, EPOMM, ELTIS and CIVITAS could play an important role in spreading awareness of best practice and the possibility of using existing planning instruments.

It is also worth bearing in mind that the integration of sustainable transport, MM and LUP is not only dependent on the nature of the LUP system. National road building and infrastructure plans often happen in isolation from much of the rest of the transport and land use planning system. In addition, the availability of finance plays a big role in the attractiveness, or otherwise, of integrating sustainable transport, MM and LUP: in Switzerland, a system of government incentives for planning at agglomeration level works in the favour of integration, but in many other countries the desire of municipalities to raise revenue from inhabitants and businesses works against the adoption of wider national policies.

Changes in the near future in the UK, Spain, Netherlands

There are a number of forthcoming changes in planning and transport practice that were highlighted by partners as being of importance to the integration of MM and LUP in several countries.

As noted already, above, the Netherlands is (in 2008) changing its planning law to give more power to local authorities to obtain financial contributions from developers for *off-site* infrastructure, including public transport, cycling and walking infrastructure. In addition, the national advisory board to the Ministry of Transport (the *Raad voor Verkeer en Waterstaat*) recently (Jan 2008) published a consultation paper called "An end to the situation with no obligations" (see http://www.verkeerenwaterstaat.nl/kennisplein/3/6/365095/-Einde_aan_vrijblijvendheid.pdf) in which it recommends to the Ministry of Transport and to the Ministry of Environment, to provinces and local authorities to take a much stronger role in using existing law, and possibly making new law, to stimulate MM in the building permission and plan making process. This includes much greater restrictions on the current ability of municipalities to grant exceptions to the local land-use plan.

Also as noted above, in Spain there is likely to be new legislation passed to require the creation of sustainable urban mobility plans which itself is likely to stimulate new thinking and activity on the links between sustainable transport, planning and mobility management.

Finally, in the UK (in England, in the first instance), there is likely to be a weakening of the current framework for MM and LUP. Under the previous Prime Minister, the UK Finance Ministry commissioned a member of the Bank of England's Monetary Policy Committee to review the country's land use planning system. She concluded, although did not cite any evidence in her report to support this view, that "it would be helpful for a more flexible approach to be taken to the current national policy on the number of car-parking spaces allowed per square metre of office development, though it is important that green travel plans continue to be promoted" (http://www.hm-treasury.gov.uk/media/3/A/barker_finalreport051206.pdf, p 28). The English government has (in early 2008) consequently published a consultation version of new planning guidance, PPS4, (http://www.communities.gov.uk/documents/planningandbuilding/pdf/614685) which proposes an end to national maximum parking standards in England – allowing local authorities to instead set their own maxima within a national framework - together with a somewhat more relaxed approach to transport assessments and managing the transport impacts of new developments in order, ostensibly, to stimulate economic development, especially in rural areas. It is possible to see these new documents as part of a cyclic trend in UK transport and planning between free market pressures on the one hand and a desire to manage development on the other.

4 Conclusions

This document has reviewed country reports from WP D partner countries about the integration of sustainable transport and MM with land use planning. It has shown that there is wide variation in the level of integration at the current time, and that there are new developments underway in this field. Encouragingly, it has shown that there are existing avenues in many of the partner countries through which greater integration could be pursued. Examples of ways to integrate MM with the building permission process are shown in Table 4.1 on the next page. It has also highlighted the most important factors in ensuring that such integration becomes more systematic and nationwide.

5 References

ECOCITY Publishable Final Report EU 5th Framework. 2004. http://www.ecocityprojects.net. Page 11

EEA TERM 2001 36 EU — Institutional cooperation in transport and environment. http://themes.eea.europa.eu/Sectors_and_activities/transport/indicators/integration/TERM36%2C2001/Institutional_cooperation_TERM_2001.pdf. pp 2-3

SCATTER Sprawling Cities And TransporT: from Evaluation to Recommendations. EU 5th Framework. Deliverable 7: Work package 7. Recommendations to local and regional authorities. 2004

TRANSPLUS Final Report. EU 5th Framework. 2003. www.transplus.net. pp 14-16

Table 4.1 – Most promising approaches for integrating MM with the building permission process

Instrument	*Exists in*	*Description*	*Based on*	*Controlling authority*	*Effect with regard to MM*	*Included in*	*Level of application*
Environmental Impact Assessment (EIAS)	CH	Applicants of new buildings have to deliver an EIAS if more than 300 new parking spaces are requested	Federal Law of Environment	Cantonal public authority	Indirect; if environmental impact is considered as too high, then number of requested parking spaces has to be reduced, applicant is in the situation of limited offer on parking spaces and has to apply MM strategies	Building permission process	Local level (municipalities)
Transport impact assessment	UK, EI, ES, DE, SI, PL, SE	Applicants must show how transport impacts of development will be dealt with – includes mitigation/MM in UK, and (sometimes) SE and EI	Various; not always statutory (e.g. advisory in UK)	Normally, municipality	Concept can be extended from ensuring that development has sufficient access by car to managing access by all modes.	Building permission process	Local level (municipalities)
Maximum parking standards	At national level in UK and CH; at local level in SE, NL, EI	Limits on number of parking spaces that can be provided in new development, sometimes further reduced in areas of high public transport accessibility	Various; not always statutory (e.g. advisory in UK)	Normally, municipality, except where standards are national	Can have a powerful influence on how people travel and stimulate introduction of MM at development	Building permission process	Normally local but sometimes national
Conditions on or contracts within building permission process	SE, SI, LI, UK, EI, CH, DE	Conditions and contracts require developers to deliver certain improvements/benefits as part of development process e.g. to fund new bus services	Various e.g. State planning law (UK); National Land Development Law (NL)	Municipality, sometimes advised by next level of government up (e.g. canton in CH)	Very useful for providing MM measures at/around the site, but in most countries, rarely used to do so due to novelty of idea and/or lack of political will	Building permission/ land developme nt process	Local level (municipalities)
Infrastructure provision with new development	NL, PL	Developers required to deliver transport infrastructure required by development including links to existing networks	Various	Municipality	In certain countries this is already used to provide public transport infrastructure; has potential to be extended to do this and provide walking and cycling infrastructure in all countries	Building permission process	Local level (municipalities)

6 APPENDICES: INDIVIDUAL COUNTRY REPORTS

Appendix 1: Country report Ireland

Appendix 2: Country report: Germany

Appendix 3: Country report: Lithuania

Appendix 4: Country report: Netherlands

Appendix 5: Country report: Poland

Appendix 6: Country report: Spain

Appendix 7: Country report: Sweden

Appendix 8: Country report: Switzerland

Appendix 9: Country report: UK

6.1 Appendix 1

Country report: Ireland

Table of Contents

1. LUP and sustainable transport – preconditions for integration of MM and LUP – Ireland

Analysis framework: integrating transport and LUP

The analysis framework for Ireland is intended to serve as a guide to consistent information gathering so that as far as possible partners will gather comparable information. The purpose of this first analysis framework is to identify the state of preconditions for the integration of MM into LUP in European countries represented by the WP D partners and, in addition, in Ireland and the Netherlands.

The legal framework underlying the planning system

The governance framework in which transport and land use planning take place

There are two levels of elected government active in planning in the Republic of Ireland: a national government, and a two-tier local-government structure. Regional coordination is overseen by 2 Regional Assemblies and managed by 8 Regional Authorities.

The top tier of the local government structure consists of 29 county councils and five city councils. Five major Irish cities - Dublin, Cork, Limerick, Waterford, and Galway - have city councils, and these have the same status as county councils. County councils have sole responsibility for local services outside the towns. The second tier of local government consists of town councils (in some cases called "Borough Councils"). Town councils have responsibility for provision of local services within their boundaries. This means that in urban areas the authority that makes the final decision on a planning application for building permission may be the town or borough council. Outside these areas, the County Council is the planning authority. In all areas except Dublin and Cork Cities, the County Council is the transport authority, so it considers the transport impacts of planning applications.

National Government makes planning law and produces statutory guidance to local government and regional authorities on the objectives that their plans should seek to achieve, the way these objectives should be achieved, and how the control of new development should be carried out.

For example, the National Spatial Strategy (2002) for Ireland (NSS) is a twenty year planning framework designed to achieve balanced regional development. National and local government, as well as regional bodies have a role to play in ensuring national, regional and local objectives, strategies and policies are drafted and implemented in a manner that is consistent with the NSS. The NSS is supported by the National Development Plan (NDP), which is a plan for national investment in Ireland. Strategic links between land use planning and transport are identified in the NSS and a number of associated policy guidelines were taken into account when it was drafted. For example, the NSS states that Ireland needs improved roads and public transport, and that it needs to reduce traffic congestion in urban areas.

In many cases responsibility for decision-making in local authorities lies with full-time professionals and officials rather than elected councillors. For example, chief executives of city and county councils are public servants appointed by the Public Appointments Service, thereby making them accountable to both national government as well as the local council. Local government has responsibility for services like land-use planning and local roads.

At a regional level, Ireland is broadly divided into two areas, which are overseen by Regional Assemblies composed of elected members from the constituent local authorities. Regional Assemblies exist to facilitate the coordination of public services across and between regions, to monitor the regional impact of EU programmes, to manage the delivery of operational programmes under the National Development Plan and to raise awareness within public bodies of the regional implications of their policies, plans and activities.

A network of 8 Regional Authorities also exists. Each Authority incorporates elected representatives who are nominated to the Authority by each of the constituent local authorities in the region. These are statutory public bodies that have responsibility for strategic planning in each region, making recommendations on government investment programmes and monitoring and reviewing the operation of the National Development Plan. They also exist to (amongst other things):

- Prepare Regional Planning Guidelines (Planning and Development Act 2000)
- Promote the co-ordination in the provision of public services in the region
- Review, monitor and respond to (as appropriate) the overall development needs of the region

Statutory Regional Planning Guidelines (RPG) have been adopted by all Regional Authorities (2004). These guidelines prioritise investment in transport where doing so will help regions to reach their full economic potential, and there is a parallel recognition that investment should encourage and support more sustainable patterns of travel wherever possible. It is expected that NSS and RPG policies will be effectively translated into local authority plans.

Local government makes decisions on planning permission, in accordance with its own local development plan (LDP) which it produces (so there are County development plans for areas where the County is the planning authority, and town or borough development plans where these authorities have planning powers). Decisions about planning permission for individual sites must take into account national guidance, including the NSS and the NDP, as well as the LDP. On paper at least, there appears to be good integration between national, regional and local level policy, strategy and plans about the integration of mobility management with land-use planning.

Planning instruments that exist

National government produces legislation governing the operation of the land-use planning system (the Planning and Development Act, 2000 – available from http://faolex.fao.org/docs/texts/ire35571.doc; as well as the 2001 Planning and Development Act) and guidance to regional authorities on how they should set planning policy (e.g. how plans should be drawn up) and the factors that they should take into account when making planning decisions for particular developments.

The Planning and Development Acts (2000 and 2001) gives national government the power to "call-in" specific development decisions where it feels that it has a particular interest in the case and/or where it believes that the local authority has not taken into account its own, or regional or national, planning policy in reaching its decision to grant or refuse development. The Planning and Development Acts (2000 and 2001) are supported by Planning and Development Regulations (2001 and 2002). Therefore, national government in Ireland has an ability to significant influence local planning decisions that is absent in many other countries.

In addition, certain major infrastructure developments e.g. main roads, railways, power lines, power stations etc. do not have to get planning permission from the local authority, only from the independent central government Planning Ombudsman (www.pleaneala.ie).

In addition, the Department of the Environment, Heritage and Local Government (DEHLG) oversees and monitors national Residential Density Guidelines (1999;

http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownLoad,1611,en.pdf), which take account of the need to make efficient use of infrastructure and the need for sustainable commuting patterns.

The National Spatial Strategy is the national planning framework for Ireland for the next 20 years. It can be downloaded at: http://www.irishspatialstrategy.ie/NSSDownloads.shtml. The National Development Plan supports the NSS, and can be found at: http://www.ndp.ie/.

Each region of Ireland is required to produce Regional Planning Guidelines (RPG). There is a parallel recognition that investment should encourage and support more sustainable patterns of travel wherever possible. Regional Planning Guidance can be sourced at http://www.irishspatialstrategy.ie/Best%20Practice%20guidelines%20-%20feb%2005.pdf.

According to best practice guidance produced by DEHLG (Implementing Regional Planning Guidelines; 2005) "Article 28(1)(e) of the Planning and Development Regulations 2001 provides that where a planning authority receives a planning application and it appears to the authority that the proposed development would not be consistent with or would materially contravene any regional planning guidelines (or any objective thereof), it shall send a notice as soon as may be after receipt of the application to the relevant regional authority." (p.16) The guidance goes on to state that if "… the authority considers that the application would represent a material contravention of its own plan, the special procedures set out under section 34 of the Planning and Development Act, 2000, will apply, and the regional authority should be notified of this fact, as it will allow them more time to consider making a submission." (pp.16-17)

Local Government organisations are required to produce their own local policy that reflects national and regional policy and guidance. This tier of government must produce Local Development Plans (LDP's) and Local Area Plans (LAP's) that reflect the policies outlined in the NSS as well as their own local priorities and objectives and which provide a key part of the framework for planning decisions on individual developments. LDP's are documents with legal weight. An example of a LDP is available at http://www.waterfordcity.ie/documents/developmentplan/CityDevelopmentPlan.pdf. According to national guidance on preparing development plans available at http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownLoad,14468,en.pdf , p 10

"Local Area Plans

The 2000 Act provides that a planning authority may prepare a local area plan for any area within its jurisdiction for which it considers such a plan to be suitable, and in particular for those areas that require economic, physical and social renewal, and for areas likely to be subject to large scale development within the lifetime of the development plan. A planning authority is obliged to prepare a local area plan for an area which:

 is designated as a town in the most recent census of population, other than a town designated as a suburb or environs in that census,

 has a population in excess of 2000 persons, and

 is situated within the functional area of a planning authority that is a county council.

In providing development frameworks for particular areas, or parts of an area, local plans should address relevant issues in greater detail than in the development plan, but on a basis consistent with the approach of the development plan for the overall area.

The Planning and Development (Amendment) Act 2002 requires that a local area plan shall be consistent with the objectives of the development plan. A local area plan shall consist of a written statement and a plan (or plans) which may include:

" (a) objectives for the zoning of land for the use solely or primarily of particular areas for particular purposes, or

(b) such other objectives in such detail as may be determined by the planning authority for the proper planning and sustainable development of the area to which it applies, including detail on community facilities and amenities and on standards for the design of development and structures."

The development plan is thus the 'parent' document, which sets out the strategic framework within which the zoning and other objectives of the local area plan must be formulated. For example, the zoning of lands for use solely or primarily as residential development should have regard to the Council's housing strategy.

Development plans should indicate those areas for which a local area plan will be prepared, should set out a clear context for their preparation and give an indication of particular policies or objectives, which may need to be included therein."

Another key legal mechanism by which MM measures can be required of developers – Section 49 of the Planning and Development Act, 2000 – can be used to generate financial contributions towards the capital costs of providing strategic transport infrastructure services or projects at a local level. However, this section of the Act was not designed specifically with transportation measures in mind and it can also be used to support provision of a range of other infrastructure, services or projects.

In addition, robust LDP's and LAP's have the capacity to be effective statutory vehicles for the delivery of services – including MM - at the local level. It is however not at all clear that they are used in this way in many cases.

Legal and theoretical scopes, functions and contents of each instrument

National planning law is drawn up by Parliament and is the product of the thinking of the government of the day, and is influenced by a public consultation process. The key influences on planning law are land and home-owners who want to protect their property values and amenity; the countryside lobby who want to limit urban sprawl; the development industry; and the environmental lobby. So the planning system has to keep these groups happy, which means striking a balance between controlling and permitting development, making the planning and development process speedy and efficient, and protecting the environment.

Regional and local government has considerable power to make plans which then govern where development can take place. However, this power is strongly mediated through the lengthy plan-making process, which involves much consultation/lobbying, and a public hearing process, after which a representative of central government (the Ombudsman) makes recommendations about the plan before it is finally adopted.

Local government and regional authorities also have considerable power to make decisions on individual planning cases, and this is also mediated by the power of national government to intervene, and by developers' ability to appeal against a decision. Local councils in economically buoyant areas also have a lot of power to negotiate planning obligations with developers, because these developers want to develop there and so don't mind paying for a few extras. This is much less the case in areas where development pressures are lower.

Guidance from national government and regional authorities to local government on how to draw up LAP's and LDP's makes clear the importance of sustainable transport in supporting land-use and vice versa. Thus LAP's and LDP's should consider the main development nodes in the council's area, and the transport investments and services that are required to ensure that access to these is as sustainable as possible.

Sustainable transport in the LUP process

How far sustainable transport is an objective or an outcome of the LUP process

Land use policies and plans at all three levels of government generally state that LUP should be used to make transport more sustainable, and this is an important output of the LUP process.

The mechanisms to be used include denser development, locating trip-intensive development near major public transport nodes, putting development along corridors, not allowing sprawl or development in small communities, and stimulating a mix of uses. In addition, maximum parking standards are supposed to be set for all development (although in practice, rarely are outside Cork and Dublin), and national residential density standards exist.

For example, The guidance document for the preparation of local development plans 'Development Plans: Guidelines for Planning Authorities' states that "The strategy, policies and specific objectives of the development plan should take an integrated approach to land-use and transportation. Transport considerations should inform all aspects of plan making. Transport policies and objectives should be informed by national and regional strategies and guidelines."

It also says
(http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownLoad,14468,en.pdf pp 23 – 24)

"Land Use and Transportation Strategy: There are clear overlaps and opportunities for synergy between the areas of land use policy and transport. Integrated land use and transport planning has a key role in delivering social, economic, and environmental sustainability. By seeking to influence the location, scale, density, design, and mix of land uses, and thus shape patterns of development, planning can help to facilitate an efficient transport and land use system by:

• facilitating a move towards sustainable modes of transport e.g., public transport, cycling, walking.

• making it easier for people to access employment and services;

• facilitating the operation of labour markets;

• reducing the impact of transport on communities;

• improving freight flows and access to key ports and airports;

• providing for the efficient distribution of goods and services to business and the community;

• providing a choice of travel modes; and

• ensuring flexibility to meet the demands of a changing economy and market conditions.

The reservation of corridors for transport infrastructure such as roads and public transport is vital to facilitating the provision of such infrastructure in a timely and cost-effective manner. In addition, consideration of land uses along major transport corridors must take account of the need to preserve their capacity to cope with increasing demands for safe and effective transport.

The development plan should address the key areas of inter-relationship between land use and transport and should set out its overall aims on this key issue. These might include:

(1) A statement (accompanied by a diagrammatic illustration) outlining the key transport corridors, nodes and networks, including public transport networks such as bus networks, that are present in or traverse the county in question.

(2) A statement regarding the key development issues facing the evolution of these transport networks.

(3) A statement of supporting policies to ensure that transport and settlement patterns will mutually support each other.

(4) Statement of policies to:

- minimise the need for travel,

- reduce the length of journeys,

- maximise the proximity of people, business and the services they require,

- encourage more urban movement involving walking, cycling and public transport and

- promote greater investment in and usage of public transport modes such as rail and bus networks, with the support of complementary land use policies.

- maximise road safety through clear policies on access to and control of development on or near roads, including National Roads."

The degree to which development plans actually reflect this advice in practice depends a great deal on conditions in the area in question. Thus, for example, in the South Dublin County Council Development Plan (an area with very great development pressure and very serious traffic congestion) these policies are to be found. In contrast, the Donegal County Council Development Plan covers an underdeveloped area of north west Ireland, inhabited largely by sheep. Consequently it has little reference to using the planning system to manage demand for travel, but much more about ensuring that transport links to the rest of Ireland facilitate economic development.

Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in LUP? Are there any conflicts between policies at different levels of government?

See above for an answer to this. Generally "using land use to reduce the need to travel" is a key planning objective at higher levels of government, but its importance at lower levels varies a lot from area to area, and is more strongly reflected in policy than in practice.

There may be a risk that local government and regional agencies will place a higher priority on economic development than on the integration of LUP with MM; and/or see development as a means to fund road schemes for which there has been a long-standing local aspiration.

Existence of policies towards a compact city

For this purpose, the analysis framework has identified policies that seek:

- A poly-centric urban structure.
- Medium and high land-use densities with a mix of different uses.
- Concentrating trip generating development along PT corridors/at nodes. Nodes and corridors identified in strategic and local plans, perhaps by the use of accessibility measurement.

- Re-use of brownfield sites.
- Transport impact assessment including changing sites if one is unsuitable on transport grounds.
- Maximum parking standards

The NSS and the NDP both indicate that a range of these outcomes are desirable for their ability to reduce the need to travel. All RPG's, LAP's and LDPs (regional and local plans) will refer to them to some extent, therefore. However, the degree to which they refer depends to a large extent on the priorities of the authority drawing up these documents.

Examples of regional and local plans that attempt to develop these policies include Greater Dublin Area Regional Planning Guidelines (2004-2016) the Cork County Development Plan and the Cork County Development Plan. For example, the Greater Dublin RPG states that: "Development within the Metropolitan Area will be consolidated, with a much-enhanced multi-modal transport system. For Dublin City Centre, this will require a further increase in overall residential development densities, the delivery of well-designed urban environments, as well as measures to ensure priority for public transport. Outside Dublin City Centre, towns will be consolidated with an increase in overall residential development densities particularly in proximity to public transport corridors." (Executive Summary; p.70) Similarly, the former of the 2 local Development Plans includes a section on integrated LU planning, and the latter includes a chapter on MM.

The Regional Planning Guidelines for the Greater Dublin Area can be found at: http://www.rpg.ie/index.html. The Cork County Development Plan can be found at: http://www.corkcoco.ie/co/pdf/57003030.pdf. The Cork City Development Plan can be found at: http://www.corkcity.ie/ourservices/developmentplanning/developmentplan/downloadcorkcitydevelopmentplan2004/.

Any work that has been carried out on the effect on the market of integrating LUP and sustainable transport

No evidence of any systematic review of developer responses could be found.

Organisational/institutional integration to encourage LUP and transport integration

Much of the public transport system – including bus and rail - in Ireland is provided by the public sector. Public transport is mainly in the hands of a statutory corporation, Córas Iompair Éireann, and its subsidiaries. Whilst some sections of road have been built using private or public-private funds, (these are operated as toll roads) they are still owned by the Irish Government. Airports are also still owned by the state, although this is likely to change in the near future.

In general, in the public sector, the same organisations are responsible for planning transport and LUP. Therefore, institutionally, there is reasonable integration. However, the degree to which this results in transport input to planning policy making and planning decisions, and vice versa, depends on the individual nature of each local/regional organisation, and on the politicians that ultimately control them. In some organisations, there is a lot of integration and in others, much less – but it is very difficult to generalise about this.

Barriers to integration

The key barrier to integration is pressure to open up land for development, as Ireland has undergone a development boom in the past 15 years. Building new roads, and in part at least funding these through

contributions from developers along the road, is seen as a desirable outcome by many local politicians. This is clearly a barrier to using the planning system to support sustainable transport.

Where integration of policies exists – any evidence of its success on the ground?

There is no systematic evidence. However, parts of Dublin are becoming more densely developed, in particular around the new LUAS tramline. However, it is difficult to judge whether this is a result of planning policy and practice, or increases in land values.

2. Analysis framework: integrating MM and LUP in the building permission process – Ireland

In tandem with an analysis of framework conditions (the integration of sustainable transport and LU planning), there is of course a need to assess how far MM has been integrated into the process of granting permission for a given building or development in the WP D partners' member states, plus Ireland and the Netherlands. This section sets out the framework for gathering comparable data on this subject, as detailed below. The term "building permission process" refers to the decision on whether or not to grant planning permission for a particular development.

Detailed steps in the building permission process

Planning permission is generally required for any development of land or property, unless it is specifically exempt from this requirement (as set out in planning law). Applications can be made for outline (i.e. 'in principle') permission or (full) permission.

Planning permission is obtained from the local planning authority, which will be the local County Council, Borough Council, City Council or Town Council. A fee is payable, with the amount linked to the type of development, and the application process is typically dealt with within 12 weeks.

"In making the decision, the planning authority takes a number of matters into account, including:

- The proper planning and sustainable development of the area (e.g. appropriate land use (zoning), road safety, development density, size, location, adherence to established planning and development practices);
- Its own development plan;
- Government policy (NSS and NDP objectives);
- The provision of a Special Amenity Area Order;
- Any European site (e.g. Special Areas of Conservation; Special Protected Areas);
- Submissions and observations made by members of the public on the application."
- "Impact on local traffic network- in which a Transport Impact Assessment is required"

Planning applications may attract conditions which must be met to fulfil planning permission requirements. Enforcement is the responsibility of the planning authority, "… which has wide enforcement powers to ensure development is carried out in conformity with planning permission, and to halt and rectify unauthorised development. … Planning authorities have powers to stop unauthorised development and this can be a costly experience for the offender."

(Source: http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownLoad,1582,en.pdf)

In the case of developments with significant car trip generation potential, applicants are required to submit detailed assessments of the transport systems provided and the impacts of the proposed development on the surrounding environment and transportation network through the submission of a Transport Impact Assessment

(TIA), or Traffic and Transport assessment (TTA). Only very recently (October 2007) has national guidance been issued on this topic.

Which planning instruments are included in the building permission process and how are they specified in terms of content

The main instruments are as follows. Their content has been described earlier.

- The Planning & Development Acts (2000 and 2001)
- Planning & Development Regulations (2001 and 2002)
- National Spatial Strategy
- National Development Plan
- Regional Planning Guidelines- Implementing the NSS: Preparing Regional Planning Guidelines http://www.irishspatialstrategy.ie/docs/RPG%20Guidance%20Note%20Fifth%20draft.pdf
- Planning and development (Regional Planning Guidelines) Regulations 2003- http://www.irishspatialstrategy.ie/docs/word/RPG%20Regulationsv5.doc
- Residential Density Guidelines (1999)
- Development Management: Guidelines for Planning Authorities (2007)- http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownLoad,14467,en.pdf
- Development Plans: Guidelines for Planning Authorities (2007)- http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownLoad,14468,en.pdf
- Local Development Plans, which set out policies on development and broad zoning. In theory, therefore, this could include the requirement for certain types of development to include MM plans as part of the development process. It is however not clear how many do include such requirements. One that does is the South Dublin Development Plan which in section 12.3.2 states the following (emphasis added):

"**Employment-Intensive Development**: The suitability of employment-intensive development proposals on sites located in areas zoned for Enterprise and Employment and related uses, (zoning objective "E") will be assessed having regard to the level of employment and the walking distance to a good public transport network. Walking distances of not more than 400 metres to a QBC route or LUAS stop or 800

metres to a heavy rail stop, will generally be considered acceptable for employment-intensive developments in such areas. Proposals for such developments will be required to be supported by a viable mobility management plan that provides a reliable basis for the achievement of acceptable modal shares for both public and private transport within an appropriate time

frame. Multi-storey or basement level car parking to serve employment-intensive developments located in areas zoned for enterprise and employment and related uses, (zoning objective "E"), shall only be permitted on sites within the distances from a QBC [quality bus corridor], LUAS [tram] or heavy rail stop specified above. On sites located outside these walking distances car parking shall be provided at surface level only."

Cork City Development Plan Section 49 also requires MM plans for all large new employment developments and suggests their likely contents. It also says that building permission for high employment uses will be conditional on the ability of the developer or employer to implement a viable MM plan, and that such plans must include a MM manager (travel coordinator), and regular monitoring and feedback.

It appears that other Councils with similar policies include all the Councils covering the Dublin area; Wicklow; Sligo (Leitrim); and Limerick.

- Local Area Plans – including detailed zoning.

- Local authority advice notes, e.g. Dublin Transportation Office- Advice on Mobility Management Plans- http://www.dto.ie/mmp.pdf Note these have no legal basis but reflect good practice

How are the planning instruments applied in practice

According to a source in the development planning industry, there is in practice little serious application of the policies on mobility management plans in new developments. This is because there is little knowledge of what they could contain; and little experience of how to use them effectively. This is the result of there being in practice little political pressure for these plans. Thus the transport impacts of new developments are still dealt with largely on a "predict and provide" basis – the number of cars that will travel to the development is predicted, and then improvements carried out to the road network to ensure that there is sufficient additional road capacity to cope.

There is also some evidence that planning law in general in Ireland has been applied quite flexibly in the past, meaning that development has been able to take place even where it is in conflict with most policies set out in the Development Plan. This obviously undermines the achievement of those policies.

To whom are the planning instruments addressed

No information available

What flexibility do these instruments offer in order that MM can be included, and what is their ability to support, hinder or allow MM and supporting measures

In theory the Irish planning system could be used in a similar way to the British planning system to secure mobility management measures. It is normal to place conditions on new development, and there is a system of securing Special and General developer financial contributions to infrastructure and services related to the development. However, a lack of political will, and the fact that the pursuit of MM through the planning system is a new activity in Ireland, means that the planning system is not often used in this way.

That said, two major new retail developments in South Dublin, Dundrum shopping centre and a new Ikea, both had conditions attached to their planning permissions requiring the implementation and monitoring of MM plans. Information about the latter, and the actual text of the conditions, can be found at http://www.pleanala.ie/casenum/220256.htm (in the Order document).

To which other instruments and laws (e.g. in other sectors or in higher levels than the local level) are they referring and what is their content

Generally the local authority refers mainly to its own Development Plan when making decisions on building permission applications, although obviously it must keep within the national law when so doing, and take into account (to a greater or lesser extent) guidance from higher levels of government. It must also bear in mind that in the Irish planning system, anyone can appeal against a decision to grant building permission. Residents groups often appeal on the grounds of fears of parking or traffic congestion arising from the development. Therefore if the authority can show that a MM plan may help to reduce these problems, this may reduce the risk of it losing at appeal.

In those countries that already include MM in the building permission process, how this works in relation to the process, instruments and laws identified above; and who is responsible for this integration, what are benefits of the integration of MM

Ultimately the local planning authority is responsible for ensuring that MM is built into individual building permission decisions. The degree to which this occurs depends on the staff involved and the political interest in MM and congestion management more generally. If there is a will to use the planning system in this way then, when a developer first approaches an authority for "pre-application discussions" about a major development that they are considering, the local authority will indicate that a MM plan is required, and perhaps suggest that a consultant with experience in this area (since many Irish transport consultancies are branches of UK companies) is brought in to advise. However, this means that the developer is in a powerful position to specify the content and operation of the MM plan, since the Council staff may have little experience of other developments where such plans have been required.

How the practice is and what problems, barriers, etc. are encountered

According to some actors in the industry, the emphasis on economic development and land speculation means that many MM plans drawn up for new developments remain just that, plans, that are never actually implemented once the development is open. This is perhaps also because there is as yet no evidence that central government will call-in developments applications on the grounds of a lack of an effective MM plan.

6.2. Appendix 2

Country report: Germany

Table of Contents

1. LUP and sustainable transport – preconditions for integration of MM and LUP – Germany

The legal framework underlying the planning system

The governance framework in which transport and land use planning take place

Germany is a federation consisting of 16 federal states (*Bundesland)*, each with its own constitution, parliament and government. The highest state authority is exercised by the federal government (*Bundesregierung*). Through the agency of the federal parliament (*Bundesrat* consisting of delegates of the state governments to uphold the states' interests) the states are represented at the federal level and participate in federal legislation.

Figure 1: Map of Germany and its 16 federal states

Source: http://www.deutschland.de/aufeinenblick/deutschlandkarte.php?lang=2 (Nov. 2, 2007)

Government structure

In general, the German administrative system consists of two levels: Firstly the state level which includes the national state, federal states and in five bigger federal states the administrative districts (*Bund, Bundesland, Regierungsbezirk*) and secondly the communal level, i.e. counties, country-free cities and municipalities (*Landkreis/Kreis, kreisfreie Stadt, Gemeinde*).

The following governmental and administrative levels are relevant:

- federal republic of Germany (*Bundesrepublik Deutschland*)
- federal state (*Bundesland*, e.g. North Rhine-Westphalia NRW)

  administrative district (*Regierungsbezirk*, exist only in 5 federal states)
- county or county-free city (*Landkreis/Kreis, kreisfreie Stadt*)
- municipality (*Gemeinde*)

Due to political will and related to the differences in size of the federal states there exists only in five of it a special governmental administration on a regional level. On the regional level the state of North Rhine-Westphalia is represented by five administrative districts.

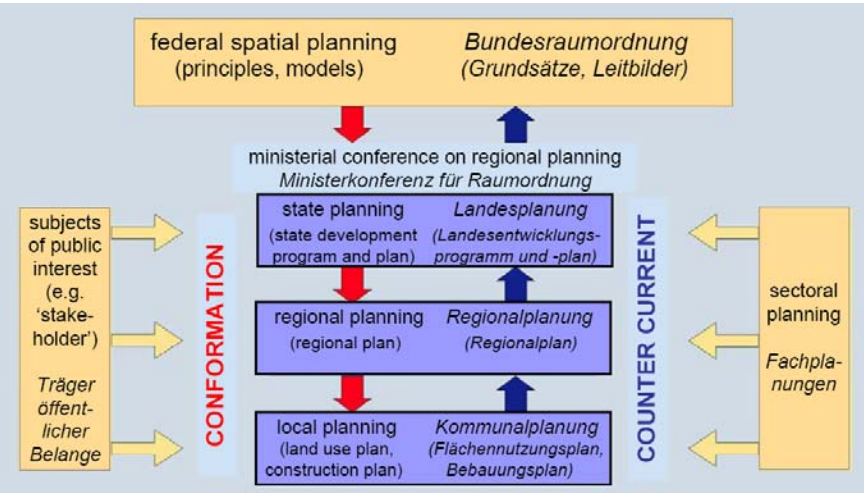
In accordance with federal state law all German municipalities (~12,240) are united in either counties (323) or, regarding the bigger ones, stay single as county-free cities (116). Concerning transport and land use planning in many federal states the county level has only little or no relevance.

Elections take place for the federal parliament (every four years), the state parliaments (every four or five years depending on the State, in NRW every five years), county council (every five or six years, in NRW every five) and municipal council (between every four and seven years, in NRW every five). Depending on the State the Mayor is elected partially by the citizens (direct election, e.g. in NRW) or indirect by the city council.

There are two basic principles in the German planning system: **Subsidiarity** and counter-current principle. Regarding the former principle there is a strong local self-administration, and municipalities as well as the federal states are in charge of many legal and governmental tasks. This principle can not only be found in the planning system but in general tasks as well.

The **counter-current-principle** consists of two factors: compliance of lower-level plans to higher-level plans, and participation of lower level-planning authorities in higher-level planning. These two factors are the corner stones of coordination between different departments and administrative levels.

Figure 2: Principles of German spatial planning system



Source: modified on BBR (2005): page 219

In every planning process – no matter on which administrative level – can be found an amount of participation. Stakeholder (like environmental associations), sectoral planning disciplines (*Fachplanungen*, i.e. transport planning, landscape planning…) as well as citizens affected by contents of the planning process take part by criticising aspects and/or show alternatives.

In points of land use planning the most powerful level is the municipal one. The principle of subsidiarity is laid down in German basic law (*Grundgesetz*) article 28 so called '*kommunale Planungshoheit*'. Upper levels create a framework of legal regulations and basic aims which is concretised by the local government and administration. Regarding to the interpretation of the given framework the municipal authorities have a huge margin of discretion. In terms of transportation responsibilities are organised a bit different. Here the regional level is more powerful. Nevertheless the municipal level has far ranging power because of the principles of counter current and subsidiarity.

Following paragraphs describe North Rhine-Westphalia and its planning law in further detail as an example for the German planning system.

FEDERAL REPUBLIC OF GERMANY

This top level sets the legal framework for spatial planning, transportation and building affairs (nationwide). Building law in Germany distinguishes between two different bodies of law, spatial and urban development planning, on the one hand, and planning permission for the concrete individual building project, on the other. Basic for spatial planning in Germany is the federal regional planning act (*Raumordnungsgesetz, ROG*) which defines general guidelines and principles for all governmental and administrative levels involved.

The German federal building code (*Baugesetzbuch, BauGB*) regulates German building law and defines functions and instruments for urban planning. The procedure which the local authorities have to follow in drawing up their plans, i.e. the planning process, and the permissible material planning content are also laid down in the federal building code for the country as a whole.

Legal affairs of spatial planning are organised as a particular case of concurrent legislation (*konkurrierende Gesetzgebung*). In general this means that on matters within the concurrent legislative power, the federal states shall have power to legislate so long as and to the extent that the federation has not exercised its legislative power by enacting a law. Due to a federalism reform (*Föderalismusreform*) which leads to changes in basic law (functions as constitution: *Grundgesetz*) in 2006, there are some exceptions to this rule which include spatial planning (*Raumordnung*). Now both, the federal and the state governments can enact laws on affairs of spatial planning. If the two laws have conflicting regulations the newer one has to be applied.

Responsible for spatial planning is the federal ministry of transport, building and urban affairs (*Bundesministerium für Verkehr, Bauwesen und Stadtentwicklung, BMVBS*). For research and advisory on spatial planning and land use planning there is furthermore the federal office for building and regional planning (*Bundesamt für Bauwesen and Raumordnung, BBR*)

The federal transport infrastructure plan (*Bundesverkehrswegeplan, BVWP*) rules investments in construction and extension of federal railways and waterways as well as federal trunk roads (*Bundesfernstraßen*) which include freeways (*Bundesautobahn*) and highways (*Bundesstraße*). Time period of the actual BVWP runs from 2003 to 2015 and includes a total investment sum of nearly 150 billion Euros. The plan includes lists of projects that have been suggested by planning authorities (this can be state governments but also German Rail, *Deutsche Bahn AG*) and that have been rated by the federal ministry of transport, building and urban affairs (*BMVBS*) regarding need and profitability. Only projects that make it into the 'best' group, the so called urgent need (*vordringlicher Bedarf*) have a realistic chance to be implemented.

Long distance trains are operated almost solely by German Rail. New construction or extension of railway infrastructure for regional and long distance trains is listed in the BVWP as well.

The federal cycling plan (*Nationaler Radverkehrsplan*) aims to encourage cycling mostly by promotion and supporting of projects and initiatives (no infrastructure program).

Heavy vehicles with a weight of more than 3.5 tons have to pay a road charge for using German freeways.

FEDERAL STATE OF NORTH RHINE-WESTPHALIA (NRW)

The 16 federal states have the main responsibility for spatial planning in Germany. They have the possibility to 'fill in' the framework given by the federal government. Since federalism reform in 2006 state governments can make up contrary regulations (see above), it is not clear what this means for the future of the planning system in Germany.

The main laws concerning the governance framework for planning in NRW are

- regional planning act (*Landesplanungsgesetz, LPlG*)
- state development program, which is enacted as a law (*Landesentwicklungsprogramm NRW, LEPro NRW*)

Those two laws build the basis for the main state development plan (*Landesentwicklungsplan, LEP*) for the federal state. Responsible for its development in NRW is the state ministry for economy, middle-class and energy (*Ministerium für Wirtschaft, Mittelstand und Energie, MWME*). The LEP is developed as a strategic plan for the whole area of the federal state. In the LEP objectives and basic conceptions like transport axis and core development areas are given:

"Its goals leave the downstream planning levels the necessary discretionary power to adapt them to suit regional and local conditions and requirements as the situation dictates. The regional planning authorities or technical plans are to fill out the framework under their own responsibility with their own goals or plans." (http://www.wirtschaft.nrw.de/600/200/100/lep-engl.pdf)

The detailed regulations governing the granting of planning permission for specific building projects are adopted by the federal states in their respective state building codes (*Landesbauordnung* e.g. *Bauordnung für das Land Nordrhein-Westfalen, BauO NRW*). This applies in particular to the procedure for granting planning permission. In addition, there are also material requirements to be met when carrying out specific projects with a view to avoiding building-related hazards.

Road infrastructure is up till now mostly planned, constructed and maintained by the public sector. In North Rhine-Westphalia the state enterprise for road construction (*Landesbetrieb Straßenbau NRW*) is responsible for planning, construction and maintenance of federal trunk roads (*Bundesfernstraßen*) and regional roads (*Landesstraßen*).

To achieve a more sustainable transport in North Rhine-Westphalia former sectoral plans for each mode (e.g. demand plans for public transport or regional roads, *ÖPNV Bedarfsplan, Landesstraßenbedafsplan*) have been brought together to a comprehensive transport infrastructure demand plan. This integrated overall transport planning (*Integrierte Gesamtverkehrsplanung, IGVP*) is based on the work of an Enquete commission of the NRW state government.

Based on a special law (integrated overall transport planning act, *Gesetz zur Integrierten Gesamtverkehrsplanung*) and with consideration of principles and aims of spatial planning as well as interests of environmental protection and urban planning the responsible state ministry for construction and transport (*Ministerium für Bauen und Verkehr, MBV*) sets up this planning.

ADMINISTRATIVE DISTRICT

North Rhine-Westphalia is divided in five administrative districts (Arnsberg, Detmold, Düsseldorf, Cologne and Münster) that are subdivisions of the state level and that for only take administrative tasks. There are not any elected representatives on this level. The administrative districts are responsible for setting up the regional plan (*Regionalplan)* for their territory. This is another step in concretisation of the given framework in consideration of the state level. In the regional plan, main points of land use planning and transportation infrastructure are determined.

In some federal states the regional planning is organised on county level (i.e. *Landkreise*, Lower Saxony, *Niedersachsen*) or by other forms of regional cooperation (e.g. planning districts, *Planungsverbände* in Bavaria, *Bayern*).

COUNTY AND COUNTY-FREE CITIES

Responsible for rail bound public transportation (*schienengebundener Personennahverkehr*; i.e. regional and commuter trains, but not long-distance trains, subways and trams) are the counties and county-free cities. For a better organisation and cooperation the counties and county-free cities in NRW are combined to nine purpose associations (*Zweckverbände*) which are responsible for planning and tendering public transportation services. Operation is done by 'private' companies in regional public transport (mostly by German Rail) and in most cases by public owned companies (often as subsidiary companies of municipal utility) in local public transport. For state-wide coordination an ‘umbrella association’ called *‘Nahverkehr NRW’* (public transport North Rhine-Westphalia) is founded by the state transport ministry (*MBV*).

The NRW public transport law (e.g. *ÖPNV-Gesetz NRW*) forces the purpose associations and local authorities to set up local transport plans (*Nahverkehrspläne, NVP*) together, in which basic conditions of operating PT e.g. routing, service quality, intervals etc. are included.

Public authorities (federal and state government as well as local authorities) plan and invest in new construction and/or extension of infrastructure.

MUNICIPALITY

Urban planning

According to the principle of subsidiarity municipal authorities are responsible for the urban land use planning (*Bauleitplanung*) to prepare and control the use of land within a municipality. As mentioned above, urban planning law is (mainly) based on the Federal Building Code (*BauGB*). One core element is the local authority's obligation, to draw up urban development plans on their own responsibility in so far as this is necessary for the urban development of their areas. While setting up the plans, they have to include regulations made by higher administrative levels. Counties and administrative districts control municipal decisions and plans or have to give permissions in some cases – but this is only regarding to formal aspects like planning procedure. Higher-level authorities have no right to judge about content-related aspects of municipal decisions.

There are two main plans on municipality level: the local land use plan (*Flächennutzungsplan, FNP*) and the detailed site development plan (*Bebauungsplan).*

The (preparatory) local land use plan (*FNP*) is drawn up for the entire local authority area and determines quite concretely the desired future land use patterns for the whole area. It only has binding force for the authorities and administration themselves e.g. when they have to balance different interests during their decision making processes.

For parts of the municipality area a (legally binding) detailed site development plan can be drawn up. This plan sets up a precise division into lots and determines in detail every affair regarding new construction in housing, business and industrial areas as well as seldom transport infrastructure. Based on this detailed site development plan the municipal administration grants building permissions. As the name presumes, those plans are directly legally binding for all citizens as well as administrations. Depending on the federal state municipalities may set up their own charter for handling parking space matters.

For new constructed (and partly for extensive converted) facilities the state building codes include a duty to build parking spaces on the building parcel itself or in close neighbourhood. For the demanded amounts of these parking spaces there are standards and benchmarks. Different possibilities to reduce the amount of parking spaces can be found. The building code of NRW offers a variety of possibilities to do so, for example when public transportation is available in high quality, when a low car use is expected, like it is the case with car-free residential sites or student accommodations or when additional bicycle (parking) infrastructure is built.

In NRW as in most states the municipalities can set up a charter to specify these parking space regulations (parking space charter – *Stellplatzsatzung*). For each development the number of requested parking spaces is to be set individually. Generally the municipality authorities have the possibility to reduce the number of parking spaces for a certain development e.g. in case of good access to quality public transport. The municipalities can demand a fee (*Ablösesumme*) for those parking spaces which will/can not be built on the site itself, in some cases the fee is abated until recalled. Other cities expect for example in case of car-free districts that the inhabitants own some space at the edge of the quarter for a possible future construction of parking space if needed.

Roads in local responsibility are operated by the municipalities on their own. The federal government gives some financial supports via the states; this kind of payment is regulated by communal transport finance act (*Gemeindeverkehrsfinanzierungsgesetz, GVFG*). Money from this source can be used for road as well as public transport projects but only for investing in infrastructure (new construction, extension etc.) not operation or maintenance. This money comes from the petroleum tax of the federal government.

Regarding mobility and transport issues, some municipalities set up a strategic transport development plan (*Verkehrsentwicklungsplan, VEP*) or master plan mobility which covers all modes.

The cities are responsible for other PT services (i.e. bus, subway, tram, etc. but not long distance trains) on their own. The city can delegate this responsibility to the counties or purpose associations, e.g. if there is no municipal transport company.

Due to the plans of federal government to (partly) privatise the German Rail (*Deutsche Bahn AG*) responsibilities might change in the (near) future. Regarding the railway infrastructure, it is not yet clear who will own and/or run it and who will decide on extensions, new lines and even more important on shutting down tracks. Political discussion and decision-making are still running.

Planning instruments

	Spatial Planning	**Level**
LEP	Landesentwicklungsplan	Federal State
LEPro	Landesentwicklungsprogramm	Federal State
	Regionalplan	Administrative District
FNP	Flächennutzungsplan	Municipality (whole area)
	Stellplatzsatzung	Municipality (whole area – see above)
B-Plan	Detailed site development plan	Municipality (parts)

	Transport planning	Level
IGVP	Integrierte Gesamtverkehrsplanung	Federal State (see above)
NVP	Nahverkehrsplan	purpose associations and local authorities (county & county-free city)
VEP	Verkehrsentwicklungsplan / Masterplan Mobilität	Municipality (whole area)

Legal and theoretical scopes, functions and contents

State development program (LEPro) and state development plan (LEP) (*Landesentwicklungsprogramm & Landesentwicklungsplan*)

These two pieces are combined and strongly related. The program is the textual part with the status of a law; the plan shows the conversion into spatial dimension. Together they include objectives (aims/goals) and basic conceptions like transport axis and core development areas (*Verkehrsachse, Siedlungsschwerpunkt*) for the whole federal state. Together they form a development strategy for the next 10 to 15 years. Two major aims can be found in program and plan for North Rhine-Westphalia:

- First defining the fundamentals of the spatial structure by large scale spatial categories (zonal classification and regionally significant spatial functions)
- Second handling economic development, residential and recreational matters, environmental protection as well as waste management and energy supply on a large scale

Large-area retail trade (more than 800 square metres of sales area) as well as shopping centres are only allowed in city centres or special zones (*Sonderflächen*, have to be set up in land use plan and detailed site development plan!).

Regional plan (*Regionalplan*)

The regional plan is another step towards concretisation. To all aspects mentioned in the state development program and plan (see above) the regional plan gives more detailed information. It consists of a text and a map part with illustration on a 1:50,000 scale. There are five regional plans in NRW, one for each administrative district.

Local land use plan (*Flächennutzungsplan, FNP*)

German urban planning system is separated into two steps: First step is preparatory urban planning (*vorbereitende Bauleitplanung*). The FNP - local land use plan (also zoning plan) shows for the whole municipal area the intended future land use. Categories are amongst others residential or business areas, forest and farmland, areas with environmental protection and land for transport and supply/disposal. It is suggested to update the plan every 10 years, but due to the complex and time consuming development phase of drawing up most land use plans are used longer. The elected city council needs to pass the FNP as well as every other city charter.

If new developments do not fit to the content of the FNP the plan can be altered / adapted for the certain area. This is quite simple because city council can easily decide the change. Therefore quite a lot of preparatory land use plans originate from the 1970ies and are not used and not useful to determine future land use.

Detailed site development plan (*B-Plan, Bebauungsplan*)

Second step in German urban planning is the so called obligatory urban planning (*verbindliche Bauleitplanung*) because it's legal binding to everyone. The detailed site development plan - sometimes called 'legally binding land use plan' - is made up individually in case that new sites shall be built up or regulations on existing site shall be legally ensured. The detailed site development plan can be combined with a design charter (*Gestaltungssatzung*) to ensure certain house or public space and road design. What is more there exist different types of detailed site development plans. One example is the project-based detailed site development plan (*vorhabenbezogener Bebauungsplan*) which is made up by the site developer in cooperation with the municipal authority. In other types the detailed site development plan is combined with an urban planning contract (*städebaulicher Vertrag*) that is concluded between developers or other stakeholders on the one hand and the municipality on the other. Quite seldom this tool is used for legally securing single transport infrastructure project like municipal roads.

The municipal administration can charge fees for the preparation of land for building. The money can only be used to cover the expenses of supply with water, electricity etc. and waste water disposal as well as road construction. There is no possibility for covering PT with it!

A particular feature of German urban planning law is that the determinations laid down in the legally binding detailed site development plans give the citizen constitutionally enforceable rights with regard to the permissibility of land use, which can not be restricted on grounds of planning law in the subsequent procedure leading to the granting of planning permission for a concrete project.

Transport development plan (*Verkehrsentwicklungsplan, VEP / Masterplan Mobilität*)

Regarding mobility and transport issues, municipalities can set up a long –term and strategic transport development plan (*Verkehrsentwicklungsplan, VEP*) or master plan mobility. It looks at different scenarios to discuss the future development of urban transport within the next 5-15 years. Content and scope of existing VEPs are quite different; how comprehensive these plans are depends on the individual case e.g. in taking the needs and development of all modes into account. The master plan mobility of Dortmund (*Masterplan Mobilität Dortmund*) is a good example for a quite comprehensive approach. Those kinds of voluntary plans show the vision for mobility matters for the next ~15 years. There are no restrictions on content, process, participation but there exist some kind of practical standard. The plans serve as decision guidance and decision support for the authority but are not legally binding. In many cases there is no monitoring if suggested measures are actually implemented and there is no revision needed. How far sustainability is taken into account depends mostly on local planning culture and political decisions.

Master plan retail trade (*Masterplan Einzelhandel*)

Municipalities can set up a master plan retail trade. As the master plan mobility it is not legally binding but a decision support. As an example the master plan retail trade of Dortmund (*Masterplan Einzelhandel Dortmund*) creates the framework for handling development processes in retail trade as compliant as possible.

It consists of four single concepts: First the regional retail trade concept for the eastern Ruhr area and neighbouring region (*Regionales Einzelhandelskonzept für das östliche Ruhrgebiet und angrenzende Bereiche*) includes regulations for the cooperation between the cities and coordination of their retail trade matters. Second

there is the retail concept for the whole city of Dortmund (*Gesamtstädtisches Einzelhandelskonzept für Dortmund*) with aims and regulations for the strategic retail trade development. Third the local supply concept (*Nahversorgungskonzept*) aims in securing supply with esp. groceries close to where the people live. Fourth a concept for the three special sites of large-scale retail trade called '*Konzept für die drei Sondergebietsstandorte*' includes further aims and regulations for coping with this three important retail trade sites outside the city centre.

Local transport plan (Nahverkehrsplan, NVP)

This instrument is quite new (1996) and was introduced by regionalisation law within reformation of the German rail system. Federal states had to adapt it e.g. to define content and responsibilities and in most states this instrument is mandatory. It sets the framework conditions for public transport and for competition (regional rail-bound and other local public transport) and aims to secure and improve public transport as service of general/public interests.

In NRW the purpose associations (*Zweckverbände*) and counties and county-free cities (local authorities in charge), set up local transport plans for a five years period. The purpose associations are responsible for the regional rail bound public transport, the local authorities are responsible for the local public transport and busses, (but they can pass over the task to the purpose associations). The NVP has to take into account other levels (vertical and horizontal) urban and transport planning as well as environmental protection and barrier free accessibility and needs to be considered by PT issues).

The NVP shows the public transport needs and interests in consideration of given and future settlement structure within its area. It gives information about e.g. state and future development of PT network, number of passengers and the level of service quality for all PT modes (route/line, frequency, barrier free design). It gives information about planned infrastructure development, about vehicle quality and should coordinate (further development of) tariffs and timetables within the target area. Its implementation can be monitored within the 5 year revision thus it is of more practical use than the strategic VEP. One problem with local transport plan is that it is not an integrative (all modes) but 'classical' sectoral planning instrument.

Sustainable transport in the LUP process

How far sustainable transport is an objective or an outcome of the LUP process

Sustainable transport is a topic in LUP process. Increasing mobility is a need that has to be fulfilled. More traffic as a cause of increasing mobility is seen as negative but granted. Municipalities have far reaching competence in decisions of land use policies and a wide scope for interpretation of upper level guiding principles. How far sustainable transport is fostered by LUP is therefore depending on the awareness of municipal authorities. Close cooperation between land use and transport planning is rare (e.g. Munich; Freiburg – good example: Vauban). In most cases different departments of the municipal administration are responsible for urban and transport planning, they are able to comment on each others draft plans but working together is not common practice.

Setting up a regional land use plan (*Regionaler Flächennutzungsplan, RegFNP or RFNP*) as a new instrument may help: Several cities e.g. in an agglomeration area can voluntarily work out a land use plan together. By doing so the land use and transport planning matters of the involved municipalities can be coordinated. Today only two regional land use plans have been set off: The one in the agglomeration area of Frankfurt (*Ballungsraum Frankfurt RheinMain*) is setting up phase now and in central Ruhr Area (i.e. the cities of *Gelsenkirchen, Herne, Bochum, Essen, Mülheim an der Ruhr, Oberhausen*) is at planning stage / in preparation.

In summary one can say, that sustainable transport is rather an aim, but it finds seldom it's way into reality.

Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in LUP? Are there any conflicts between policies at different levels of government?

Since federalism reform in 2006 legal affairs of spatial planning are organized as concurrent legislation. In case of conflicting regulations between federal and state government the newer law is the one to be applied. This means that if one level amends its law this newer one is in account until the other level amends its one. This could create a to-and-fro and that for a number of serious problems. Firstly the 16 German states can set up 16 different regulations, one for each state. This may create problems in compatibility of spatial planning on the federal level. Secondly every state has the right to differ in fundamentals of spatial planning. That means that achieved goals on federal level e.g. according to environmental protection or restrain urban sprawl may get lost. Thirdly a lot of non-explicit situations regarding competence between federal and state government may end up on constitutional court which would slow down important political actions.

Regarding spatial planning in NRW, the higher level guiding principle of urban development along transport axes and nodes is often ignored or 'weighed away' on the municipal level. There is no common integrated practice – only in some cases of regional cooperation.

Government recognises in policy documents that LUP can influence how people travel and therefore plays a role in the overall sustainability of the transport system. To achieve a more sustainable transport in North Rhine-Westphalia former sectoral plans for each mode (e.g. demand plans for public transport or regional roads, *ÖPNV Bedarfsplan, Landesstraßenbedafsplan*) have been brought together to a comprehensive transport infrastructure demand plan. This integrated overall transport planning (*Integrierte Gesamtverkehrsplanung, IGVP*) is based on the work of an Enquete commission of the NRW state government.

Based on a special law (integrated overall transport planning act, *Gesetz zur Integrierten Gesamtverkehrsplanung, IGVPG*) and with consideration of principles and aims of spatial planning as well as interests of environmental protection and urban planning the responsible state ministry for construction and transport (*Ministerium für Bauen und Verkehr NRW, MBV*) sets up this planning. Of course stakeholders, subjects of public interest and all municipal authorities take part in the process of setting up a sustainable transport.

Regarding public transport (PT) neither BauGB nor other federal laws obligate municipalities or investors to cover (new) residential, business or industrial sites by public transport! State laws are more important in this matter. The NRW public transport law (e.g. *ÖPNV-Gesetz NRW*) forces the purpose associations and local authorities to set up local transport plans (*Nahverkehrspläne, NVP*), in which basic conditions of operating PT e.g. routing, service quality, intervals etc. are included. But municipalities have no duty to provide public transport or to secure a minimum quality performance of given PT services. Another problem is that accessibility of a site is solely seen as a (road) infrastructure problem and must be proofed/secured to get a building permission.

The existing state building laws present regulations regarding concepts of reducing parking space by municipalities. In all states except Baden-Württemberg the relevant regulations provide the possibility to fix the number of parking lots depending on the expected traffic caused by the development. In Berlin the investor's duty to construct parking spaces has been erased completely a few years ago with the experience that the investors create as much parking space on their own as is needed. In case of car-free projects whose residents contract to live without an own car, this could lead to a very low number of necessary parking lots of usually 0.2 per household. Furthermore the building codes of nearly every state authorise the planning authorities to reduce or restrict the number of parking lots e.g. because of traffic or urban planning reasons as well as good PT service.

Objectives of land-use policies primarily relate to a reduction of the need for travel, while transport policies mainly aim at making the remaining traffic more sustainable. In the long-run, transport policies affect land-use and land-use policies also affect transport.

Existence of policies

The first policy is called theory of central places (*Zentrale Orte Konzept*) and was invented by Walter Christaller in 1933. It seeks to explain the number, size, distribution and distances of towns. Based on the assumption that the town's range and functions increase with increasing size, municipalities are separated in three different levels of centralisation: A lower, middle and upper level regarding aspects like health care, education, market functions etc. with the lower level forming the basic supply and increasing specialisation with increasing level. Core development areas as well as concentrating settlements close to transport axes or nodes derive from this concept. Although today the concept is discussed controversial because of lacking up-to-dateness most spatial planning programs include references to central places theory. A result of amongst others this concept is the prohibition of new housing facilities outside urban settlements. This means that new residential sites are only constructed within or with a direct connection to existing settlements.

Another policy is called city of short distances (*Stadt der kurzen Wege*). This overall urban planning concept postulates mixing up uses like living, working and recreation in an area with a quite high density. Unfortunately this concept is not found in laws, programs or plans – and more threatening not in reality! Only few developments nearby the city centre follow this concept; most residential or industrial developments are quite one-dimensional and that for contrary to this policy. For example while parallel setting up of new local land use plans and transport development plans in Dortmund, Freiburg and Munich this concept is referred to. One strategy to achieve this is (like Munich does) to give priority to inner city development and to re-development of sites.

One big problem is the integration of regional settlement development into the local LUP / transport planning: Neighbouring municipalities are involved only by comments on the draft FNP and/or VEP during participation phase. The interests of neighbouring cities can simply be "weighed away" and commuter transport often longer distances…

Sometimes Distance decree NRW (*Abstandserlass NRW*) is conflicting with the policy 'city of short distances'. It demands certain distances between certain commercial (esp. industrial) uses and residential sites to protect the latter of noise and/or smell pollution. This is one reason among others (e.g. prices) why new business and industrial areas are situated mostly at the edge of the city. There free space is available and the accessibility for road transport is best, and supply traffic will not pollute (residential) settlements. Because of the municipality's offering planning strategy local government does not know which sort of businesses will settle in the area when it is set up. This is why government will develop industrial areas at sites that fit into regulations of distance decree and not exclude certain uses from the beginning.

Brownfield redevelopment and strongly related saving space is an important part of the federal government's sustainability strategy (*Nationale Nachhaltigkeitsstrategie*). One aim among others is to reduce the use of new space (especially by ground sealing) to 30 ha per day in 2020. Government has set up this strategy in 2002 but until today no improvement has been reached yet (2005 ~118 ha/day). In this content the policy to prioritise urban development within given settlements (e.g. re-densification) is often mentioned, but it seems not to be a commonly used strategy.

Any work that has been carried out on the effect on the market of integrating LUP and sustainable transport

No data

Organisational/institutional integration to encourage LUP and transport integration

As already stated above the higher level principles are not very powerful on the local level where this integration should take place. Moreover in many municipalities different departments are responsible for LUP and transport planning. The possibility of integration lies in voluntary cooperation between the departments e.g. fostered by the city council.

Barriers to integration

Organisational structures of spatial planning, public transport, road construction and maintenance as well as financing infrastructure etc. are often really complex. Furthermore LUP organisations have other areas of responsibility than transport organisations. Additional barrier is the different temporal and spatial scope of transport and spatial and land use planning.

The concurrency of municipalities to attract investors/businesses and inhabitants creates a barrier as well: Municipalities do not raise general taxes (like income tax) on their own but payments (coming from tax incomes) by the federal as well as state government often depend on the number of inhabitants. For holding inhabitants or even “win” new citizens municipalities have to be as attractive as possible and this includes a certain amount of car-friendliness.

Where integration of policies exists – any evidence of its success on the ground?

No data

2. Analysis framework: integrating MM and LUP in the building permission process – Germany

The federal government creates the legal framework (*BauGB*, further decrees) that can be concretised by the state's building codes (*Landesbauordnung*). A sample or prototype building code for the federal states was created by the conference of the building ministers in 2002. Therefore all current state building codes are based on it but nevertheless they vary regarding the extent and content of regulations. The state building codes rule the procedure of getting a building permission (*Baugenehmigungsverfahren*). This is why differences between the processes in the federal states can be found.

Building authorities can be separated in building planning authorities (*Bauplanungsbehörden*) and building supervision authorities (*Bauaufsichtsbehörden*).

Building planning authorities are responsible for urban planning (*Bauleitplanung*) and set up the local land use plan (*Flächennutzungsplan*) and detailed site development plan (*Bebauungsplan*) based on higher level legal regulations. The authority is organised as a department of the municipal administration (most commonly called *Stadtplanungsamt*, department for urban planning).

The building supervision authorities are organised in a two or three level system:

Top level authority (*Oberste Bauaufsichtsbehörde*) is the state's ministry for building (in NRW it is called state ministry for construction and transport; *Ministerium für Bauen und Verkehr MBV*). Function of this level is to enact legal or administrative regulations, permit new building materials or techniques etc.

The second level (*Obere Bauaufsichtsbehörde*) exists in those five states that have administrative districts (e.g. NRW). Function is supervision of the lower level supervision authorities. If this level does not exist the first level takes over these responsibilities.

The lower level supervision authority (*Untere Bauaufsichtsbehörde*) is situated in the county administration for small municipalities or in the municipal administration itself in case of county-free cities as well as large and medium-sized municipalities. This level has the main importance because it grants building permissions and supervises building activities. During the building permission process the authority examines that the submitted documents are complete and the planned use and the planned building are consistent with respective regulations by public law. If everything is correct, the authority has to grant the permission. For major modification of buildings and some kind of demolitions (e.g. in case of listed buildings; *Denkmalschutz*) a building permission is needed as well.

There are two transport related issues within the building permission process. To get a building permission in NRW the developer needs to proof that the question of parking spaces is solved finally and permanently. The question of preparation of the land for building (public roads, supply with electricity, gas and freshwater as well as waste water disposal) needs to be solved (latest by the time the building is ready for use). This is a public duty which includes building roads to give access to the existing road network (if needed, additional paths for e.g. pedestrians are built as well). This duty can be transferred to private investors and developers.

In NRW and most of the other states the developer has to show either that requested (in most cases a minimum) amount of parking spaces (*Stellplatz*) will be built on the estate itself; or – if this is not possible or only some of the spaces can be built – to pay the municipality a specified sum (*Ablösesumme*) for each of the remaining ones. The municipality needs to spend this money for special tasks according to the states building code. In NRW the money needs to be spent to build additional public parking spaces or invest in public transport or bicycle transport in order to achieve a better accessibility of the estate. The developer can also show that the duty of building parking spaces is fulfilled by buying an obligation (*Baulast*) to build the parking spaces on someone else's estate

(which needs to be in immediate vicinity). For this neighbour estate this special obligation will be enlisted into a register (*Baulastverzeichnis*).

Detailed steps in the building permission process

There are two different procedures regarding the building permission process: the 'provision planning strategy' (*Angebotsplanung*) and the 'project oriented planning strategy' (*Vorhabensbezogene Planung*).

Provision planning strategy (*Angebotsplanung*)

In case of the 'provision planning strategy' the municipality sets up the planning process on its own and offers developable areas e.g. when the need is observable. Only in a second step, a developer comes into action. This is the common procedure for new residential sites or business and industrial areas. Following steps are part of this planning process:

1. **Municipality** decides to develop a site.

2. Planning department of the municipal authority may have to adapt the local land use plan (*FNP*) if the current content conflicts with the intended development.

3. City council passes the changed local land use plan.

4. Planning department sets up the detailed site development plan (B-Plan).

   Within existing developed areas no detailed site development plan is needed under certain circumstances: If the site is located within part of a built-up area ('*im Zusammenhang bebauter Ortsteil*') and fits into the existing district structures (e.g. regarding use, building density) there is no need to set up a new detailed site development plan. But this special case should primarily be used to facilitate closing gaps between buildings or for re-densification of existing settlements.

5. City council passes the detailed site development plan. In most cases the steps 2 and 4 as well as 3 and 5 are prepared simultaneously.

6. For the case of *Angebotsplanung* the municipality will start with real estate regulation and construction of supply infrastructure (e.g. roads, water and energy supply etc.). The municipality has to pay at least 10 % of those costs and the owner of the property has to pay the rest.

7. To get a building permission the **developer** sets up the architect's / building plan (which needs to take the regulation e.g. of the detailed site development plan into account) and bring in additional needed documents. There is a possibility to ask for an advanced notice that the planned use and size of the building is within legal regulation and therefore licensable. This notification is time limited and expires e.g. in NRW within two years if the developer does not apply for a building permission.

8. The building supervision authority (municipal or county building department, see above) will check if the development is conforming to legal regulations (specific laws, land use plan, detailed site development plan).

9. If there are no objections the supervision authority has to grant the building permission which is time limited and gives permission to start construction work within the next three years.

10. The developer can now start constructing.

11. After construction is finished the supervision authority will check again, if the developer observed all rules. This step is called 'acceptance of construction work' (*Bauabnahme*). Depending on how complex the development is there may be checks during the construction process as well.

12. After positive acceptance the building is ready to get in use.

Project oriented planning strategy (*Vorhabenbezogene Planung)*

The 'project oriented planning strategy' is used e.g. for brownfield redevelopments or larger business or industrial sites. Here the developer wants to develop a site and planning regulations are made accordingly. The most important difference in relation to the more common offering planning strategy is that the developer has more individual responsibility but at the same time more opportunities to do in his/her own initiative. Following process steps are important:

1. After making the decision to develop the site, the **developer** (!) creates – supported by the municipality's planning division – the project oriented detailed site development plan (*vorhabenbezogener Bebauungsplan)*. Simultaneously the developer sets up the architect's plan.

2. City council passes the new project oriented detailed site development plan (see step 1) and – if needed – changes in the local land use plan.

3. Now the developer can bring in all needed documents for the building permission.

4. The building supervision authority will check if the development is conforming to legal regulations.

5. If there are no objections the supervision authority will grant the building permission.

6. The developer can now start constructing.

7. After construction is finished the supervision authority will check again, if the developer observed all rules and regulations. Depending on how large the development is there may be checks during the construction process as well.

8. After positive acceptance the building is ready to get in use.

Which planning instruments are included in the building permission process and how are they specified in terms of content

See above.

How are the planning instruments applied in practice

In practise the municipalities have a wide range of own responsibilities. Framework, aims and conceptions given by the upper levels can be laid out quite freely.

To whom are the planning instruments addressed

Most plans are aimed at people within administrations or for consideration within decision making processes. Only the detailed site development plan is legally binding and refers to everyone.

The building permission addresses to the developer.

What flexibility do these instruments offer in order that MM can be included, and what is their ability to support, hinder or allow MM and supporting measures

As stated above, the **federal building code** sets the overall aims for urban planning including (since 2004) the aim of climate protection and sustainable settlement development as well as the reduction of traffic and its negative effects – therefore mobility management in principle could play a role within the general considerations of different needs as it is asked for within the planning process.

The **local land use plan** shows the different kinds of land use within the whole city area and guides the content of the **detailed site development plans**. Both plans regulate the use of land and soil, the content of a detailed site development plan is strictly regulated and no additional issues can be integrated at given state. Therefore mobility management measures (which are not strictly related to land) can not directly be integrated or asked for. The only link is the possibility to define areas which are dedicated for transport (*Verkehrsfläche*). Planning is possible for all modes but the quality of planning in regards of encouraging sustainable transport depends on the municipal planning department's awareness of the needs of users of car-alternative mobility modes. At this point 'good' strategic **transport development plans** are getting important (like *VEP* and *Masterplan Mobilität*) because they serve as a guideline for all administrative departments.

To influence on-site parking, the **state building code** (and the dependent lower level regulations like city charters) is of importance. It include regulations for the amount and quality of car parking spaces and (in some States) bicycle parking spaces.

The administration has to give building permission if everything is correct. However, the research project 'Mobilitätsmanagement in der Stadtplanung' stated that there exists in general the possibility to give the permission and add a condition (*Auflage*) which has to be proofed later on. One example could be that the number of requested parking spaces can be reduced on condition that a company offers rebated PT tickets to its employees. This offers a possibility to refer to mobility management but the open question remains: how to monitor the performance (normally the monitoring stops at the end of the construction phase) and how to ensure that this condition is legally binding for the end-user as well and not only for the investor/developer (*Bauherr*) who gets the permission.

Unless those additional conditions are used in a wider context (region, state, nationwide) it is likely that only municipalities with strong economic and negotiation power or those with strong commitment to environmental protection and sustainable development would use this possibility.

To which other instruments and laws (e.g. in other sectors or in higher levels than the local level) are they referring and what is their content

The new local **environmental plans** relate closely to the local traffic emission problems of fine particulate matter and noise: noise reduction plans (*Lärmminderungsplan*) and clean air plans (*Luftreinhalteplan*). The states are responsible to fulfil this European law and made those plans mandatory for big cities under certain circumstances. First plans are recently set up and in some cases integrate MM into the planned measures, but effects and effectiveness of those plans can not be estimated yet.

A more flexible way of setting up an agreement with a developer is a special form of **contract** with regards to town planning issues (urban planning contract, *Städtebaulicher Vertrag*). This instrument is based on the federal building code (*BauGB*) and does not restrict the content in detail. Many municipalities use this more flexible form instead of the above mentioned plans, especially in growing regions where bargaining power is quite big. This instrument can be used to foster the aims of urban planning and therefore offers the possibility to integrate MM.

In those countries that already include MM in the building permission process, how this works in relation to the process, instruments and laws identified above; and who is responsible for this integration, what are benefits of the integration of MM

Germany does not belong to 'these countries' ☹

How the practice is and what problems, barriers, etc. are encountered

Germany does not belong to 'these countries' ☹

Case study sites

Freiburg, Vauban

Freiburg is a city in the southwest of Germany (Baden-Württemberg). This city traditionally integrates non-motorised modes as well as public transport into urban planning especially in the historical city centre. Car traffic is bundled on main roads.

Vauban is the redevelopment of a conversion area (former French army site) in Freiburg close to the city centre. Parts of the mainly residential development with about 5,500 inhabitants and (aspired) 600 employees are developed as car-free or car-reduced sites. Further ecological aspects like energy and water saving, special building materials as well as roof greening have been integrated as well.

Several aspects have been set up by regulations in the detailed site development plan: One is setting up central garages (*Quartiersgarage*) in which inhabitants of the car-reduced parts of Vauban have to park their cars. The garages are situated at the edge of the settlement to make the roads within the area as car-free as possible. Another aspect was to build the smaller roads mainly as traffic reduced or even pedestrian zones (u-shaped streets for housing only areas). It is up to now not possible to set up dedicated parking spaces especially for Car Sharing vehicles in a detailed site development plan (therefore federal law has to be changed first to allow dedicating transport areas within public spaces / roads as special parking places for car-sharing).

For car-free households a further regulation is set up in an informal way by contracts with the inhabitants of Vauban's car-free sites: The inhabitants declare not to use or possess a car of their own. In return the number of requested parking spaces for the area is strongly reduced. According to Baden-Württemberg's planning law it is quite difficult or nearly impossible to set up a detailed site development plan completely without parking spaces. In Vauban the contracting issue is handled by an association, where all car-free households have to be member in. All members have to pay a special amount to enable the association to buy a parcel of land at the edge of the quarter. On this piece of land the obligation to build parking spaces is registered in case that too many people will own a car in the future and in case the garages are too small.

Site selection for planning simulation

Dortmund Phoenix-West: former steel-mill brown field redevelopment site.

3. References

Bundesanstalt für Bauwesen und Raumordnung (2005): Raumordnungsbericht

Research Institute for Regional and Urban Development GmbH (ILS); Institut für Stadtbauwesen und Stadtverkehr, RWTH Aachen; ivm Integriertes Verkehrsmanagement Region Frankfurt RheinMain (2007): Mobilitätsmanagement in der Stadtplanung. 1. Zwischenbericht. FOPS Projekt FE 70.794.

Research Institute for Regional and Urban Development GmbH (ILS) (2005): Untersuchung zentraler Rahmenbedingungen, Instrumente und Zielkriterien der Landesverkehrsplanung NRW – Modul 2: Steuerung von Raumentwicklung und Verkehrsnachfrage. Abschlussbericht.

Ministerium für Wirtschaft, Energie und Mittelstand des Landes Nordrhein-Westfalen (MWME): Regional Development Plan (LEP NW). Online available: http://www.wirtschaft.nrw.de/600/200/100/lep-engl.pdf (Oct 25, 2007).

Ministerium für Wirtschaft, Energie und Mittelstand des Landes Nordrhein-Westfalen (MWME): Landesentwicklungsprogramm (LEPro NW). Online available: http://www.wirtschaft.nrw.de/600/200/500/625_ScanLEPro_12-02-04.pdf (Nov 13, 2007)

Stadt Dortmund, Stadtplanungsamt (2004): Masterplan Mobilität Dortmund 2004. Dortmund

Stadt Dortmund, Stadtplanungsamt (ohne Jahr): Masterplan Einzelhandel. Schlussbericht. Dortmund

Homepage Bundesministerium für Verkehr, Bauen und Siedlungsenrwicklung (BMVBS) www.bmvbs.de

Homepage Ministerium für Bauen und Verkehr des Landes Nordrhein-Westfalen (MBV) www.mbv.nrw.de

Homepage Ministerium für Wirtschaft, Energie und Mittelstand des Landes Nordrhein-Westfalen (MWME) www.wirtschaft.nrw.de

Homepage Deutschland Portal www.deutschland.de (Nov 2, 2007)

Country report: Lithuania

1 Analysis framework: integrating transport and LUP

1.1 The legal framework underlying the planning system

1.1.1 The governance framework in which transport and land use planning take place

Main concepts

Lithuania is divided into 11 counties, each covering a few (5-8) municipalities. Every municipality is divided into several (10-15) local authorities. The right to initiate different LUP documents lies with different ministries, counties' and municipalities' administrations.

A county ("apskritis" in Lithuanian) covers approximately 1/10 of the whole republic, and around 8000 km^2 in area. A municipality ("savivaldybe" in Lithuanian) covers approximately 1/5 of a county, usually more than 1000 km^2, with some more than 2000 km^2. It must be mentioned here that in most cases a municipality administers the territory of one district, but the biggest Lithuanians towns (like Vilnius, Kaunas, Šiauliai) are administered by a separated municipality. Every municipality is usually divided into more than 10 local authorities ("seniunija" in Lithuanian), and one local authority's area varies from 70 to 200 km^2.

In Lithuania the concept of spatial planning exists, though we do not have plans called precisely "Spatial plan". The main documents for planning are the strategic documents on the one hand, or the territories' planning documents on the other.

As noted above, there are several originators of planning documents, including:

- Lithuanian Republic (LR), represented by different ministries and departments. In this level only national level documents can be prepared. These include national strategies, the comprehensive plan (CP) which covers whole republic, national special area plans (SP) (like national auto tourism plan). National strategies and LR CP has to be approved in government;

- Counties. In this level regional documents are prepared, like strategic plan for county, CP for county, some other plans (like plan for treatment of waste in Kaunas County). These plans must be checked in responsible ministries and other institutions, before approving them at the level of the county administration.

- Municipalities prepare documents at the level of the district; this might cover all or part of the municipality area. All kinds of documents can be prepared at this level; the municipality administration is the institution which officially takes the role of Organizer in the planning process. Documents can include: strategic plan for district development (or, rarely, a strategic plan for a specific issue, like for transport, economic and so) various feasibility studies for complementing strategic plan, CP might be prepared for whole district or cover just chosen town and it's suburbs), SP might be prepared for whole district (like forestry special plan, SP for layout of gas-stations) or some part of it (SP for big shopping centres and high storeyed buildings position in some town). Detailed plans, initiated by municipality mostly are been prepared for some new areas building-up for residential purposes or redeveloping old areas. Detailed plans initiated by developers are meant first of all for purpose of land using changing from into another (e.g. from forest to commercial) and secondly for detailing situation in site, where street or building must be.

- There also exists the office "Governmental planning and building supervision institution (GPBSI)", which works at the level of the country and county. In that case once the CP for a district is prepared, then it must be approved by this institution. The institution checks whether the prepared plan is in line with higher level and earlier prepared plans and strategies, if it was properly consulted upon, and if the plan was coordinated with all responsible institutions (these institutions are indicated in the legal rules for preparing concrete plan, and also the organizer of the plan can choose some other institutions to take part in the planning process). This is more of a box-ticking exercise than anything else, and the GPBSI is not a very powerful institution. However, it would in theory be possible for it to introduce a rule to ensure that all plans included policies and recommendations for practice concerning MM.

Planning instruments in existence

There is one planning legislation system for all Lithuania. Building and planning laws and changes to them are usually initiated by work groups in different ministries (like Environment Ministry, Economy Ministry) or by some working groups in government. All laws must be approved in Government. For approving specific norms or some rules (like the framework for environmental assessment report) specific documents have to be prepared and approved by the relevant ministry (Environment Ministry in this example). If there is no normative guidebook providing any standards, these can be approved in some territorial plan (CP or SP), for example urbanisation density in recreation areas.

Strategic planning documents are: strategy for some issue (like national education strategy, City transport strategy), strategy for some area (like Vilnius county strategy), various feasibility studies, which often doesn't have document status, these just complement documents prepared before.

Documents for territories planning are: Comprehensive plan (CP) (this one is mostly like to be a spatial plan, because it covers all areas (land use, social infrastructure, transport and engineering systems, landscape, heritage, recreation and so on); Special plans (SP) (these are meant for one or two of above mentioned areas, e.g. special plan for cycling routes, special plan for water-supply, special plan for streets networks in developed area and etc.) and Detailed plans (DP) (these are only for a specific site, with the aim to receive building permission later on).

The situation with regard to transport planning in Lithuania differs somewhat from the other (especially from old) member states. Whilst the relationship between all the land use plans mentioned earlier are clear (the district CP must follow the county CP, national special plan must follow all national and counties CP and strategies), strict rules for making transport plans do not exist at all. Basically there are no transport plans at any level – national, regional or local.

There are also some plans whose status isn't absolutely clear, these are so called regulative plans for regional parks, national reserves, which sometimes analyse the transport system as well. There is a problem that plans made for areas protected by government can't be changed by the CP or some other plan, even if the regulative plan is no longer current.

Legal and theoretical scopes, functions and contents of each instrument

As previously mentioned, planning documents in Lithuania have to follow a kind of subordination. This should be understood as follows, e.g. the most important are the planning law and regulative acts, then come national documents, and regional plans that serve as frameworks for planning in districts or local levels. The aim of each document is to detail the one made before, e.g. CP of LR is prepared following national strategies, counties plans detail national CP and various strategies too, plans in district level should analyze deeply all documents prepared and to detail or (and) complement its solutions.

This means that if some years ago some national strategy or plan was already prepared, all planners at lower levels have to follow it, which makes no sense sometimes. For example, if there exists such national program like “Maintenance of roads network in Lithuania” and you want to plan some new road in district or town level, in many cases you can’t, because construction of this road wasn’t indicated in the aforementioned national program. Even if you prove a need for this road or bicycle path (because you analyze it in more details), the only thing you can do is to recommend a new road after the program has expired.

But an even bigger problem is with the district or local level documents. Here there should be the same subordination to the more important document too, but suddenly in the municipalities’ planning system a new rule “appears” – a document prepared earlier is always better than one which you do at present. For example if some institution made SP for foresting district, and you are preparing CP for the same district, you can’t question it’s solution, even though comprehensive plan is more important document than SP and if SP says, that there should be forest in some area, you can’t plan road or urbanisation even if you know that it’s the best solution for it.

The second big problem is that planning isn’t quite backed up with financing of planned objects. When government is preparing annual budget and provide some money to municipalities, they don’t really care that municipality needs some extras e, e.g. it’s planned to electrify new area, to provide new school bus or something more, but financing it’s meant just for means planned in national plans. Of course situation bit differs if some private developers want to provide necessary infrastructure for their purposes, but if planned objects are meant for habitants needs, municipality has to provide this infrastructure and it’s not always easy to involve investment from developers. And even if private developer builds some roads, parking sites or some other infrastructure, the maintenance and care of it goes to municipalities, so they need some extra money again (and of course it wasn’t planned in any national or regional plan).

1.2 Sustainable transport in the LUP process

1.2.1 How far sustainable transport is an objective or an outcome of the LUP process. If so, how is this supposed to be achieved.

National policy do states that is very important to provide sustainable transport in area of whole country. It states that it is very important to use all possible means of transport including rail, air and water transport, which should increase needs for people and goods travelling by car. Government (Economy Ministry) organizes national special plans for bicycle routs, for water routes, auto tourism and so. Unfortunately these plans are meant more for promoting tourism, with less attention to daily needs of habitants.

Better situation is in district level plans, comprehensive plans for districts and towns, where one of the most important parts is – communications system. But here everything is in politicians and planners hands – nobody will argue plan, if it won’t provide new public transport routes, but plan will be “bad” if it won’t follow early prepared national documents. And as I said financing will be given first of all to those means which are copied from national documents. But if planer is well prepared to do this part, he usually does all necessary researches and designs not only copied roads, but show all the bet solution to improve existing situation with sense of transport sustainability.

Besides, there exist such documents as feasibility studies for transport system in concrete towns. Unfortunately they don’t have any status and even if in this study transport system is planned very well it might just lay down in municipality archive, because if e.g. initiator of such study will quit municipality, the study might just be forgotten….

Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in LUP? Are there any conflicts between policies at different levels of government?

Theoretically in all levels of government the same attention to transport policy exist. But practically the attention maybe is the same but there exists different ways of understanding transport policy. If national levels cares about sustainable development in general; regions (counties plan) pay attention to main links between regions; municipalities already are interested only in new roads, and detail plans initiators cares about the only thing – how with less money to build new entrance to area under developing. Shortly – as more detailed plan is prepared as less attention to general transport system and national policy is given.

Do any of the following exist – policies that seek:

- A poly-centric urban structure.
- Medium and high land-use densities with a mix of different uses.
- Concentrating trip generating development along PT corridors/at nodes. Nodes and corridors identified in plans, perhaps by the use of accessibility measurement.
- Re-use of brownfield sites.
- Transport impact assessment including changing sites if one is unsuitable on transport grounds.
- Maximum parking standards.

In Lithuania only two of above mentioned policies exist, which are stated in following documents:

- Transport impact assessment is estimated in "Strategic assessment of effects on environment". This document has to be prepared in all levels of territories planning documents (CP, SP and DP) in stage of conception of plan and so main transport solutions has to be discussed in the way how they are going affect environment, landscape, heritage and social quality of life in planned area. In addition, there is consideration of the possible transport impacts of a new development on the surrounding road network, but sometimes this consists only of the developer trying to show how little impact the development will have!

- There is also some standards (like parking standards, street width according to traffic density, accessibility of public transport) stated in one of the most important documents in Lithuania, called "Constructional Technical Regulation. Cities and Towns Communication Systems".

All other listed policies in planning system appears only with competence of planning organizer (e.g. municipality administration) and planner itself. Even though everybody understand the utility of poly-centric urban structure, developer's pressure and politics' decisions in most cases allows to plan urban sprawl.

Re-use of brownfield sites, recommendations to land use densities and mix of different uses lay down in district and town comprehensive (general) plans and later on are concretised in detailed plans. But it happens because of initiative of planners, developers and politicians, but not because of officially stated position in governmental level. Developers and planners realise that this land is valuable, so they develop it.

Any work that has been carried out on the effect on the market of integrating LUP and sustainable transport – for example, developers' perceptions of "accessible" locations for developments

Developers participate in planning process as society, sometimes they write proposals for plans solutions, and sometimes they try to affect politicians and planners. Their aim of course is to see that in plan is drawn land use which is suitable for their commercial purposes. If it happens they usually don't really care how their land is

linked with existing transport system. They are ready to develop necessary infrastructure if they will be allowed to build instead of looking for another place better fitted in general urban structure.

There some developers associations, whom participates in planning process constantly as adviser, there are also some institutions defending developers aims and needs, but except some articles about failed or successful projects, no more works has been done to effect their participation. The main position in Lithuania is – developers have to deal with politicians for every case, but not to affect preparing laws or something else.

Organisational/institutional integration to encourage LUP and transport integration

It's not easy to explain transport and LUP integration as there doesn't exist separated transport and land use planning in Lithuania. As it was described above, national strategy state main policy for transport system, republic CP indicates main corridors; Counties CP indicates main regional links, which are detailed in district level: CP, SP for transport or detailed plans for concrete area or road (street).

The organizers of planning transport are: Transport ministry (Road or Railway directions) and administrations of different governmental authorities. In bigger towns (like Vilnius, Kaunas) there exist also institutions which make strategies for public transport, but I think these strategies appears chaotically when suddenly some problems appears and solutions take part in some rout, some ticket's pricing but not generally in whole public transport policy. And very important thing is that in e.g. municipalities there are no separated transport planning departments so coordination and integration about all above mentioned documents and organizers is the only – institution which prepare CP for district (with transport part too) has to match it with earlier prepared plans. And the same specialists who are responsible for land use planning are responsible for transport system solutions too. So much about integration in Lithuania….

Barriers to integration

The main barrier – is the lack of clear responsibilities and rights in the planning system. Looks like after national strategy and road maintenance program, there are no needs to plan anything else while these plans won't expired. There should be created simple and concrete scheme of planners duties regard to transport planning, of obligatory for transport plans, how it should be matched with existing LU plans and so.

Where integration of policies exists – any evidence of its success on the ground?

To be honest, planning system in Lithuania at the moment is in something of a renaissance. After planned economy system collapsed in 90's there were lot of mistakes done in land reform and there were no other planning documents, just detailed plans with no regard to main urban structure of towns or perspectives of district. Even if cities and towns had general plans, no monitoring was done to emphasize if and how it works, what benefits were achieved, what solutions were realized. To answer this question would be possible after few years and only if stronger position about importance of transport policy will be taken and more freedom to local plans and strategies will be allowed.

An exception to this explanation might be Vilnius City, its municipality and planning enterprise (which belongs to Vilnius City Municipality) – "Vilniaus planas". All this time, planning was organized here well, Vilnius always had renewed strategic and comprehensive plans and even strategy for transport development. Though planning system worked well, solutions of plans were not the best sometimes and I can't provide clear evidences about improved situation in Vilnius City Transport system. Well at least modal split of transport used for daily trips is still sustainable (1/3 cars, 1/3 public transport, 1/3 foots and cycling ☺), but everyday we face traffic, parking problems, which unfortunately are tried to be solved with planning and building more new infrastructure but not applying some means of mobility management.

1.3 Analysis framework: integrating MM and LUP in the building permission process

In tandem with an analysis of framework conditions (the integration of sustainable transport and LU planning), there is of course a need to assess how far MM has been integrated into the LUP process in the WP D partners' member states, plus Ireland and the Netherlands. This section sets out the framework for gathering comparable data on this subject, as shown in Table 1.2. In the table, the term "planning decision" refers to the decision on whether or not to grant building permission for a particular development. In Lithuania the building permission process is divided into two parts: permission to develop the land, and then later, permission to develop a building.

1.3.1 Detailed steps in the building permission process (intention > planning > construction > get in usage);

In Lithuania most developments are started by the private sector who applies to the local authority for permission to build a development. The decision is taken dependent on how the development fits in with the strategic and comprehensive plan and policies and land-use zones of current district.

For getting building permission the following processes have to be completed:

- Developer comes up with the initiative and applies to possible planning organizer (municipality administration) to receive permit to prepare detail plan for concrete area; Developer has to indicate main purposes of new development, resources he might need (electricity, water and etc.), what density and height for building area he wants.

- Municipality makes decision if to allow such plan to be implemented and if yes gives permit for:

- Detail plan – if developers interest is in between already developed area, which has already close access to main street (roads), engineering systems and if in existing CP this area is marked as recommended for new urbanisation;

- Special and detail plan – if developers interest lies in undeveloped area used to be e.g. agriculture land. In that case developer by its own resources has to prepare special plan for big undeveloped area, indicating main transport and engineering systems corridors, zones for social infrastructure and buildings like substation for electricity or drain equipment. This plan might be done in consolidation with other owners (neighbours) if they agree, if not, plan has be done by one who has interest to develop this land first. Such requirement for special plan is intended with aim to structure new developed areas in very early beginning of that process. As soon as this plan is prepared (even in same preparing process) developer can start do his own site detail plan matching his planned infrastructure with main corridors, indicated in special plan;

3. Developer or municipality itself (often the municipality, although it is the notional developer, gives rights to develop to a private developer (although the municipality will always be developer of municipal land)) - has to get planning conditions from necessary institution (like road direction, engineering infrastructure systems, hygiene centre, environment and heritage protection institutions and so);

4. Developer has to find planner who would prepare detail plan, plan has to be discussed with society (neighbours), coordinated with institutions who gave planning indications;

5. After plan is proved as document and registered in Territory planning documents registry, developer may apply for permission to prepare the technical project for the actual building(s) to be built on that land;

6. He has to indicate again his vision about purpose of specific building(s) and to receive planning technical conditions (given by likely the same institutions as for detail plan), to prepare technical project. Technical

project differs from detailed plan in this way – detail plan shows functional zoning of site, main corridors, parking lots, place for green area, existing security zones for e.g. river, heritage object, present pipes and technical project analyse only constructions of the intended building, parameters, materials and etc.

7. First of all the developer shows their project to Municipal Architect (Head of Planning) in municipality and checks that it conforms to local (Comprehensive) plan and if it doesn't then he can reject it. After technical project is prepared and approved in Settled Building Commission (SBC - as exists in every municipality) developer together with protocol of project approval receives permission from the SBC. But the SBC is made up of representatives of the organisations that are listed in the planning law as those who have to make decisions on building permission, as well as "Mayors" of sub-municipalities. If the building conforms with (or is said to conform with) the documents (see next sub-heading, below) that are the responsibility of the organisations represented on the SBC, then it will normally receive permission.

8. According to technical project, works plan has to be prepared before starting constructions.

9. After building is built according to prepared technical project and works plan (somebody, usually the same person, who prepared project, supervises if constructing goes following project), developer also has to prepare cadastral measurement and some energy certifications for receiving permission for usage of built object.

1.3.2 Which planning instruments are included in the building permission process and how are they specified in terms of content;

The main instruments (documents) are: 1-7 are equally important and all prepared by Environment Ministry – the development has to conform with these to get through SBC.

1. Territorial planning law;

2. Land law;

3. Rules for preparing detailed plans;

4. "Constructional Technical Regulation. Main Obligatory Requirements for Building ", "Constructional Technical Regulation. Cities and Towns Communication Systems", "Constructional Technical Regulation. Roads";

5. "Hygiene norms";

6. "Strategic assessment of subsequence's to environment";

7. "Society participation in territorial planning process and in assessing possible subsequence to environment process";

8. Earlier prepared national, regional and district (local) level plans and strategies (the responsibility of the "Governmental planning and building supervision institution") – some of these could be forgotten because there are so many!;

9. Planning conditions e.g. keep new buildings 20m away from water – although if these conditions (set by e.g. Environment Regulatory Body) are different from law, developer may argue against them.

In theory, any of these documents could make a reference to MM and/or require MM to be implemented in a new building. However, to date, none of the bodies that write these documents have even considered this possibility.

1.3.3 How are the planning instruments applied in practice

Each of above mentioned documents describes some processes of planning and there are many more other laws, rules and norms for special parts of detail plan or technical project. Of course planning organization (municipality) may try to incorporate some other terms for plan or project, like path for cycling, a route for public transport, reconstructing a crossroads or something else, but it is always negotiation process and there is no legal basis for how to "make" the developer implement these things for a building in his area if it's not obligatory according to existing documents. But usually if municipality has at least one reason not to give permission to prepare detailed plan, developer agrees with "extra conditions" as it fears that if it does not, it will not get permission at all. Developers are trying to force the government to pass a new law about such "infrastructure extra conditions" because there are cases when developer has to reconstruct kinder garden 10 km away from development site, as a "condition" of planning permission for a building there.

1.3.4 To whom are the planning instruments addressed

In the Lithuania planning instruments are aimed only at people writing plans and those making planning decisions. Developers and or (society) are not really motivated to follow national framework. There are also some nongovernmental organizations who try to follow existing law or to influence changes in it (like "Green movement" involved into law of non-motorized transport and rules for transport systems special plans).

1.3.5 What flexibility do these instruments offer in order that MM can be included, and what is their ability to support, hinder or allow MM and supporting measures; Where can MM be included in the building permission process? If it cannot, why not?

Unfortunately in Lithuania there is no obligation to make some additional Transport or Mobility Management plans before getting permission to build. The detailed plan and technical projects just solve the integration of new streets or roads into the existing transport system. I guess the only instrument to prepare basis for mobility management and sustainable transport is Special Plan for transport system in current territory. Within the Comprehensive Plan it would *in theory* be possible to identify very congested areas and to stipulate that before any development goes ahead in this area, then special transport plan should be prepared.

And if there any MM policies will be regarded, municipality can force with giving conditions and permission for detail plan developers to follow it – provide bus line, reconstruct existing parking or something else. But responsibility for maintaining it would belong to municipality; developer just would provide necessary infrastructure. So this would be theoretical way to support MM measures according Lithuanian planning system, though I can't provide many real examples in practise. But such practice already (at least in Vilnius) take place, for example when giving allowance to one developer to build big shopping centre in Vilnius suburb, developer was forced to provide new public bus route to this shopping centre. But details of this contract are not published, free bus is running every hour, but what and for how long responsibilities are divided between municipality enterprise for public transport and developer isn't really clear.

To which other instruments and laws (e.g. in other sectors or in higher levels than the local level) are they referring and what is their content;

Well, if existing rules, plans and requirements appear not to be sufficient for the development of a particular area, institutions which prepares planning conditions and terms can add some extra conditions, e.g. build more

parking as it is usually necessary. Sometimes this occurs, and mostly these conditions are made by the municipal administration and something that translates as the "Society Health Care Centre", a government institution that has a role in ensuring that environmental and other standards are met. However, the developer may not agree with these conditions if they are not described in the building norms. A condition that required the developer to provide MM measures, but which the developer thought to be unfair, could lead to legal proceedings. However, this has not yet been tested in court.

1.3.6 In those countries that already include MM in the building permission process, how this works in relation to the process, instruments and laws identified above; and who is responsible for this integration, what are benefits of the integration of MM

Lithuania is the country who hadn't start the process of MM inclusion into planning process. All above mentioned examples referring to it were more examples of so called "infrastructure fee" for developers. It means sometime if municipality won't find other infrastructure to be built by developer for social uses; it might ask to build some infrastructure for transport or to provide some extra measures for traffic organizing. Negotiated condition – is used to pay not only for roads but also for new cycle paths, public transport routes etc, not only in the developing area but also on routes to that area. So MM could be introduced into the building permission process in this way, although it rarely is in practice.

The main problem in the situation described above is lack of obligation and laws, and it is also sometimes caused by poor competence of decision makers responsible for planning laws and related issues.

6.4 Appendix 4

Country report: Netherlands

Table of Contents

1. Common analysis framework: Netherlands

1.1 Analysis framework: integrating transport and LUP

The purpose of this first analysis framework is to identify the state of preconditions for the integration of MM into LUP in European countries represented by the WP D partners and, in addition, in Ireland and the Netherlands.

1.1.1 The legal framework underlying the planning system

The governance framework in which transport and land use planning take place

There are three levels of elected government in the Netherlands with planning responsibilities: the national, the provincial and the local (*gemeente*) level. In addition, there is an appointed regional level of government, between the local and the provincial, that has an advisory regional planning function. At the national and provincial level at least, transport planning and land use planning are the responsibility of different ministries or different departments within the administration. There is a perception amongst Dutch transport professionals that this separation reduces the thought that is given to transport in land use policy and practice (although note, below, that provinces are beginning to make joint land use and transport plans).

Planning instruments that exist

National government makes planning law and policy. The provinces produce structure plans within this national framework. Within the national and provincial frameworks, local government makes local plans. This is governed by the Spatial Planning Law (*Wet Ruimtelijke Ordening*)

As well as national planning law, the law on the use and development of land (*Wet Grondexploitaite*) is also extremely important. This governs the tax on land value uplift that developers must pay back to the public sector in exchange for the right to develop land and also gives municipalities the right to purchase land before it is (re-) developed.

National planning law includes a very important "opt-out" clause (Article 19) which allows local authorities to approve developments that do not conform with local, provincial and/or national plans, and then to subsequently alter the local plan to take into account the development that they have just permitted. Over the past decade or so, a high percentage of development in the Netherlands has been permitted in this way although Ministry of Transport contacts suggest that in 2008 the use of Article 19 will become strictly limited.

There is the ability to make covenants between developers and local authorities where each undertakes to deliver certain things related to a development (e.g. new off-site cycling infrastructure). However, these are unenforceable unless incorporated into an actual contract, for which there is little precedent. In addition, the concept of "park management" is growing in popularity, applied to large office parks in particular. Here, as a condition of their tenancy, new tenants on the park pay into a common fund that then pays for common services including, increasingly, transport.

National or regional maximum parking standards do not exist, and only the big cities tend to have very restraint-based parking standards (e.g. Den Haag, Rotterdam). However, in some locations the cost of land keeps down the number of parking spaces provided in new development.

Environmental law. This is a law that requires newly located, and existing organisations to obtain an environmental permit from the local authority before they can operate. Thus the strictness with which the law is applied, and the environmental performance of the company managed, depends in part on the politics of the local authority (at *gemeente* level). City of Amsterdam uses this law to secure mobility management measures from organisations and companies.

Law on building permission. Any developer of land must adhere to this law and obtain quite a large number of permits to demolish any existing building, cut down any trees, and to construct a new building. Permits required include a building permit, demolition permit, monument permit (where the development affects a monument), an architectural permit, a water permit, an environmental permit, a permit to change or sell affordable housing (where applicable), a permit to use a new building, a permit to cut down any trees, and a permit to allow any car to travel across the footway from any garage to the road. However, an assessment of transport impacts of the development is **not** required. Certain small developments (e.g. house extensions) do not require building permission, or only "light" permission.

Structure plans – including location policy - at provincial level. The provinces issue structure plans (streekplannen) that indicate, broadly, where different types of development should be located. The structure plan should take into account national guidance (e.g. the Nota Ruimte). Increasingly, according to the Dutch Ministry of Planning and Environment, provinces are choosing to produce integrated plans covering environment, water resources and flood protection, planning and traffic and transport. Examples include Limburg, Flevoland and Drenthe.

Local plans (bestemmingsplannen) set out in detail where different types of development should be located, and include elements such as parking standards. The local plan is the key factor in making a planning decision. In theory the local plan should reflect the provincial structure plan and the national policy on land use.

1.1.2 Legal and theoretical scopes, functions and contents of each instrument

No information available

1.1.3 Sustainable transport in the LUP process

How far sustainable transport is an objective or an outcome of the LUP process. If so, how is this supposed to be achieved.

It appears from the latest government spatial planning framework (see below) that sustainable transport is **not** as high a priority objective for the spatial planning process. Instead, the emphasis is on connectivity and accessibility, by all modes.

Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in LUP? Are there any conflicts between policies at different levels of government?

The key government policy on land-use planning, the *Nota Ruimte*, is issued every five years. The one that covered the last decade of the 1990s was quite strong on the integration of land-use and transport in order to reduce car use. However, the subsequent two documents – the last adopted on 17th Jan 2006 – place much less stress on this policy objective. Instead, the location of companies and facilities is supposed to make an optimal

contribution to the vitality of urban networks, partly by improving accessibility – there is no longer any reference to limiting car use. This perhaps reflects changes in economic conditions in the Netherlands, from a boom during the 1990s to something of a downturn around 2000. On the other hand, as the economy has grown again over the past few years, and traffic congestion with it, so the pendulum may swing back in the other direction in time. Certainly, discussions between the author and some staff in the Ministry of Transport suggest that it will do so.

Certain regions/cities find that their own congestion problems and political priorities require stricter control of the transport impacts of new development than is implied by national and provincial documents. For example, the Province of Noord-Holland, perhaps in response to changes in national policy, but also in response to discussions with local municipalities, changed its structure plan to reduce its emphasis on managing the mobility impacts of new development and locating new development to reduce car use. However, the City of Amsterdam found the new policy too relaxed and issued its own rather stricter guidance. However, this is effective only within the City of Amsterdam's area, so surrounding areas are able to pursue policies that conflict with those of the City of Amsterdam, if they wish.

1.1.4 Do any of the following exist – policies that seek:

- **A poly-centric urban structure**.
- **Medium and high land-use densities with a mix of different uses.**
- **Concentrating trip generating development along PT corridors/at nodes. Nodes and corridors identified in strategic and local plans, perhaps by the use of accessibility measurement.**
- **Re-use of brownfield sites.**
- **Transport impact assessment including changing sites if one is unsuitable on transport grounds.**
- **Maximum parking standards.**

Most of these policies exist to some extent, the major omissions being maximum parking standards (in most areas), and a standard form of transport impact assessment.

The Nota Ruimte supports a poly-centric urban structure at the country level, but does not talk much about structures within urban areas. Nor does it talk much about density or the concentration of trip generating uses at nodes and along corridors. It makes no reference to the use of the planning system to reduce the need to travel. There are policies in the Nota Ruimte that support the re-use of brownfield land, and the concentration of activities in key locations, but these policies are not justified with any reference to (sustainable) transport.

At the Provincial level, location policy may be more specific, indicating those locations where high trip generating land-uses should be directed, in part at least to reduce car use, and also to maximise accessibility of these locations. However, to take the example of the Province of North Holland's employment location policy within its structure plan (*Een Goede Plek voor Iedere Bedrijf, 2005)*, a wide variety of locations is in fact permitted for (for example) offices, although the largest offices are directed to the most public transport accessible locations.

Where transport and traffic congestion are major issues, the local plan may be used to concentrate and densify development in a way that is intended to reduce its transport impacts. This is clearly shown in the Amsterdam local plan, that seeks to concentrate most trip generating uses around major public transport nodes and along the Amsterdam south axis.

Any work that has been carried out on the effect of integrating LUP and sustainable transport on the market – for example, developers' perceptions of "accessible" locations for developments

No such work is available. Some anecdotal evidence from OPTIMUM2 project suggests that at very desirable locations such as Amsterdam Zuidas, businesses will locate regardless of any MM measures imposed on them, because they really want that location. At others such as Goudse Poort in Gouda, accessibility – by all modes – is a key selling point of the development. At other locations, such as Ede in the more eastern (and much less congested) part of the Netherlands, mobility management is not really an issue.

Organisational/institutional integration to encourage LUP and transport integration

There has not really been any such integration. This is a major complaint of transport professionals in the Netherlands: that transport and land-use planning are very institutionally fragmented, especially at the national level.

Barriers to integration

See above

Where integration of policies exists – any evidence of its success on the ground?

Not really.

2 Analysis framework: integrating MM and LUP

2.1 Introduction

In tandem with an analysis of framework conditions (the integration of sustainable transport and LU planning), there is of course a need to assess how far MM has been integrated into the process of granting permission for a given building or development in the WP D partners' member states, plus Ireland and the Netherlands. This section sets out the framework for gathering comparable data on this subject. The term "building permission process" refers to the decision on whether or not to grant planning permission for a particular development.

2.2 The detailed steps in the building permission process (intention > planning > construction > get in usage)

The developer announces their intention to build or redevelop a building, and applies for planning and other required permits from the *gemeente*. The authority has a limited period in which to process this request (6-12 weeks depending on the nature of the development and the context of the application). The application is assessed against the policies and land use zoning shown in the local plan, plus architectural, construction safety and townscape criteria. Thus the building permission decision need not take into account any regional, provincial or national policy or plan. If the development is clearly in conflict with the provincial structure plan, the province does have the right to "call-in" the decision, but this is very rarely done in practice, perhaps for political reasons.

2.2.1 Which planning instruments are included in the building permission process and how are they specified in terms of content

Mainly the local plan, the permits that are required, and possibly location policy, if it exists.

How are the planning instruments applied in practice

There appears to be considerable evidence that they are applied quite flexibly, so that development is not turned away on local policy grounds, but rather the local policy is changed to accommodate the development. This is permissible because there are few effective links between national and provincial policy and local decisions on building permission.

To whom are the planning instruments addressed

The instruments are primarily addressed to the local authority (gemeente) and the developer.

2.2.2 What flexibility do these instruments offer in order that MM can be included, and what is their ability to support, hinder or allow MM and supporting measures

These instruments seem to offer little flexibility to stimulate mobility management in a formal way. Mobility management is being introduced in new developments during, or alongside, the planning process, as shown by cases such as Amsterdam Zuidas, Goudse Poort and Gelre Hospitals in the OPTIMUM2 project www.optimum2.org. However, whilst the opportunity of (re-)development is being used by interested parties – normally employed by the transport department of the province – to get into the development and deliver mobility management, there are no formal parts of the planning process that appear to be being used to require or

stimulate such activity in the way that policy and legal instruments such as conditions and planning obligations are used in the UK. So, for example, in the City of Amsterdam's employment location policy (*Locatiebeleid Amsterdam, 2007* available at http://www.dro.amsterdam.nl/smartsite.dws?id=9002&thema=19 - part of its local plan), there is a whole chapter on mobility management, this is all couched in terms of MM activities that companies *could* implement, and ways in which the municipality will help them to do so – not at all in terms of MM measures that they must implement, if they are to get planning permission.

According to the Dutch traffic and transport "Knowledge Platform" www.kpvv.nl, the City of Zoetermeer at one point "in the past" used a policy in its Local Plan to bring about mobility management in the development of the office location Rokkeveen, partly by means of covenants with developers and occupiers. No explanation is given as to precisely how this was done or why the practice was discontinued, although there is an implication that restrictive parking standards helped to stimulate interest in MM.

To which other instruments and laws (e.g. in other sectors or in higher levels than the local level) are they referring and what is their content.

These instruments refer to laws specified earlier.

2.2.3 In those countries that already include MM in the building permission process, how this works in relation to the process, instruments and laws identified above; and who is responsible for this integration, what are benefits of the integration of MM

Any attempt at integration of MM into the LUP process appears to be voluntary and negotiated. It sometimes takes place alongside the LUP process but is not really yet a formal part of it, in the way that it has become through the transport assessment of new developments in Britain, for example.

How the practice is and what problems, barriers, etc. are encountered.

The biggest problem remains, therefore, that there are often few obvious reasons for developers or site occupiers to participate in MM, even at the planning stages of the development, since there is no threat of failing to obtain building permission if no MM measures are implemented. The (perceived) competition for economic development between municipalities also makes many reluctant to impose the "burden" of MM requirements on developers.

6.5 Appendix 5

Country report: Poland

Table of Contents

1. Analysis framework: integrating transport and LUP

1.1The legal framework underlying the planning system

1.1.1The governance framework in which transport and land use planning take place

Number of levels of government involved in LUP and transport

The following levels of government are involved:

- on the country level – Ministry of Regional Development with National Council Spatial Development, Main Urban Commission – Architecture and Ministry of Transport
- on the province level – Marshal's Office, Governor's Office with Governor's Urban Office, Governor's Urban Commission
- on the local level – on the district level - borough leader/mayor/the mayor of the city (president) with department of urban planning (also department of development, urban planning, environmental protection, architecture, etc.), Urban Planning Commission
- private planning studios

In all levels of governances structures there are 3 administrative units at least, which are responsible for spatial planning process. They prepare land use plans; compile analysis, forecasts and results of changing process in spatial development. They prepare also local plans, applications, information and opinions concerning spatial developments projects. Government's units prepare those documents for specific areas:

- on the country level – "The Concept of National Spatial Arrangement Policy", work on "The Concept of National Spatial Arrangement 2008-2033";
- on the province level (voivodeship level) – local development plan for province, development strategy, long-standings plans, priority in international cooperation between provinces;
- on the local level – for cities and districts (municipalities) – "Land-use planning" "Local land development plans" as a legal local article, decision about condition for land development.

The government levels with governments structures:

- Ministry of Regional Development – responsible for all the development issues, prepares planning documents for country – and in theory this Ministry could also issue guidance on how to produce development plans (including guidance on incorporating MM) – although it does not at present do so;
- National Council Spatial Development – advisory authority for Ministry of Regional Development; compound with experts from all the governments levels for land development process;
- Main Urban Commission – advisory and opinion authority;
- Marshal's Office - with Voivodeship Urban Planning Studios prepares land development plans;

- Voivodeship Urban Commission – opinion authority;
- Borough leader/mayor/the mayor of the city (president) – prepares the planning documents for district/city – this is the main decision-making body and they have a very broad area of independence of action, largely unfettered by the other levels and agencies;
- Urban Commission – advisory and opinion authority;
- Private Planning Studios – prepares the local/regional development plans under freelance agreement from government agencies;
- Spatial Planning Licencing Authority – finally signs off the Plan.

Local plans are the basis of land use planning. Those documents, also with strategy investments on province/country areas, are preparing based on "Voivodeship land development plans" and "The Concept of National Spatial Arrangement Policy". The coordination of the most important transport investments should be very strong in all planning documents. There is a kind of hierarchy here and in theory you could have guidance on sustainable transport planning in the national and regional plan, but even if you did, it would be quite possible for the Mayor to ignore this. (Although the Council has to approve this.)

The differences of opinions, during the planning process, are explained in process of preparing planning documents. First, the mayor/president takes a decision about preparing planning documents and then, he announces that in a local newspaper or makes an official announcement about it. Then, he receives all the proposals, applications, and comments taking into consideration public/private organisations. Next, the planning documents are preparing by the planners and after the end of work, all this document is making available to opinion by the experts, appropriate units and by interested private people/organizations/institutions. Therefore, all the differences of opinions are explained on this step. To whom the Mayor listens, and the criteria that he takes into account when making these decisions, all depends on the quality and opinions of his advisors, which may be dominated by private companies and property development interests, in certain areas. Mayors also tend to like new development because it brings votes. Very few of them are aware of the idea that land use could be used to manage the way to travel and mobility in general but again, in theory, it would be possible for them to build this concept into the plan if they wanted.

1.1.2Planning instruments that exist

Legal instruments are as follows:

- the acts of Parliament – Land development Act, Law Contraction
- the government orders, law resolutions,
- development strategies
- studies – land use plans,
- programmes – Local Development Programmes, Local Revitalization Programmes,
- plans – Local Plans, Long-lasting Investment Plans,

Financial documents:

- operational programme – Integrating Operational Programme of Regional Development (ZPORR)

- sectors programme – Operational Sectors of Transport Programme (SPOT)
- financial means from International Financial Institutions,
- governance's financial means, self-governance's/own financial means

Social instruments:

- tenders, urban competitions
- agreements, negotiations,
- education

Planning instruments:

- studies, planning documents,
- investments
- marketing, city promotion

All the instruments, which are included in realization of policy planning process, form a very accurate system made up of local planning, administrative decisions, legal instruments, management instruments (land use planning, development strategy, local development plans, local revitalization programme, long-lasting development programme, budget, sectors programme, land management, joining/reclassify land, tenders and architecture-urban competitions, operational urban planning, agreements, negotiations, marketing, city promotion). Some of these are defined below.

- **Land Development Act** – determines the rules of shape policy development by the self-governance units and administrative authorities, scope and proceeding possibilities in land purpose for defining aims and also for determine rules of development, taking into consideration all spatial orders and sustainable development as a basic rule.
- **Law Contraction** – standardizes rules concerning design, construction, maintenance of the building and demolition; determine also operate rules of administrative/governance units in this issue.
- **Governance orders** – normative act, issues by the governance authority on based on particular authorization contained in law act for executed its regulations.
- **Law resolution** – will act of governance authority – it could be taking adobe a stance in define issue. Normative law resolutions are passing for Parliament, district/city town council.
- **Development Strategy** – take into consideration main aims and development determinants of particular territorial area in horizontal time (10 – 15 years), including all changes in internal/external social/economy conditions, with active participation of public/private institutions.
- **Land use planning** - is the term used for a branch of public policy, which encompasses various disciplines, which seek to order and regulate the use of land in an efficient and ethical way. Document defines the issues of land development (building's area), corridor for main transport routes, protected areas, etc. This document

is passing by the district/city town council, but it isn't a legal document. It's only a base for a legal document - The Local Plan.

- **Local Development Plan** – the basic instrument with land development planning used in the local level. It defines social-economy strategy in very detailed way; indicate the aims and assumptions for land development, economy/social marked, and also possibilities of receive the financial means from EU, country or self-government (also own means). It also sets out very specific problems, measures, realization terms, and financial possibilities. It is the most important consideration in the building permission decision.

- **Local Revitalization Plan** - planning document; diagnoses situation in the city and determine quarters where the revitalization is necessary; this document must be connecting with others planning/financial documents taking into account all its set actions.

- **Local Plan** – law resolution, is an act of local law legally on the local area. It defines two issues: purpose of the fixed property on the difference aims, the way of fixed property development, and way of development in particular. It decides about execution of law private property. Passing of this document is not necessary/ required for the authority, but it is necessary in land policy in governments units. So these are relatively rare.

- **Long-lasting Investments Plan** – it contain a list of all planning investments in the future with a material and financial schedule on the particular years (for 4 – 6 years). Hierarchy objectives are connecting with development strategy; document is a base of preparing budget in investment part in particular year. It's a guarantee to ensure financial means for investments in the future. Includes new infrastructure but also new major buildings, but generally very general level.

- **Transport Policy** – document which defines main transport problems, diagnoses transport/roads preconditions, proposes solutions between harmful causes of transport and citizens health.

Legal and theoretical scopes, functions and contents of each instrument;

Land Development Act – it's a legal document, passing by the Government (Parliament); on its base, the policy planning land development is forming – this document is a base for preparing local planning documents on local area and land use planning for territorial units; it determines rules for forming land development policy including local conditions concerning development in district (e.g.), shows steps in preparing planning documents (land use planning and local planning) – scopes, functions and contents, financial rules on the country, province and local level. It defines also localization of public investments and building condition with reference to different investments.

Law Construction - it is a set of law standards, which regulates design, construction, charge of the construction work, maintenance of the building and demolition, rules of the work of administrative organ of environmental, transport and law. This document also determine steps in the building permission process/demolition, in getting into use an investment, in running company constructing/designing (with receiving building/designing qualifications) and civil liability. Document determines steps before beginning building works.

Development strategy – long-lasting programme, containing initial social-economy-environmental situation, determine weak and strong sides, chances and risks (SWOT analysis), shows visions, priorities, aims, development directions.

Land use planning – as a base of local development plan; document forms rules of development land in city town and villages and also integrates all the document concerning economical/social development; document with the maps, tables, drawings helps with international and national promotion. It contains much information about environmental, development, social and economical issues.

Local Development Plan – determine main aims and concrete measures, terms, realizations and financial ways. It help with investments chances with concentrate all planning aims for rapid realization, which decrease the costs.

Local Revitalization Plan – the most important of Revitalization Programme, is a diagnosis of chances and risks in urban land development issues; document identifies those areas, where revitalization process is necessary to carry out. Choosing area, it must be taking into consideration the level of unemployment, poverty, hard hosting conditions, crime, education, state of infrastructure, environmental pollution, etc.

Local Plan - is an act of local law legally on the local area, taking into consideration arrangement of land use planning under invalid strict. Document determines land destiny and demarcating between areas with different uses, areas for public sphere and residential areas, objects which are under protection, local conditions, rules and standards in building development forms, building dimensions, maximum/minimum indicators the intensity buildings, particular development uses.

Long-lasting Development Plan (WPI) - it contain a list of all planning investments in the future with a material and financial schedule on the particular years; defines a list of organized investments measures with material and financial scope in division on the years. Plan is updating in every year.

Transport Policy – transport problems collection, which diagnoses trends and problems in transport issue, defines policy transport aims, shows regulations in policy scope, frames of development trends in all transport systems – roads, rail, air, water, etc; document raises also environmental issues in transport system; defines also implementation instruments and monitoring rules.

Law act – as a legal document concerning all the governments' level which is responsible for planning development (on the country, province, local level). The scope of the act is always taking into consideration in preparing planning documents. Those acts are required in planning process.

Law Construction – legal document legally all the levels in the authority units during giving a building permission on the all levels.

Development Strategy – optional document on local level, but required on voivodeship and country level; as a resolution of ministry/district/city town council, strategy document are the base of planning development, with clear aims and priorities development policy for future. It also defines conditions for fulfilling all priorities. Strategy is base for Long-lasting Development Plan. Document is consistent with Land Use Planning.

Land Use Planning – it isn't a legal document, but is an obligation local authority for the actions according to set priorities. It's a set of conditions, which are inviolable – conditions concern development trends as a base for process planning. Document is important in preparing local land development plan.

Local Development Plan – is required with development management and with the process of obtaining the financial means from EU for investments.

Local Revitalization Plan – is required with the process of getting the financial means from EU for development revitalization. This document must including all aims and priorities of city development strategy, land use planning and long-lasting development plan. This document isn't very popular in the planning documents (perhaps because many cites haven't still a local development plan which is required for preparing LRP).

Local plan – is pass by the district/city town council; it regulates process of building permission. This document is optional – it's decision of district/city town council. But it's required in agrarian policy.

Long-lasting Development Plan – it helps much economically, rationally and effectively make plans and realizing investments in district/city. It's required in process of getting financial means from EU.

Transport Policy – this document is needed for define main transport problems in country, regions and cities and for propose solutions; it's also essential in applying for fund investments from EU.

1.2 Sustainable transport in the land use planning process

1.2.1 How far sustainable transport is an objective or an outcome of the LUP process. If so, how is this supposed to be achieved?

In planning documents, the LUP process has impact on sustainable transport through:

- planning of new route corridors – it could help in public transport service;
- increase standards in PT service – priority for PT (bus lanes)
- planning bicycle lanes
- pedestrian areas in the city centres
- movement reassures areas in the downtown (with high PT service, bicycle lanes and parking closely the downtown
- in the metropolitan documents there are postulates about spatial and function integrating public transport system (change nodes) with individual transport system (car park like Park&Ride)

In planning document, there is no regulation concerning needs for integrating planning development with transport system. In Poland, sustainable transport is outcome of the LUP process, but no its objective. If the sustainable transport exists, it's only because there were needs to improvement transport connection, but not as a result of prediction that in planning process. Regulation in planning process of new transport corridors allows developing of PT service. However, there is no planning procedure, how planning transport network to achieve good PT service. All development plans of transport corridors are contain in Land use planning documents and Local Development Plans on the country/voivodeship/ local levels.

1.2.2 Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in LUP? Are there any conflicts between policies at different levels of government?

In Poland, there are no procedures concerning integration of LUP and sustainable transport. Integration of the sustainable transport with LUP is considering on small level in planning documents. Government does not get a force on including sustainable transport (with good connection by PT service) in LUP – no legal documents supported those issues. All procedures in integrating of LUP and sustainable transport are starting and ending on routes investments and without necessity of including bicycle or bus lines. There is a lack of legal procedures about requirements in including sustainable transport in land planning development. If the procedures in document are divergent, the investments could be realizing depending on investment priority (in according of government units where the investment is locate).
Usually, the authority units reaches an agreement on how to serve new development areas by public transport because economical development is forming with development of PT service (demand for transport service is high in new development areas).

1.2.3 Do any of the following exist – policies that seek:

- **A poly-centric urban structure.**
- **Medium and high land-use densities with a mix of different uses.**
- **Concentrating trip generating development along PT corridors/at nodes. Nodes and corridors identified in plans, perhaps by the use of accessibility measurement.**
- **Re-use of brownfield sites.**
- **Transport impact assessment including changing sites if one is unsuitable on transport grounds. Maximum parking standards.**

In the law/policy planning document there are the procedures for keeping compactness the spatial developments. It helps to ensure correct transport service. In the city planning development, it is visibly caring to set and to obey of the city boundaries. Therefore, surrounding small city are getting bigger and its form metropolitan union, where sustainable transport is more and more real. In the metropolitan planning documents that issues is very high emphasize. In the same time, planning procedures take into consideration fact of different purpose areas – in the living quarters the planners plan public buildings, recreation areas, etc.

In existing transport corridors, the planners make plans of new development forms (living quarters, public areas), but in the same time with enclose accessibility to main road (depending of the technical route class). It is very popular, in big cities, to use free industry areas for new living developments. The governance authority must take evaluation of function public transport (when the spatial development is changing). However, in most of cases, the authority does not adapt to social and market demands. In the smaller cities, there are lacks of investments plans for development standards service.

Maximum parking standards are mainly contained in planning documents like Land-use planning and Local Development Plan, but only for cities. Some law/policy documents determine minimum parking standards related to type of quarter – mainly in Land use planning and Local Plan on the local level. Those documents have law dimension and all the procedures must be unanimous. Building permission processes consider these standards.

Aspiration to compact in spatial development is contained in Land Development Act – it is a directive with planning development. However, Mayors and Advisors tend to ignore this – they don't really understand it. Increasingly, though, European money and regulations are forcing Mayors to look at these aspirations. In theory, there should be compact development, but in fact there often isn't due to the operation of the property market. Mayors' advisors are sometimes quite old-fashioned and need to be educated/trained – they don't really understand these concepts. This is an important role for MAX.

Is there any work that has been carried out on the effect on the market of integrating LUP and sustainable ttransport – for example, developers' perceptions of "accessible" locations for developments.

In Poland, there are no experiences with or practice of integrating LUP and sustainable process – sustainable process, if exists, is the outcome of planning process. Developers, in building permission process, must only prove (in project documents) that the investment has route connection with main public road (internal and

external transport service is correct). In gaining building permission, there is no need to demonstrate integration between sustainable transport and LUP. Developers do not have to take up the problem of sustainable service in particular area. They must only provide correct transport connection by car to main road.

1.2.4 Organisational/institutional integration to encourage LUP and transport integration

In Poland, there are separate institutions that take up the transport problem and land development issues. However, there is a lack of any unit, which joins all in one. The agencies of transport planning are as follows:

- on the country level – Ministry of Infrastructure;
- on the voivodeship level – Transport Department, Transport, Economy and Infrastructure Office;
- on the local level – Transport Department, Investments Office;

And the agencies of land planning development:

- on the country level – Ministry of Regional Development;
- on the voivodeship level – Regional Policy Department, Infrastructure Office;
- in the local level – Department of Architecture, Land use Planning and City Development, Building and Land Use Planning Office,

In the actual conditions in spatial development, policy planning development aspires to use existing transport corridors, for provide correct transport service. In those places, where planning include new areas, there is automatically requirement to ensure connection to main road from investment. However, in this step there is lack of procedure to ensure sustainable transport for these areas. After the getting to use and existing investment inn spatial development, the sustainable transport seems to be very important and useful issue.

In the process of transport development (with road investments), there are more and more cars on the roads in effects of better condition on the main roads. However, this situation is temporary. After few months, the problems with congestion are the same. Therefore, the actions with promotion for daily travel by PT means are so important. However, at the same time, planning development of new/rebuilt areas must take into consideration sustainable transport with good service. In Poland, one can see transport investment where the bicycles and buses lanes are more frequent. However, there is no practise of limits in parking standards.

Barriers to integration

Institutional fragmentation is a significant barrier to integration– there is no integration between units connected with transport planning and land use planning. There is no awareness of good impact of integration LUP with sustainable transport. In Poland, there is a mode for having own car and travel by car in daily trips (in spite the traffic congestion on the route). In most of the cities, the level of PT service is still very bad (city buses are old, PT service is unpunctually, etc.). It is no impossible to integration planning units with transport governance authorities. The most important is awareness of benefits from integration sustainable transport during land development planning process. Education society, office workers, and authorities could realize it.

Where integration of policies exists – is there any evidence of its success on the ground?

In Poland, in planning documents, there is no integration between transport and land development policies. There is a real lack of evidence.

2. Analysis framework: integrating MM and LUP in the building permission process

The detailed steps in the building permission process (intention > planning > construction > get in usage);

Decision for building permission is issue when one complies with rules of spatial development conditions for investment. Building permission consider also type of investment (which will be set on the land) – must be in accordance with type function of the land which is define in land use planning. Developers submit the application to administrative units in order to get necessary agreements and permits.

Steps in the building process permission:

- purchase building plot
- check whether plot is on the area with Local Plan
- order form location plans, maps in Geodesy Department
- submit the application for supply electricity, gas, water mains, sewage etc. (with enclose location maps and document with property for plot)
- submit the application in Architecture Department for issue (get) "building and spatial development decision" (if Local Plan doesn't exist) or extract from spatial development plan. In the application must be enclosing: boundary plot on the map; function and way of spatial development plot; demand for water, electricity, gas, sewage channel; development impact on environment; decision that the plot is not an agricultural or a forest plot
- building development project (with connection electricity, gas, water mains project)
- submit an application for building permission with following documents: building development project in 4 copies with necessary agreements and permits; declaration of the right to purpose investment for buildings; building and spatial development decision or extract from spatial development plan; additional document if are demands.
- Getting (issue) for building permission decision;
- Construction
- Get in use.

Buildings work could be start only with building permission decision. Decision is issue on the base on the location plans, maps, location decisions, land use planning or spatial development conditions, land property and number of agreements and permits. All steps are necessary/ required to get building permission.

Developments that have not to get building permission decision

- outbuildings with 35 square metres in area;
- bus/tram shelters;
- parking bay, parking for max 10 bays,

- ramps for disabled people;
- small architectures buildings;
- fences, walls;
- redevelopment, repair roads,
- pavement roads, etc.

Which planning instruments are included in the building permission process and how are they specified in terms of content?

Building permission is issued on the basis of a legal document – the Law of Construction passed by Parliament. All the regulations about building permission process, necessary documents and rules for types of development, are contained in those document.

It would be possibility to impose a planning condition such as provide bike parking in the development in public areas (marked square, schools, shopping centres, etc), but it must be preceded by regulation in planning law. Planning documents should also include new bicycle lines in that area.

Standard way to assess the potential transport impacts of a new development is realized by transport impact on environmental. This procedure is always required in feasibility studies of new development. New developments that are very significant must be check by economical, social, and environmental analyses.

Maximum amounts of parking are limit by size plot and possibilities for location parking places. There is no law regulation for limit parking places on the development area. There is only indirect regulation, which limits parking size. It is connect with maximum traffic capacity on the road and efficiency network.

In the building permission process there is no requirements to propose alternative road service by developer. It is only require ensuring connection from development to main road. Existing planning instruments to guide or shape the planning decision are:

- planning documents – law, strategy and land use planning documents;
- applications, agreements, arrangement
- strategies, plans, programmes.

All the planning document are always use in building permission process, because as directive are require.

How are the planning instruments applied in practice?

Political mediation of policies, problems, barriers appear on the step of preparing planning documents. After announcement the beginning of the planning works, borough leader/mayor/president accept applications concerned development plan. Then, after the end of planning documents, he gives all the regulation and its content to opinions. Opinion is address to experts, institutions interested in developments, and to private people. All of them could submit the protest to plan, which must investigate all applications.

There is no planning guidance for planner, which aspire to the limits amount of parking and investment location in areas with good PT service. In planning investment, developers try to find location with correct transport network and PT service, but it s only secondary decision for building location. It is not a priority and it is not certainly a rule and law regulation.

Building permission is issue on the base on legal documents, where only requirement to provide is a road connection between the investment area and the main road. Others arguments for issue permission or not is not possible, because there are not supported by law.

To whom are the planning instruments addressed?

Planning Documents are address only to planners and units that issue building permission. While mediations, enquires and opinion possibilities are address to private and legal people and for organizational units without legal entity. They can get comment to development plan. The planners and government authority could use planning instruments. Planners must prepare planning documents as studies and strategies. Lawyers prepare act, law and other legal documents also. All the planning documents must be taking into consideration by the units, which issue building permission, but also by investors.

What flexibility do these instruments offer in order that MM can be included, and what is their ability to support, hinder or allow MM and supporting measures.

There are no legal possibilities to require mobility plans during planning investments from developers and leaseholder. Only one legal regulation is providing connection to the main road. Flexibility among all instruments is not possible with binding law. The MM process could be include during building permission process for living area (requirement for developers), but under condition for existing the same regulation in land use planning documents. MM regulations could include providing bicycle parking with detailed bicycle line plans for investment plan (about area radius – 2 km). This bicycle lanes plan must be cohesive with land use planning document. MM plan could establish/define maximum parking standards in living and public areas, with PT service improvement plan.

Demands measures for developers in building permission process are: maximum amounts of parking, PT service development plan, and payment for parking on the investment area. Currently, there is lack of demands and requirement measures because of the development law and lack of awareness on sustainable transport.

To which other instruments and laws (e.g. in other sectors or in higher levels than the local level) are they referring and what is their content

In issue of building permission, application is check by the environmental expert. It is an evaluation of transport network impact on environmental (with car amount and lack of sustainable transport). There are supported laws – Environmental Protect Law and technical conditions which must be met by planning road and theirs location. All this documents define maximum standards of transport impact on environmental and parking, road measures.

In those countries that already include MM in the building permission process, how this works in relation to the process, instruments and laws identified above; and who is responsible for this integration, what are benefits of the integration of MM;

There is no situation of integrating LUP with planning process. No.

Country report: Spain

Table of Contents

1. Integrating Transport and Land-using Planning: definitions

WP D is concerned with integrating MM and LUP. However, it is argued by the WP team that a key **pre-condition** for this to occur is that transport planning and land-use planning more generally are also integrated. It is the purpose of this section of the report to explain what this means in practice.

Rather than try to define once more the integration of transport and land-use as a means of bringing about lower levels of car use, previous EU projects in the LUTR cluster (see www.lutr.net) were reviewed. Particularly useful definitions and visions were found from the ECOCITY, SCATTER and TRANSPLUS final reports; how they defined this integration is summarised here.

Key characteristics of the integration of transport and land use planning

Transport or spatial planners, when considering the LUP system, look to it to produce urban structures that reduce the need to travel, especially by car, and provide better conditions for sustainable transport modes (public transport, nonmotorized modes). The literature shows that there are a number of recognised ways that it is believed that such an objective can be brought about. Key amongst these are the following:

- A poly-centric urban structure where basic needs can be accessed in local centres, with easy access by public transport and cycling to other higher-order centres.
- Medium and high land-use densities with a mix of different uses rather than rigidly separating these uses since, if they are separate, people must travel further to access them.
- Development, especially the kind of development that generates lots of trips (e.g. offices, shops – but also housing) should be concentrated at nodes and along the corridors of the public transport network or at the very least in places that have the potential to become public transport nodes. These areas (nodes and corridors) should be identified in strategic and local plans, possibly by the use of accessibility measurement. Thresholds of (public transport) accessibility could then be set, such that certain types of development are discouraged or not permitted in areas where accessibility levels are below the threshold.
- Re-use of brownfield sites rather than permitting new development on green field sites, as the latter course of action adds to less sustainable urban sprawl.
- When new development is planned, its transport impacts should be assessed and its location should take into account its transport needs. If the transport impacts of the development are predicted to be too large in the chosen location then a different location may need to be selected.
- Parking standards that limit the amount of off-street parking required to be provided with new developments in order to new parking to restrain car use to and from new developments.

For their effective implementation, all the mechanisms above should be supported by their explicit inclusion in policy documents from all levels of government that are involved in the LUP process.

In addition, institutionally and organisationally, if planning and transport are to be better integrated, it may be necessary to make organisational changes to ensure that transport planners and land-use planners work together more closely, and to ensure that land-use planners know what transport planners are trying to achieve. This can be the case even if they already work for the same organisation, as they are still likely to be working in different sections/departments with different points of view.

The degree of cooperation is best measured by the division of powers in the preparation of joint strategies. Two extremes of cooperation between departments relevant for sustainable transport can be identified:

- no cooperation: informing other departments only when a draft policy, plan or programme has been submitted to the city council or parliament;
- full cooperation: defining joint visions of the future, leading to joint actions, formulated in strategies, which are jointly initiated and subscribed to by the involved departments.

In between these extremes lies the procedure of informing other departments at an early stage and commenting on draft papers on an ad hoc basis at junior, permanent or ad hoc joint task group level, or informing working groups at low or high level in the administration (EEA, 2002).

Supporting measures

To support these land-use measures and policies, complementary transport policies are necessary. For example, it may be necessary to strengthen nodes and/or create new corridors in the public transport system by opening new routes and lines, or increasing service frequencies. Improved cycling and walking environments are necessary if the physical proximity of homes and other activities, brought about through the LUP system, is to result in much greater levels of walking and cycling. In certain countries (e.g. the UK and Ireland) it is possible for the public sector to make agreements with and/or impose conditions on new developments such that developers pay the cost of all or some of the transport system improvements that are associated with the development. Parking policy is one of the most important supporting measures as it has a key influence over how people travel.

The projects in the LUTR cluster also recognised that land-use planning alone is a slow-acting measure that, on its own, is likely to have relatively small impacts on people's travel behaviour – especially as real incomes rise, since this makes physical proximity a less important factor in people's choice of destination. Therefore, the projects identified that it is important to support the integration of transport and planning with measures that influence the real cost of travel, making car travel more expensive, and/or other modes cheaper.

Conclusion to this section

The earlier work reviewed for this report concluded that in many EU member states, the integration of transport and land-use planning still remains largely suboptimal, and many of the policies and measures mentioned in this section are not in place. Nonetheless, WP D argues that it is crucial that such integration is in place at the wider level if the integration of MM with the LUP system is itself to take place. It is to that second level of integration that this report now turns.

2. Common analysis framework

Introduction

MAX WP D proposes to evaluate how far transport and LUP are integrated in partner member states, and then to do the same for the integration of MM and LUP. In order to gather data that are as consistent and therefore comparable as possible, common frameworks for analysis must be developed. They are based on initial thoughts on analysis criteria contained in the WP D Research Plan, which themselves refer back to the original criteria for analysis as set out in the Details of Work section of the MAX proposal. These frameworks also identify the gaps in knowledge that were highlighted by the State of the Art review for the work package. They thus have a rational basis and will permit a structured analysis that will form a solid base for further work in the WP.

Below, the analysis framework for Spain is outlined.

Analysis framework: integrating transport and LUP

The purpose of this first analysis framework is to identify the state of preconditions for the integration of MM into LUP in European countries represented by the WP D partners and, in addition, in Ireland and the Netherlands.

The legal framework underlying the planning system

The governance framework in which transport and land use planning take place

There are 3 main levels of governing in Spain; national ("nivel nacional"- state of Spain), regional (autonomous regions called Comunidad Autónoma (CCAA) and local (municipality "nivel municipal"). Some CCAA are divided in provinces (provincias) but they have not competence in land use planning other than delegation from the CCAA in what rural development plans is concerned.

At a National level there are laws referring to land use and transport planning. These laws are considered as the framework where the regional laws have to be developed. Land use National law has been systematically updated every four-five years. On the other hand, The Transport Act comes from late eighties, without main changes.

In the regional level, each CCAA has both legislative competence and administrative faculty to approve land use plans. It is at the regional level where it lays the critical decision area to set up new LUP laws, implement supramunicipal plans and to take the final decision on the municipal land use plans.

Concerning the transport area, CCAA competence is narrowly restricted to both infrastructure and services involving more than one municipality, always inside the region (otherwise this would be a State competence). Only recently have the CCAA started systematically to plan inside the main urban metropolitan areas through the successful Transport Authority form.

Last but not least, municipalities have broad competence in land use planning and urban development inside its territory. This, which is due to what is called municipal autonomy (autonomía municipal) has revealed one of the main problems to reach a sustainable urban development, mainly in most coastal and touristic areas.

Traditionally, there has been in the CCAA an administrative difference between regional – supramunicipal planning (Ordenación del Territorio) and Town land use planning (Plan de ordenación urbana). The first refers to more than one municipality or the whole region. In this case the CA has all faculties to plan, approve and implement the plan. Unhappily, these plans are rare and difficult to approve since they involve different municipal interests. They are seen as co-ordination tools better than directives for the municipal plans.

As said, Town planning is competence of the municipalities. The CA has the faculty to approve these plans and to monitor its development. A separately administrative branch (urban general direction / urban commission) is in charge of supervising activities and not planning ones.

Some CCAA have a common law for both levels (ie. CCAA Galicia, CCAA Extremadura), but usually each CCAA has two different laws; one for Supramunicipal Planning (Ley de Ordenación del Territorio), other for Town Planning (Ley de Suelo, Ley de Urbanismo).

Town local plans have to follow the guidelines and regulations of the Town Planning Law of each CCAA. Local government make decisions on land use planning following the town planning plans developed under the regulation of the regional laws. In fact local autonomy is very high, mainly in what urban development tools under the Town Plan is concerned.

In the last three years, a new plan at the National level has been approved (PEIT – National infrastructure plan for transport). This plan contemplates innovative tools in transport urban planning, intermodality, sustainable transport and mobility management. The plan has been developed through sector programs (National intermodal strategy, cycling & pedestrian strategy, sustainable urban mobility plans, etc,..) Unhappily these plans have not been approved yet being only a general reference for CCAA and municipalities as well as a guide for State investment in these areas.

Planning instruments that exist

Land use planning:

- Territorial plans (Supramunicipal tools – both concerning land use and specific fields)
  Are being developed directly by the CCAA under the either land use or territorial laws. These tools are not common and it depends on the CA the importance and feasibility of its implementation.

- Town land use plans (municipal plans)
  Most of the big – middle size municipalities are obliged to approve a town land use plan, this being entirely developed by the local authority. According to its law, each CA names the plan differently (Plan de ordenación urbana, plan de urbanismo, etc,…) but all of them have the faculty to final approval of the plan.

  Initially, Town land use plans are focussed in land use, giving new classifications through "zoning" techniques. Since this plan has been the only planning tool involving the whole municipality, new functions have been added such as transport management, infrastructure planning and co-ordination among administrations. This depends on the CA and even on the own municipality.

  Smaller municipalities have a more simplified planning tool (Normas) which covers more or less the same land use activity.

- Development land use plans
  While or after the approval of the Town land use plan, Development Plans can be initiated both by the municipality and the private sector. These are aimed at developing specific areas of the town plan and have a complete hierarchy of tools from the Sector land use plan (called Plan Parcial) until the urbanisation and building projects (& licences). Usually these development plans are based on the general Town land use plan but many exceptions can be considered, which makes room to undertake development planning outside the general Town plan.

Example: CA Basque Country, with both supramunicipal Land Use planning activity and Town land use planning .

The Basque Government uses three different planning tools at the supramunicipal level: Guidelines for Spatial Planning, Sectorial Territory Plan and Partial Territory Plan. The Guidelines for Spatial Planning puts up the reference framework for the development for other instruments within urban and spatial planning. The objectives

are to formulate criteria and norms that orient and regulate territorial, economic and social processes, put up a framework for the formulation and execution of sectorial policies and foresee joint actions with both the national government and other CCAA. Revision at least every 8 years.

The Guidelines for Spatial Planning states in which areas it is obligatory to write Sectorial Territory Plans. For instance, there have been sectorial plans for rail in all three main metropolitan areas of the region (Bilbao, San Sebastian and Vitoria)

The Guidelines for Spatial Planning also decides geographical areas for the development of The Partial Territory Plans, on the supramunicipal level. The objective is to concrete and adjust the Guidelines to the area's characteristics. Some tasks of the plans are to establish the limits for residential land use in each municipality, define spaces for large infrastructures and equipments, quantify the uses of the soil, and establish objectives, criteria and norms for the spatial planning.

This theoreticaltop-to-bottom organization tools with regional guidelines determining both the sector and partial guidelines and thus determining the municipal plans is far from the reality. Inf most of the sector transport plans have succeed in implementing new transport infrastructures, the partial plans suffer long processes and hardly can impose directives to the Town land use plan.

Transport tools.
As mentioned, there are not specific tools for transport planning at the metropolitan-urban level other than the transport law (National level - Ley de Ordenación de los Transportes Terrestres (LOTT- 1987) and some regional laws). The PEIT (National transportr infrastructure plan) introduce the sustainable urban mobilityt Plan (PMUS) as a tool for sutainable transport planning and investment at a metropolitan – urban level. This tool not having a proper legal framework is being developed by municipalities under the attraction of heavy funding programs from some National Agencies (IDAE – national energy agency – and the Ministry of Public works)

Only in the case of Catalonia there is a Law on Mobility that has developed its own planning tools mainly focused on sustainable mobility and transport management: National Mobility Guidelines, Mobility Master Plans, Sectorial Plans and Urban Mobility Plans. All the instruments should be revised at least every 6 years or when the guidelines are being changed.

New mobility laws are being considered both by the National Government and the CCAA since it can give a definite legal framework to PMUS and MM plans.

Following the Catalonia Mobility Law, Urban Mobility Plans are to be approved in all municipalities bigger than 50.000 inhabitants.

Legal and theoretical scopes, functions and contents of each instrument

As explained above

Sustainable transport in the LUP process

How far sustainable transport is an objective or an outcome of the LUP process

As said, sustainable transport is not initially in the scope of the LUP process being this focussed on land use classification. Traditionally, LUP has involved infrastructure planning, not from the functional point of view but as a need to reserve land. Since Town plans have to consider investment programs, they include both National and Regional transport infrastructure programs. Recently, LUP has added traffic analysis, PT planning and MM, always partially and following the interest of specific municipalities.

One of the few exceptions is the Mobility Law in Catalonia, which is an attempt to promote sustainable transport, although the connexion to land use planning is weak. The overall objective is to integrate urban and

economic policies with transport policies in order to minimize regular trips. And the only objective that refers to land use is: “relate the land use with the public transport supply”.

At this moment, two main streams are converging into considering sustainable transport in LUP processes:

- Some regional land use laws demand specific studies of accessibility and transport efficiency in the different land use planning tools (Town plans and development plans) this being the case of Madrid. In fact, traffic and capacity studies are compulsory for each plan to be developed inside Madrid. There is a broad opinion to widen this analysis to the PT and pedestrian – cycling networks.

Following the Catalonian exercise, the PMUS will be extended to all middle – big urban areas so that a transport planning framework will be achieved, properly co-ordinated with PUP processes.

Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in LUP? Are there any conflicts between policies at different levels of government?

At the national level:

- A new land use law has recently (may 2007) been approved by the Spanish Parliament, considering sustainable development.
- The new PMUS tool has been successfully accepted in several regions and municipalities. It covers a lack in transport planning though without a legal framework yet (except Catalonia)
- Heavy funding programs are beong implemented by State Agencies to make attractive SM toboth CCAA and municipalities

At the CA level:

- It is expected that CCAA revise their own legislation according to these changes, following the national framework.
- New mobility laws are discussed at least in four CA

At the municipal level:
Not having legislative competence, municipalities will follow the national – regional framework. As far as we know, there is a broad acceptance of the new PMUS and MM plans.

Existence of policies towards a compact city

For this purpose, the analysis framework has identified policies that seek:

- A poly-centric urban structure.
- Medium and high land-use densities with a mix of different uses.
- Concentrating trip generating development along PT corridors/at nodes. Nodes and corridors identified in strategic and local plans, perhaps by the use of accessibility measurement.
- Re-use of brownfield sites.
- Transport impact assessment including changing sites if one is unsuitable on transport grounds.
- Maximum parking standards

In this regard, each CCAA Town Planning Laws regulate the minimum parking standards that have to be used in local planning.

Any work that has been carried out on the effect on the market of integrating LUP and sustainable transport

No experiences known other than few isolated cases of promoters developing commercial and leisure resorts very sensitive to sustainable transport.

Future will be linked to a change in the legal framework opening the actual transport and accessibility studies in the PUP to sustainable mobility..

Organisational/institutional integration to encourage LUP and transport integration

- PMUS (Sustainable Urban Mobility Plans) have been implemented in some pilot municipalities, but there is still little evidence on measures carried out and follow-up.
- This is the second year for IDAE programs funding both PMUS and MM measures. Up to 30 M eur is being spent by State agencies co-funding these programs (at a maximum of 60%).

Barriers to integration

No information available

Where integration of policies exists – any evidence of its success on the ground?

No examples of success, however, there have been some attempts but are too recent to take conclusions.

3. Analysis framework: integrating MM and LUP in the building permission process

In tandem with an analysis of framework conditions (the integration of sustainable transport and LU planning), there is of course a need to assess how far MM has been integrated into the process of granting permission for a given building or development in the WP D partners' member states, plus Ireland and the Netherlands. This section sets out the framework for gathering comparable data on this subject as detailed below. The term "building permission process" refers to the decision on whether or not to grant planning permission for a particular development.

Detailed steps in the building permission process

The Town Plan (local level) defines the use of the area where the site is located –residential, economic área, equipment, etc- . It also defines the criteria and norms of how to develop it –intensity of building, heights, etc-. The only mobility parameter that is regulated is the minimum parking standard –about 1 parking place for each 100 m2 or more in residential areas depending on the CCAA regulation-.

Town land use plans have a schedule for developing new urbanisation. This can be kept by the promoter or, if interested, he can accelerate the process promoting a development plan (Plan Parcial and so on)

If the site is a new area, some different development planning instruments have to be developed: as mentioned in former chapters, Partial Plan (Plan Parcial), that defines the structure of the new site, street organization, infrastructures needs, structure of lots, etc. The Partial Plan has to define the measures of streets and foothpts. In some CCAA, the Partial Plan has to develop also a traffic plan estimating the number of total trips that the new area will generate. No public transport planning is required up till now.

After the partial Plan is approved at the local level, the Urbanization Plan is developed. Urbanization Plan defines the urbanization of infrastructures for the area. Urbanization costs are assumed by the developer. Except urbanizations of roads and footpaths, no other transport infrastructure are required. When the urbanization of infrastructure is finished, the plots can be built.

Developers of a new area have to cede some percentage of the area for equipments and green parks. In residential areas ,Town Planning Laws also define % of plot that have to be appropriate to protected housing (cheaper).

In what is called "urban areas" (which already have water supply, sewage, transport infrastructure, etc,..) or "new urbanised areas" (coming from the Plan Parcial development) the promoter can apply for a "building licence". There are not specific mobility obligations linked to the licence since all main accessibility and mobility aspects have been solved during the Plan Parcial process or are already solved as an "urban area". Only parking standards and accessibility facilities, in the case of commercial malls, are to be considered at this stage of the process.

Which planning instruments are included in the building permission process and how are they specified in terms of content

The Town Plan is the main instrument. It defines planning conditions and obligations. This is developed by the Plan Parcial and other development tools. The building permission must accept all constraints coming from the higher planning tools.

How are the planning instruments applied in practice

There is a variety of practices, not being possible to specify only one pattern.

To whom are the planning instruments addressed

To local authorities (city council)

What flexibility do these instruments offer in order that MM can be included, and what is their ability to support, hinder or allow MM and supporting measures

No MM measures are requested in the planning instruments or the building permission.

There is as easy way to introduce MM instruments through both mobility and land use laws. Traffic and capacity analysis are already considered both at the Town planning level and the development level (Plan Parcial and other tools). Slight legal changes can afford to introduce compulsory analysis on PT and sustainable mobility in the Plan Parcial and other tools.

Future Mobility laws will introduce the need of a co-ordination of LUP and MM programs.

To which other instruments and laws (e.g. in other sectors or in higher levels than the local level) are they referring and what is their content

The PEIT (National Level) includes among their priorities the necessity to intervene in the urban areas and develop measures to promote Sustainable Mobility Plans and Strategies to promote pedestrian and cycling mobility. Unless CCAA adopt modifications in its legal framework, the National Level has no territorial or land use competence so that this can be only a way to develop MM measures under the attraction of funding.

In those countries that already include MM in the building permission process, how this works in relation to the process, instruments and laws identified above; and who is responsible for this integration, what are benefits of the integration of MM

No

How the practice is and what problems, barriers, etc. are encountered

No

Site selection for planning simulation

In the next stage of the work, planning simulations will be carried out in Germany, Lithuania, Slovenia and Spain. Whilst carrying out the data collection for WS1, Analysis, it would be useful to try to identify possible sites that could be the topic of these simulations.

6.7 Appendix 7

Country report: Sweden

Table of Contents

1. Integrating Transport and Land-using Planning: definitions

WP D is concerned with integrating MM and LUP. However, it is argued by the WP team that a key **pre-condition** for this to occur is that transport planning and land-use planning more generally are also integrated. It is the purpose of this section of the report to explain what this means in practice.

Rather than try to define once more the integration of transport and land-use as a means of bringing about lower levels of car use, previous EU projects in the LUTR cluster (see www.lutr.net) were reviewed. Particularly useful definitions and visions were found from the ECOCITY, SCATTER and TRANSPLUS final reports; how they defined this integration is summarised here.

Key characteristics of the integration of transport and land use planning

Transport or spatial planners, when considering the LUP system, look to it to produce urban structures that reduce the need to travel, especially by car, and provide better conditions for sustainable transport modes (public transport, nonmotorized modes). The literature shows that there are a number of recognised ways that it is believed that such an objective can be brought about. Key amongst these are the following:

- A poly-centric urban structure where basic needs can be accessed in local centres, with easy access by public transport and cycling to other higher-order centres.
- Medium and high land-use densities with a mix of different uses rather than rigidly separating these uses since, if they are separate, people must travel further to access them.
- Development, especially the kind of development that generates lots of trips (e.g. offices, shops – but also housing) should be concentrated at nodes and along the corridors of the public transport network or at the very least in places that have the potential to become public transport nodes. These areas (nodes and corridors) should be identified in strategic and local plans, possibly by the use of accessibility measurement. Thresholds of (public transport) accessibility could then be set, such that certain types of development are discouraged or not permitted in areas where accessibility levels are below the threshold.
- Re-use of brownfield sites rather than permitting new development on green field sites, as the latter course of action adds to less sustainable urban sprawl.
- When new development is planned, its transport impacts should be assessed and its location should take into account its transport needs. If the transport impacts of the development are predicted to be too large in the chosen location then a different location may need to be selected.
- Parking standards that limit the amount of off-street parking required to be provided with new developments in order to new parking to restrain car use to and from new developments.

For their effective implementation, all the mechanisms above should be supported by their explicit inclusion in policy documents from all levels of government that are involved in the LUP process.

In addition, institutionally and organisationally, if planning and transport are to be better integrated, it may be necessary to make organisational changes to ensure that transport planners and land-use planners work together more closely, and to ensure that land-use planners know what transport planners are trying to achieve. This can be the case even if they already work for the same organisation, as they are still likely to be working in different sections/departments with different points of view.

The degree of cooperation is best measured by the division of powers in the preparation of joint strategies. Two extremes of cooperation between departments relevant for sustainable transport can be identified:

- no cooperation: informing other departments only when a draft policy, plan or programme has been submitted to the city council or parliament;
- full cooperation: defining joint visions of the future, leading to joint actions, formulated in strategies, which are jointly initiated and subscribed to by the involved departments.

In between these extremes lies the procedure of informing other departments at an early stage and commenting on draft papers on an ad hoc basis at junior, permanent or ad hoc joint task group level, or informing working groups at low or high level in the administration (EEA, 2002).

Supporting measures

To support these land-use measures and policies, complementary transport policies are necessary. For example, it may be necessary to strengthen nodes and/or create new corridors in the public transport system by opening new routes and lines, or increasing service frequencies. Improved cycling and walking environments are necessary if the physical proximity of homes and other activities, brought about through the LUP system, is to result in much greater levels of walking and cycling. In certain countries (e.g. the UK and Ireland) it is possible for the public sector to make agreements with and/or impose conditions on new developments such that developers pay the cost of all or some of the transport system improvements that are associated with the development. Parking policy is one of the most important supporting measures as it has a key influence over how people travel.

The projects in the LUTR cluster also recognised that land-use planning alone is a slow-acting measure that, on its own, is likely to have relatively small impacts on people's travel behaviour – especially as real incomes rise, since this makes physical proximity a less important factor in people's choice of destination. Therefore, the projects identified that it is important to support the integration of transport and planning with measures that influence the real cost of travel, making car travel more expensive, and/or other modes cheaper.

Conclusion to this section

The earlier work reviewed for this report concluded that in many EU member states, the integration of transport and land-use planning still remains largely suboptimal, and many of the policies and measures mentioned in this section are not in place. Nonetheless, WP D argues that it is crucial that such integration is in place at the wider level if the integration of MM with the LUP system is itself to take place. It is to that second level of integration that this report now turns.

2. Common analysis framework

Introduction

MAX WP D proposes to evaluate how far transport and LUP are integrated in partner member states, and then to do the same for the integration of MM and LUP. In order to gather data that are as consistent and therefore comparable as possible, common frameworks for analysis must be developed. They are based on initial thoughts on analysis criteria contained in the WP D Research Plan, which themselves refer back to the original criteria for analysis as set out in the Description of Work section of the MAX proposal. These frameworks also identify the gaps in knowledge that were highlighted by the State of the Art review for the work package. They thus have a rational basis and will permit a structured analysis that will form a solid base for further work in the WP.

The analysis frameworks have first been applied to one country (the UK) where the integration of both transport and LUP, and MM and LUP, are believed to be relatively advanced. This work has been written up and agreed, so that it can be used to guide the analysis in other partner countries. The advantage of this approach is that those undertaking the research in other countries will have, not only the frameworks, but also the "answers" to the criteria in the frameworks as they apply to one or two countries. This should make accurate and consistent analysis easier for these other partners.

Below, the analysis framework for Sweden is outlined.

2 2 Analysis framework: integrating transport and LUP

The purpose of this first analysis framework is to identify the state of preconditions for the integration of MM into LUP in European countries represented by the WP D partners and, in addition, in Ireland and the Netherlands.

2.2.1 The legal framework underlying the planning system

The governance framework in which transport and land use planning take place

Sweden is divided into 290 municipalities, 18 counties and two regions (the regions are Västra Götaland and Skåne). There is no hierarchical relation between municipalities, counties and regions, since all have their own self-governing. It is important to note that Sweden has a long tradition of local self-government, especially regarding land use planning. Municipalities are responsible for matters relating to the inhabitants of the municipality and their immediate environment (for example land use planning). The main task of the county councils and regions is healthcare, but they are also responsible for organising public transport. Parliament, "Riksdagen", which has 349 members, is the supreme political decision-making body in Sweden.

National level: This level makes planning law and produces guidance to lower levels of government. At national level there are two laws that especially applies to LUP: Planning and Building Act, "Plan- och bygglagen (PBL)" and the Environmental Code, "Miljöbalken (MB)". The national government decides on laws that regulate planning and on national goals. The National Board of Housing, Building and Planning, "Boverket", is the central government authority for planning, urban development etc under the Ministry of the Environment, "Miljödepartementet". Boverket monitors the function of the legislative system under the Planning and Building Act and related legislation and proposes regulatory changes if necessary. To ensure effective implementation Boverket also provides information to those engaged in planning activities. The Swedish Road Administration, "Vägverket", is also an important authority when it comes to transport planning. They invest in national and regional roads for traffic, cartraffic as well as bicycletraffic. This agency belongs to the Ministry of Enterprise, Energy and Communications, "Näringsdepartementet". Also the Swedish Environmental Agency, "Naturvårdsverket" is an actor within the field, since they have defined Sweden´s 16 environment quality goals, "Miljökvalitetsmål", of which one is "Good living environment" (God bebyggd miljö). They belong to the Ministry of the Environment.

Regional level: Sweden is divided into 21 counties, "Län", each of which has its own County Administrative Board and County Governor, "Länsstyrelse" and "Landshövding". Each of them also have an elected County Council, "Landstingsfullmäktige", with its own separate County Council Board,"Landstingsstyrelsen", and an organisation of officials, "Lanstinget". The function of the County Administrative Board is to be a representative of the state in their respective counties. Their role is to see to that national targets are attained and ensuring that the rule of law is not infringed (Planning and Building Act, Environmental Code). The County Administrative Board can only interact if the laws are infringed, and the laws are quite "open to interpretation" which means that this happens very seldom. An important role is to see to that the mutual interests of municipalities are met in the plans (the comprehensive masterplans and the detailed development plans made by the municipalities), which is regulated in the Planning and Building Act. They also work with information to municipalities. The counties also produce a Regional Transport Infrastructure Plan (RTI), this is a non binding document, but it is used when asking the government for money. The County Council and its officials has its main tasks within health care, and regional/local public transport. The latter is often conducted in close cooperation with the municipalities within the county.

We have only two regions in Sweden; a large region in the southwest of Sweden around Gothenburg, lies "Västra Götalands Region", and in the most southern part, we have "Region Skåne". They are enlarged counties with an increased influence over regional matters, compared to the counties. The regions can for example work with regional strategy plans. The regional body works more as a coordinator of the municipalities, for example putting together information on the LUP:s of the different municipalities in a region.

Local level (municipality): Sweden's municipalities have a great deal of freedom to organise their LUP as they see fit. Their responsibilities are regulated in the Planning and Building Act and the Environmental Code. The municipality are responsible for two plans: the comprehensive masterplan/land use plan for the whole municipality or for large parts of the municipality, "Översiktsplan", and the detailed development plan, "Detaljplan". The municipalites with its local parliament, "Kommunfullmäktige", and Council, "Kommunstyrelsen" also makes decisions on planning permission (which shall be in in accordance with the detailed development plan of that particular area). In between the comprehensive masterplan and the detailed development plan, a certain planning programme, "Planprogram", is conducted for parts of the municipality when large changes in land use is anticipated (i.e when the changes are not totally compatible with the masterplan itself). This programme is more general and visionary in character than a detailed plan.

Planning instruments that exist

- National legislation: Planning and Building Act, "Plan och bygglagen (PBL)", the Environmental Code, "Miljöbalken (MB)". National government also has the power to abate a plan (this is done by the County Administrative Board in the first place) where it feels the local authority has not taken the laws into account. The legislation is binding but open for interpretation to some extent.
- National goals, where the goal of the built environment (see above; God bebyggd miljö) relates to LUP. It says: *land use and community planning will be based on programmes and strategies for a varied supply of housing, workplaces, services and cultural activities, in order to reduce transport demand; preservation and enhancement of cultural and aesthetic assets, green spaces and water bodies; promotion of the use of renewable energy resources and development of production plants for district heating, solar energy, biofuels and wind power.*
- National guidance/information (from the authorities), some examples related to LUP: Traffic for an Attractive City, "TRAST"- which deals with guidance and good examples, putting emphasis on safety, environment, security and accessibility, sustainable urban development, advising municipalities concerning for example issues such as "instead of traffic plans make urban plans".
- Comprehensive masterplan/land use plan, "Översiktsplan": According to Planning and Building Act each municipality has to have a comprehensive masterplan up to date, but it is not legally binding. The purpose of this plan is to be able to meet different goals –social, economic and environmental, and its main task is to describe how the land is to be used. The timespan is app. 30 years.
- The detailed development plan, "Detaljplan" is legally binding (when adopted by the municipal council after an elaborated process of public possibilities for participating, so called "Samråd", i.e public consultation) for 5-15 years. It is a legal agreement between the municipality, the public and the landowners, that makes it possible to implement the plans of the comprehensive plan. The detailed development plan normally

includes a map and a program where land use is regulated on a very detailed scale, for example the layout of buildings and roads, densities etc. In this plan the municipality has the possibility to regulate the physical aspects of a sustainable planning, but not MM.

- Building permission, "Bygglov", is based on the Local Development Framework and is decided by the local politicians. This means that they decide whether a person/company is allowed to build a new garage, building etc.

MM can only be applied in planning agreements that follows the purchase of land-agreements, "Exploateringsavtal". This possibility has not been used so far, but there are municipalities like Lund which begin to shows an interest in this. The advantage in Sweden is that the municipality often owns the land and therefore can make binding agreements with buyers of the land. The possibilities of influencing the exploiters in a certain direction is of course much better if the municipality owns the land in question.

Legal and theoretical scopes, functions and contents of each instrument

No information available

2.3 Sustainable transport in the LUP process

How far sustainable transport is an objective or an outcome of the LUP process

Land use policies, programmes and plans at all three levels of government state on a general level that LUP should be used to make society more sustainable. Guidance from central government to local government on how to draw up its local plans clearly states the importance of using land-use as a means to tackle transport problems. At the same time economic growth, a growing demand for travels and transport over larger regions, and a strong trend towards more external establishments for shopping and retailing poses barriers to sustainable development on the regional and local levels. The general problem is that the texts, policies and goals are of a very genereal character which means that in the end planning is subject to the will and skill of the planners on the local level. However, the mechanisms that is discussed today include denser development, locating trip-intensive development near major public transport nodes, putting development along corridors, stimulating a mix of uses etc. The Planning and Building Act, dated 1987, for example, is much influenced by environmental issues like preventing a energy- demanding spatial structure. The Environmental Code, dated 1999, is a conglomeration of several Environmental laws from before, and puts emphasis on analysing the consequences on nature and environment, before following through a large land use project.
Concrete policy/guidance-examples of these processes are:

- TRAST: The Swedish National Road Administration has taken the initiative to publish a programme with guidance concerning "the attractive city" involving planning the city with an emphasis on sustainable transportation.
- The 4-step-principle: The Swedish National Road Administration has adopted a strategy for measures in the traffic system. Before considering large scale investments and infrastructural changes, it is here important to look for changes in behaviour and transportation demand.

The National Board of Housing, Building and Planning, has taken the initiative to publish several texts and policies on the theme of planning traffic systems and city development together, not as two separate processes ("Stadsplanera istället för att trafikplanera och bebyggelseplanera").

Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in LUP? Are there any conflicts between policies at different levels of government?

Yes, the processes of sustainable transports and LUP are given support on all levels but on the other hand strong mechanisms concerning economic growth are pulling in the other direction. It could be argued that on the national level it is easier to pose sustainability-goals on a general level, while on the local level it seems as if

economic interests are hard to ignore. For example, a large retail actor, seeking to expand its transport intense sales in the outskirts of a city, is seldom turned down by the municipality, even if this per definition means a less vivid city centre. On a general level there seems to be a conflict on all levels of governance concerning the contradiction between economic growth on the one hand, and sustainable development on the other. Another problem in the Swedish case might be the fact that we have a strong national and local level, and a weaker regional level. The local level, municipalities, consist of very small units and there is a need for planning on a regional level concerning LUP and sustainable transport planning but this is not supported by the laws today.

Existence of policies towards a compact city

For this purpose, the analysis framework has identified policies that seek:

- A poly-centric urban structure.
- Medium and high land-use densities with a mix of different uses.
- Concentrating trip generating development along PT corridors/at nodes. Nodes and corridors identified in strategic and local plans, perhaps by the use of accessibility measurement.
- Re-use of brownfield sites.
- Transport impact assessment including changing sites if one is unsuitable on transport grounds.
- Maximum parking standards

All these policies exist but only on a policy-guidance level. They are often only tested at limited sites, for example Lund, Hammarby Sjöstad and BO01, see below.

Any work that has been carried out on the effect on the market of integrating LUP and sustainable transport

The general picture, also shown in data is that developers seek locations that are as accessible as possible by car in preference to any other location (i.e city centers). This is a strong trend, especially in southern Sweden.

Organisational/institutional integration to encourage LUP and transport integration

When discussing the integration of transports and LUP in Sweden the local level is the most relevant level, where most of the actual planning take place. Transports and traffic are often planned by separate functions, and at several of the municipalities, for example in Malmö, Stockholm and Gothenburg, these functions are divided between different departments. That is, a City Planning Department co-exist parallel to a Traffic and Streets Department. Also on the national level, the National Board of Housing, Building and Planning is parallell to the Swedish Road Administration. This sets the scene.

Barriers to integration

Institutional fragmentation in Sweden can be seen as a problem for integrating transports and LUP (also see above). One further problem is that the regional level is rather weak within the field of LUP and traffic planning. On the other hand the regional task of organising public transport in the region function well, and the planning is often done in close cooperation with the local level.
Antother barrier might be that the comprehensive master plan for a municipality is not legally binding and the detailed plans which are binding tend to cover smaller and smaller areas. This means that the overall perspective sometimes is lost.

Also, the distinction between the Swedish National Road Administration (which is in itself in turn split up in regions that does not correspond to the county regions), with jurisdiction over the regional and national road net,

and the local level municipality, with jurisdiction over the traffic and road system within its population centres (that is; cities, villages), poses a challenge. This is especially so, if taking into consideration the weak role of the regional level in general.

Where integration of policies exists – any evidence of its success on the ground?

Malmö – The Citytunnel, a strong commitment between local, regional, and national level in a large infrastructural project focusing on increasing personal travels by train, and at the same time allowing for urban development around the railway extension.
Lund – has a long tradition of efforts within the field of sustainable transports, and tries to complement this with what they call "City planning for reduced car use". Here, urban development and growth co-exist with high marketshares for sustainable transport modes. A striving for a denser urban structure is also evident here, focusing on building housing areas with good preconditions for PT and bicycling at old industrial sites.
Stockholm, Hammarby sjöstad – a good example of a sustainability project, where an old industrial harbour area is being turned into a new part of Stockholm, with a holistic perspective on sustainability, fosusing on waste management, energy-efficient buildings, recreational areas, and high-standard PT (Tramway) and carsharing-schemes. The aim is that by 2010, 80 % of travels made by residents and people working in the area should be sustainable (PT, walk, or bike). Both here, and in Malmö (BO-01), the planners have been working with lowering the normal parking norm (regulates the number of parking lots per household or/and employer. An overall evaluation of the efforts has not been done as of today.

Malmö - BO-01: In the beginning of this century, Malmö´s equivalent to Hammarby sjöstad, BO-01, was launched. An old harbour area (with heavy wharf industry in the past), the Western Harbour, was re-planned with focus on sustainability both concerning housing, energy, waste, and transports. Still, today, parts of the area is being planned and built on. This project might be seen as on example of an effort, where city planners and traffic planners have made joint efforts with the aim of creating more sustainable solutions.

3. Analysis framework: integrating MM and LUP in the building permission process

In tandem with an analysis of framework conditions (the integration of sustainable transport and LU planning), there is of course a need to assess how far MM has been integrated into the process of granting permission for a given building or development in the WP D partners' member states, plus Ireland and the Netherlands. This section sets out the framework for gathering comparable data on this subject as detailed below. The term "building permission process" refers to the decision on whether or not to grant planning permission for a particular development.

Detailed steps in the building permission process

In Sweden as in many other states, most developments are started by the private sector who applies to the local authority for permission to develop the specific land. The local municipality has a very strong position concerning influence over its own land. The decision is then taken dependent on how the development fits in with the comprehensive masterplan and/or the detailed development plan ("detaljplan") (if one exists for the specific area) and the technical requirements. An agreement (contract), a purchase of land-agreement, on how the land is going to be used is then set up between the parts ("Exploaterings- or Markanvändningsavtal"). Then a building permit ("Bygglov") is needed, which concerns the localisation , the exterior of the house and its use (if you change the use of a building you should apply for a new building permit).

It is the municipalities with its local parliament, who makes decisions on planning permission. The decisions for smaller projects and building permits in general are delegated to the political council of the City Planning Department ("Byggnadsnämnden"). In Sweden, most developments need a building permit, but there are exceptions, for example concerning small buildings of 10 m^2 ("friggebodar"). Before starting the actual building process, even with the permit in order, you then need to issue a building notification ("bygganmälan") to the local authority. After receiving a building permit, one has two years to start the development, otherwise the permit is invalid.

Which planning instruments are included in the building permission process and how are they specified in terms of content

It is possible for a local authority to impose a planning condition such as to provide car parking and bike parking in the development. In Sweden parking is regulated by minimum parking standards, but it is legally possible to regulate *maximum amounts of parking*. There are no formal/legal mechanisms in the building permission process that require the developer to provide alternatives to the private car as ways of getting to the development. This is instead based on voluntary agreements between the developer and the local authority. Here, the economic interest (see above) often seems to get in the way of sustainable solutions for transports. There is today no standard way to assess the *potential transport impacts of a new development.*

How are the planning instruments applied in practice

There is planning guidance from the national and also sometimes from the regional and local level that suggests that developments located in places well served by public transport should have limited parking. But the problem is that this possibility is often ignored by either the official or the politicians who are responsible for the permits if they believe it will deter development that brings jobs and local taxation income. The general picture is that the economic interests of the municipality are hard to ignore (taxation, jobs etc.) for the officials that negotiate with the potential developer.

To whom are the planning instruments addressed

In Sweden as well as in the UK *Policy guidance* is aimed only at people writing plans and those making planning decisions.

What flexibility do these instruments offer in order that MM can be included, and what is their ability to support, hinder or allow MM and supporting measures

There are some flexibility within the negotiative process between the potential developer and the local authority, before agreeing on the contract defining the land use ("exploateringsavtal"). However, this is up to the individual official and his/her preferences (in turn, influenced by higher officials and politicians). There are no legal mechanisms requiring a mobility plan etc. The inclusion of MM in the above planning instruments is restricted by the fact that they are defined only by potential voluntary agreements.

To which other instruments and laws (e.g. in other sectors or in higher levels than the local level) are they referring and what is their content

As for the land-use-contracts they should be in line with the comprehensive masterplan of the municipality (the plan is however not binding). This, in turn, has to take into consideration the national level environmental quality goals, dealing with for example "restricted climate change", "good urban environment" etc. National government also has the power to abate a detailed plan (this is done by the County Administrative Board in the first place) where it feels the local authority has not taken the laws into account. Here, for example, the Environmental Code, sets up certain "environmental quality norms" ("miljökvalitetsnormer") concerning air quality, noise, and fishing water quality. If a new development poses a risk of exceeding a norm, then the national level might put a stop to it. Furthermore the Code puts forward a requirement that says that all plans and programs that "supposedly can have a significant negative influence on the environment" should be analysed on account of environmental consequences, EIA ("miljökonsekvensbeskrivning"). Whether a new development, which for example could require a new detailed plan, should be analysed according to this praragraf is however a matter of interpretation.

In those countries that already include MM in the building permission process, how this works in relation to the process, instruments and laws identified above; and who is responsible for this integration, what are benefits of the integration of MM

Not relevant in the Swedish case

How the practice is and what problems, barriers, etc. are encountered

Not relevant in the Swedish case

3.1 Site selection for planning simulation

In the next stage of the work, planning simulations will be carried out in Germany, Lithuania, Slovenia and Spain. Whilst carrying out the data collection for WS1, Analysis, it would be useful to try to identify possible sites that could be the topic of these simulations.

6.8. Appendix 8.

Country report: Switzerland

Table of Contents

1. LUP and sustainable transport – precondition for integration of MM and LUP – in Switzerland

1.1 The legal framework underlying the planning system[1]

1.1.1 Introduction

The tasks of spatial planning in Switzerland can only be understood if one visualises its most important political, geographical, economic and cultural features. The limited area suitable for settlement of around 13,000 km2 together with a highly developed economy and high standard of living leads to strong land use pressure. As a reaction to this, great value is placed on environmental and landscape protection, the more so since tourism, as one of the most important sectors of the economy, is dependent on an unspoilt environment. Even the movement towards ever greener agriculture is based on these particular features.

The urbanization of Switzerland is very advanced in spite of the lack of large metropolises. The characteristic feature of the Swiss urban structure is the large number of small and medium-sized towns: by far the largest Swiss town - Zurich - has only 360,000 inhabitants. The population density in the conurbation strip of the Swiss Plateau allows a highly developed infrastructure including that for public transport. The dynamic of the strongly export-orientated economy has long since switched from land-intensive and polluting industry to service industries. A large number of branches of industry in the existing settlement area now provide the conditions for greater "inwards" settlement development on former industrial land.

On the other hand, the spatial planning tasks are different in the regions of the Jura, Swiss Plateau, Alpine foothills, Alps (40% of the area of the country) and on the southern side of the Alps. Furthermore, the political and cultural diversity which exists in a small area makes a national planning policy more difficult. Local, regional and cantonal self-consciousness built on direct democratic rights leads again and again innovative planning solutions. However, it also often prevents the necessary co-operation in economic areas which are defined more by transport axes than by political boundaries. These boundaries are very often the result of political decisions made in the 19th century and don’t match today's economic structures.

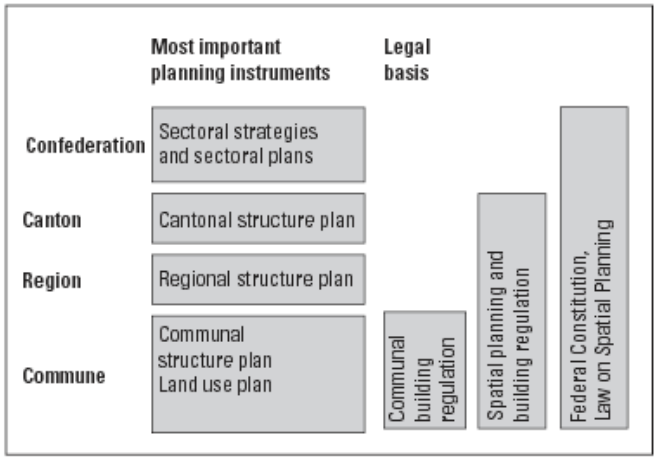
---

[1] extract from Rudolf Muggli, director Swiss Planning Association, Spatial planning in Switzerland: a short introduction, Bern; visit www.vlp.ch, last accessed 20. November 2007

1.1.2 Governance framework in which transport and land use planning take place

Spatial planning in Switzerland is defined by several important laws and different planning instruments

Figure 1: Overview of the planning instruments and the legal basis in Switzerland



Spatial planning in the Federal Constitution

The new article on spatial planning, incorporated in the Federal Constitution 1969, transferred responsibility for *framework legislation* on spatial planning to the Confederation. However, practical planning implementation was to remain essentially for the Cantons (26), which in turn often delegate a number of tasks to the communes (2'780). In addition to this federal framework legislation, the Confederation promotes and co-ordinates the spatial planning of the Cantons and also takes into consideration of spatial planning in its own activities. The limited legislative responsibility of the Confederation leads to a variety of spatial planning concepts and instruments.

The reality of Swiss spatial planning is not as simple as stated in the article of the Constitution. In fact, Confederation, Cantons and communes are jointly responsible for ensuring economic land use. They to this, inter alia, by harmonizing their activities which have a spatial impact and "implementing planning which is oriented towards the desired development of the country". The necessity of close cooperation is founded on the task of spatial planning which is to take responsibility for the whole living space. It must deal with infrastructure structure particularly those for transport, economic policy and environmental protection, as well as land use planning, nature and habitat conservation to name but a few. Spatial planning today in Switzerland is understood to be the specific tackling of all political problems which affect the living space. Consequently, spatial planning law not only includes the Federal Law on Spatial Planning, but numerous other laws of so-called functional spatial planning law. These regulate for example technical infrastructure installations (Law on motorways, on Railways, on Aviation etc.), protection of nature and the environment (Law on Nature and Habitat Conservation, Law on Water Pollution Control, Law on Environmental Protection, Law on Forests), other important spatially relevant aspects of housing (Law on the promotion of housing construction and property, agriculture and rural land laws, regional policy and tourism.

Law on Spatial Planning

The law on Spatial Planning distributes on the one hand the tasks between the Confederation, the Cantons and communes and on the other it specifies the material planning aims and principles.

Planning aims and principles

PLANNING AIMS

Its primary aim is the *economical use of the limited land area*. The importance of this aim can be understood if better if one considers that only 30 percent of the small country area (42,000 km2) is suitable for intensive human use. The aim of economic land use has two aspects:

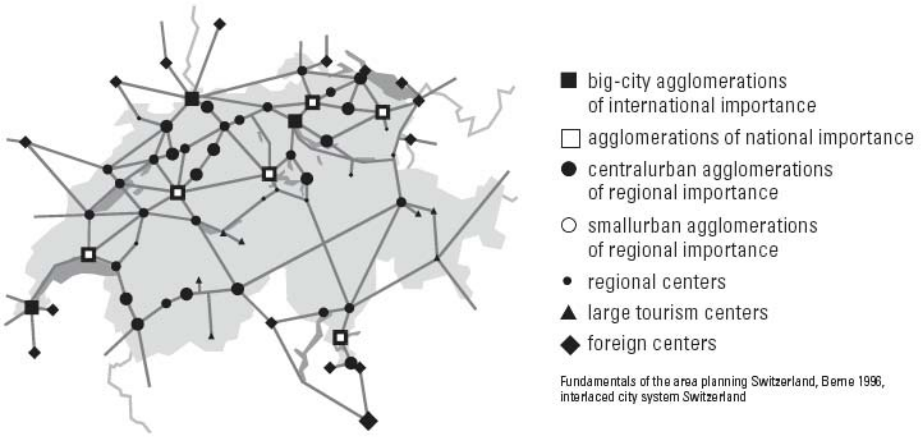
- In view of the continuous and rapid spread of settlements land consumption must be restricted. For additional needs, a check must be carried out whether they can be met in the already built up and serviced area. Concentration and change of use in the existing settlement area are central. But even with great efforts made in this area, settlement growth will hardly come to a halt; the many new infrastructure structures for transport and waste disposal will see to that.

- Economic land use means also optimal spatial organisation of the different land uses. Concentration of buildings in a well serviced settlement area ensures economical land use much better than creating scattered small settlements each with its own infrastructure provision.

The second aim of Swiss spatial planning is the *co-ordination of all activities with spatial impact* carried out by the federal, cantonal and communal authorities. All activities have spatial impact if they change land use or settlement of the country or are intended to maintain these. The “appropriate land use” and “ordered settlement” laid down in the Federal Constitution requires such co-ordination. For example, a lack of co-ordination between the arrangement of housing areas (communal land use planning) and the building of transport infrastructures (often federal planning) can result in neither being used appropriately. A lack of co-ordination therefore leads to plans being impossible to implement and finally to bad investments.

The third aim demand that *the activities of the authorities which have spatial impact be orientated towards a desired spatial development*. The spatial planning concept which this requires is laid down at federal level in the “Swiss Planning Policy Guidelines” with the related implementation programme and at cantonal level in the corresponding “Spatial Development Guidelines” and structure plans. An important element of planning policy expressed there is the orientation towards decentralised concentration”, i.e. a network of compact settlement areas of different sizes. At federal level one talks of an “interlinked system of towns and rural areas”.

Figure 2: concept of decentralised concentration



In pursuing these aims, the law defines that the needs of people and the environment must be considered equally. The forward-looking spatial planning required is thus not simply an instrument in promoting economic development, but also one of precautionary nature conservation and environmental protection.

PRINCIPLES

For balancing the different spatial planning aims, Art. 3 of the Law on Spatial Planning lays down a number of *planning principles*. These are decision-making criteria which are intended to act as guide to balancing interests. The planning principles do not in themselves form a consistent system, so that they have to be weighted against each other in each individual case. Specifically the Law lists beyond others the following principles regarding the integration between transport and land use planning:

- Arrangement of settlements according the needs of the inhabitants and limitation of settlements by

  appropriate location of homes and workplaces and *adequate linking by public transport*;

  protection of *residential areas* from harmful effects and nuisances such as *noise and air pollution* (now to a large extent put into concrete terms by legislation on environmental protection);

  creation of cycle tracks and footpaths;

  creation of favourable conditions for the supply of goods and services;

  integration of numerous green open spaces and trees in settlements.

- Appropriate location of public buildings and installations by

  considering regional needs and reducing inequalities,

  good accessibility of public and leisure facilities,

  reduction of adverse affects on these facilities on the *environment*, the inhabitants and the economy.

Since spatial planning in Switzerland is rather understood to mean state responsibility for the living space in a wide sense, functional spatial planning includes in particular the spatially relevant areas of environmental law, infrastructure law, agriculture law and nature and habitat law as well as land law and tax law.

For its part, the Federal Law on Spatial Planning regulates only plans “under this law”. These are the sectoral strategies and sector plan of the Confederation and the structure plans and the land use plans of the Cantons and communes.

In addition, there are numerous state plans which have spatial impact directly and indirectly. In particular, the planning of infrastructures such as roads, railways, local public passenger transport etc. require state planning which must be harmonized with “plans under the Law of Spatial Planning”. At federal level, the Federal Office of Spatial Planning and the competent technical offices ensure that the aims and principles of spatial planning are incorporated into these plans and that they are harmonized with the spatial planning of the Cantons. Important instruments in this process are the sectoral strategies and plans of the Confederation or the Cantons. At communal level too, this task of interlinking with urban development concepts and development structure plans is being realised.

Distribution of tasks

The Law on Spatial Planning defines furthermore the tasks of the Confederation, the Cantons and the communes.

TASKS OF THE CONFEDERATION

FRAMEWORK LEGISLATION

In the matter of legislation, the Confederation must limit itself to laying down principles. This limitation leaves the Cantons the legislative scope intended in the Constitution. However, the Confederation may regulate in detail particularly important areas which are key for the whole of Switzerland, such as implementation of principle of the separation of building zones and non-building zones as laid down in the Constitution. Federal law principles relate in particular to

- the aims and planning principles which must be considered for any spatial planning;
- the planning instruments and related rules for procedure;
- the co-ordination rules for all measures of the authorities having spatial impact;
- those individual questions which are central for the whole functioning of spatial planning, such as the permit obligation for all buildings and installations, the size of building zones, exceptional permission for building outside building zones and ensuring of *infrastructure provision of building land*.

PROMOTION AND COORDINATION OF CANTONAL SPATIAL PLANNING

The Confederation promotes and co-ordinates the spatial planning of the Cantons first and foremost through the mentioned framework legislation and through the *approval of cantonal structure plans*. However it also has the duty to co-ordinate its own tasks with the spatial planning of the Cantons. Important instruments for this are the basis studies drawn up by the Confederation and the actual planning instruments of the Confederation: sectoral strategies and sectoral plans. The sectoral plans are not directly binding to individuals.

TAKING ACCOUNT OF SPATIAL PLANNING WHEN FULFILLING FEDERAL TASKS

When fulfilling the taks conferred on it, the Confederation is also bound by the aims and principles of spatial planning. Being tied to the “demands” of spatial planning also means that the Confederation is bound by cantonal law and the planning studies based on it unless exempted by special provisions. Finally, approval of cantonal structure plans by the Confederation ensures that cantonal spatial planning does not unlawfully hinder the Confederation from fulfilling its duties. But the cantonal planning and building regulations do not require approval from the Confederation any more than the land use planning studies of the Cantons do.

TASKS OF THE CANTONS AND ASSIGMENT OF RESPONSIBILITY WITHIN THE CANTONS

SPATIAL PLANNING AND BUILDING REGULATIONS

The Cantons enact cantonal implementing legislation for the Federal Law on Spatial Planning. Cantonal Spatial Planning and building regulations also contain public building regulations, and often road construction regulations and regulations on building land rationalisation. In simple terms, the cantonal public building regulations are concerned with the requirements for building, the integration and form of buildings and the requirements for construction operation and maintenance. In addition, there are rules for procedure. Spatial planning and building regulations from the Cantons also differ from each other in the extent of regulation: large Cantons characterized by urban development have more extensive and complex legislation than small, rural Cantons. Harmonization is needed.

CANTONAL STRUCTURE PLAN

The Cantons draw up a structure plan covering the whole area of the Canton which is subject to approval by the Federal Council.

LAND USE PLANNING

In the land use plans, the Cantons lay down the binding provisions on how the land may be used in practice. Most Cantons delegate this task to the communes because they have the requisite local knowledge for plot-related land use planning. Communal land use plans are subject to approval by the Cantons. Many Cantons however also provide cantonal land use plans for projects which are of importance for spatial planning policy. For example, industrial zones, zones for heavily frequented sites or waste disposal sites of regional importance. Cantonal land use planning then replaces communal (local authority) land use planning in plot-related restricted areas.

BUILDING PERMIT

Another important task of the Cantons is to issue building permits; in order to enforce land use planning, official inspection is necessary before building is erected. Linked with this permit responsibility of the Cantons is control of building work: building without building permit and exceeding of the terms of building permit must be authorised. The permit responsibility of the Cantons is not applicable in cases where it is assigned to the Confederation under special legislation. This happens for example in the case of many national transport infrastructure projects (motorways, railways, aviation facilities, pipelines etc.). In reality most Cantons delegate the task of issuing building permits to the communes. Since this requires thorough knowledge of the law as well as technical knowledge, smaller communes are occasionally overtaxed by this task. This is usually resolved by the cantonal offices supporting the communes or a cantonal authority retaining a right of approval. So permit responsibility of the communes for buildings outside the building zones (mostly agricultural land) is ruled out by Federal Law on Spatial Planning: permits require at least the approval of a cantonal authority.

TASKS OF THE COMMUNES AND REGIONAL PLANNING ASSOCIATIONS

As already mentioned the Cantons assign the task of the land use planning and the issuing of the building permits often to the communes. Large Cantons often delegate supramunicipal spatial planning tasks to public-law planning associations (regional planning associations). In the Canton of Zurich, for example, these draw up regional structure plans, which develop spatial planning on the basis of structure plan for the whole Canton. In the Cantons of Aargau and Thurgau, the planning associations draw up basic planning studies and provide the communes with spatial planning support.

1.1.3 Existing planning instruments – function and scopes

In the section before the main planning instruments have been described in the relation of the tasks that the Law on Spatial Planning and the Constitution assign to the Confederation, the Cantons and the communes. In this section the most important with regard the integration of transport and spatial planning will be summarised.

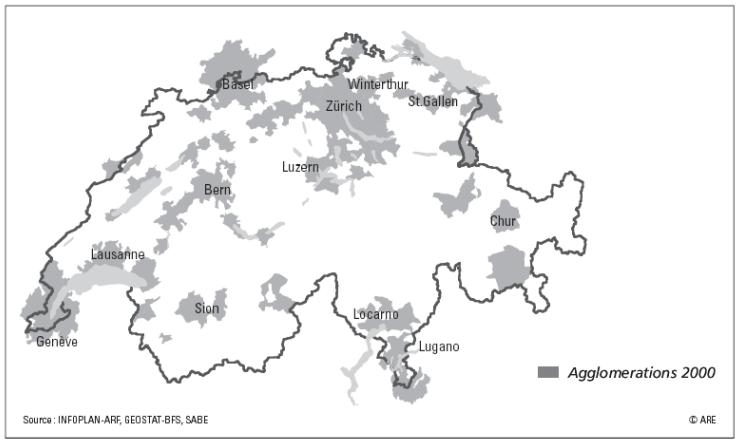
Federal Agglomeration Programmes

Beyond the task defined to the Confederation by the Law on Spatial Planning the most important planning instruments on federal level are the so-called sectoral plans. There is no sectoral plan for spatial planning on federal level but with regard on transport there are a few of them. Within this plans transport infrastructure of national importance are treated like national motorways, the great railway links and also the aviation. They have insofar an impact on spatial planning of the Cantons because on this level space for the networks have to preserved.

More important is the in 2004 by the Confederation launched programme for agglomerations as a new instrument which should help to solve the existing problems in this areas as for example the integration of urban development and transport.

Just under 75 percent of Switzerland's resident population lives in urban areas. Urban areas specifically comprise: agglomerations (comprising core city and agglomeration municipalities), individual towns/cities, corss-boarder agglomerations and metropolitan areas. Allocation to one of these categories governed by definitions drawn up by the Swiss Federal Office of Statistics and is subject to revision every 10 years on the basis of the national census. Commuter statistics are particularly relevant for classification.

Figure 3: Agglomerations in Switzerland on the base of the national census 2000



The Swiss conurbation continue to encroach on rural areas. At the same time, the typical distances between home, workplace and recreational venues are rising and are leading to high traffic problems within the agglomerations. Further problems like social segregation is becoming an important feature of agglomerations. Agglomerations frequently extend beyond cantonal and sometimes national boundaries. In the mean time the municipalities are very small and enjoy a large autonomy.

No long-term solutions will be found to the problems facing agglomerations as long the as the action taken by municipalities is limited to their own territories. In the view of the Confederation tow elements at least are key to solve the problems in conurbations / agglomeration:

- Collaboration within the agglomeration needs to be improved. Although the municipalities already co-operate within a range of committees and legal entities, these partnerships are generally on a sectoral basis and vary widely in scope.

- An integral approach is needed between the different sectoral policy areas, particularly between urban development and transport.

Facing this problem the Confederation launched a new instrument, the agglomeration programmes. An implementation-oriented tool should be developed by the agglomerations to serve as a vehicle for all conurbation-related issues. The instrument is not intended to remedy all problems and accommodate all measures, but as means of picking out priority issues from the general framework and implementing the necessary actions concertedly and efficiently. To encourage use of this tool, the Swiss Confederation provides financial incentives: it has pledged to accept a share of the costs (between 30 to 50% of the costs with a maximum engagement of overall for the conurbation transport system provided conurbations can demonstrate the optimum alignment of urban and transport planning within the framework of the agglomeration programme.

Actually over 30 agglomerations in the whole of Switzerland are elaborating integrated urban development and transport programmes. The whole process is coordinated by respective Cantons which are the direct interlocutors

of the Confederation. The programmes have to been submitted to the Confederation at the end of 2007. Then the Confederation will examine the programmes on the base of the *defined basic requirements.* This examination will take place in 2008 and at the end the Confederation will define those measures in those agglomerations which from his point of view a federal co-financing will makes sense. This selection and the correspondent investments are subject to approval by the Federal Parliament. It is planned that in 2011 the Confederation will start to give financial contributions. The process is rather complicated and the overall investment found of the Confederation is not already clear. The defined *basic requirements (BR)* are serving to the agglomeration for the stipulation of an adequate programme. Those requirements include the following issues:

BR1: Participation is guaranteed

All municipalities have to be included and consulted in the elaboration of the programme and also the populations has to be informed.

BR2: Responsible body is defined

The agglomeration has defined a responsible body, which guarantees the technical, juridical, financial and political implementation of the programme.

BR4: Analysis of the current state and the future development taking into consideration urban development and transport (including all modes) is done

Urban and transport development has to be forecasted in the long term. Transport has to be described for all modes at the current state and for the long term regarding offer and demand and regarding current and for the future expected vulnerabilities.

BR4: All measure fields have to be explored

Following questions have to answered:

Spatial Planning: Where measures explored to focus an urban development at central areas and at main public transport stops? Where consequently correspondent *development centres* defined? Do the spatial planning measures differentiate between housing, working and heavily frequented sites (shopping and leisure)?

Street infrastructure: Was the entire street network analysed not only with regard to improvement but also with regard of declassification (declassification: e.g. a street classified of cantonal importance can manage per law a much higher car traffic volume than a street of local importance). Where operational measures to ensure traffic flow analysed?

Public transport: Have long term concept of supply for railways (S-Bahn), trams and busses been developed? Where measures to solve existing weaknesses on the network developed? Is described and proven that those supply concepts require infrastructure investments (railways and street related public transport)?

Slow traffic: Is there an overall concept to promote biking and walking? Where measures to solve weaknesses on the network explored? Are there new pieces of the network proposed which are utilised only for biking and walking?

Combined mobility: Was the improvement of the quality of interchange points analysed? Have been measures for the improvement of information along the whole mobility chain defined?

Demand oriented measures: Where measures in the field of Mobility Management, parking management, transport system management analysed?

BR5: Impact and costs of the proposed measures are shown in a transparent way

The impact and the costs of the proposed measures have to be described in a transparent was and interpreted comparatively. On this base the range of measures have to be classified and the priorities have to be defined.

BR6: Implementation and controlling is assured

The integration of the programme in the cantonal and communal planning framework is guaranteed and regulated in authority binding way.

The basic requirements show that the Confederation gives some importance to Mobility Management defining this as an equivalent strategy to others. In the practical work of developing the agglomeration programmes this requirement has led to the consequence that mobility management programmes have become an integrated part of it. Following the rules of the Confederation the overall programme should be implemented by the agglomerations if co-financing of transport infrastructure is decided. This means that mobility management has to be implemented too.

Structure plan

The main planning instrument of the cantons is the structure plan. The structure plan shows how the many activities of the Confederation, the cantons and the communes which have spatial impact are to be harmonized with each other in the area. The structure plan also deals with the question of when and how the public tasks which have spatial impact are to be carried out. This produces a plan binding on the authorities which, in agreement with the Confederation, shows neighbouring cantons and bordering countries how cantonal spatial planning is intended to progress towards the desired spatial development. Depending on the state of planning work, the information may be simply orientations, interim results or firm statements. The may concern transport networks, nature conservation areas of cantonal importance, sites of waste disposal facilities, economic development areas of cantonal importance, areas for placement of heavily frequented sites of cantonal importance etc.

The cantonal structure plan also contains instructions on how to proceed: thus, for example, it may be specified how communes should proceed when designating a building zone in accordance with the requirements of federal law, where and when adjustments of the size of building zones is necessary. The cantonal structure plan is therefore not an outline of a "desirable final state" of the cantonal territory, but a process plan for co-ordinating and steering the next stages of spatial development already underway. The map therefore does not constitute the main instrument of the structure plan, but serves to clarify and define the content of the structure plan. The structure plan are constantly adjusted in line with developments ("updated") and revised at least every 10 years.

Cantons of larger size have also regional structure plans (elaborated by the regional planning associations) and also a great part of communes use this planning instrument on their geographical scale. The content is the same like in the cantonal plans but related to the regional or communal area. They have to consider the content of the cantonal plans.

Structure plan of the Canton of Zurich – section transport

The transport part of the Zurich cantonal structure plan contains on the maps the national and cantonal street network, the railway lines and all important train stations as well as the shipping lines on lake of Zurich and the site of the airport. The network or part of it is classified along the current state (existing, planned, etc.). Furthermore the plan states that the transport network of regional importance (including e.g. the public transport stops) have to be defined in the regional structure plans.

The plan also defines the cantonal objectives with regard to public transport as for example that "the whole network should be aligned to the needs of all types of traffic (commuter, leisure, etc.). Central areas of urban development as well as important sites for leisure have to be included with attractive connections into the public transport network." With regard to the regional S-Ban – System the structure plan states that "bus and trams have to guarantee the accessibility of development areas which are in a radius of 400m of S-Bahn stop and which have at least 300 residents or workplaces or educational places". Furthermore that plan says that "public transport stops have to be reachable in a good way by foot or by bike."

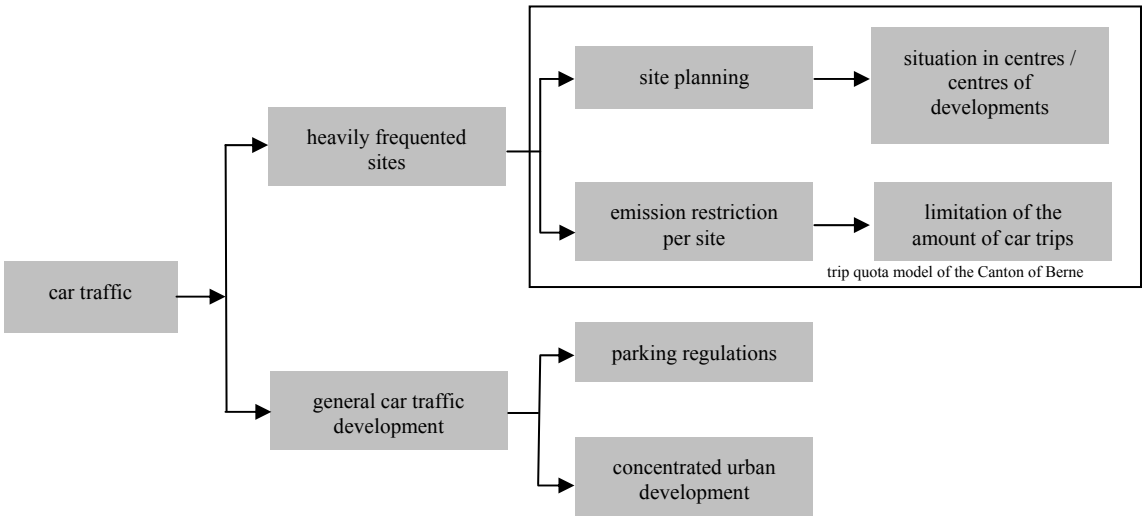
With regard to parking the structure plan states that parking facilities for biking have to be included. The amount for parking spaces for motorized transport has to be kept into a minimum in order to minimize emissions and use of space. The site selection of parking spaces should go in line with spatial planning. The dimensions of parking spaces and their management should taking into account the existing road capacities, the demand on parking and the impact of air and noise pollution.

The structure plan also deals with heavily frequented sites. Those are defined as single objects or areas with a number of single objects which are connected from the point of view of land development. Furthermore those objects or areas have a considerable impact on the spatial arrangement and generate at a minimum of 100 days per year more than 3000 car trips (in and out). To reduce the impact of HFS on space and environment a sufficient road capacity and high level accessibility with existing public transport offer and slow transport (bike and foot path network) is required. At already existing HFS a good accessibility with public transport can be required. All sites in the catchment area of 300 m of a S-Bahn stop or in den catchment area of 150 m of another public transport system with a frequency of at minimum 8 stops per hour fulfil the preconditions of a HFS. This if requirements of the communal land use plans or special land use plans are also fulfilled.

Trip quota model of the Canton of Berne

The basis for the trip quota model is the cantonal measure plan for preventing air pollution 2000 – 2015. In this plan the estimated development of car traffic emission in the Canton is forecasted. In relation to the by the federal Law on Environmental protection defined maximum air pollution limits the maximal scope of action of car traffic growth in the Canton is defined. This scope of action is calculated in the maximum allowed amount of car travelling kilometres in order to fulfil the requests from environmental measure plan. 50% of the amount is reserved for the general car traffic development. The other 50% are reserved for the heavily frequented sites in the Canton.

Figure 3: Embedment of the trip quota model



Heavily frequented sites are defined in the cantonal structure plan as planned sites with a annual medium car traffic amount of 2000 car trips per day. It also states that the main important factor of car trip emissions is not the number of parking spaces of a site but the amount of trips that a site generates. The amount is strongly related to the mix of use of planned site and where the site is located in the urban area. The more the site is integrated in city centres and along public transport infrastructures the more there is an alternative to reach the sites by alternative modes to the car.

The cantonal structure plan subdivides the amount of possible car trips to the regions. Those have to fix in their regional structure plans the areas where heavily frequented sites are possible to plan. Furthermore the model gives to the single projects a higher maximum of allowed car trips if they are planned in centres or cantonal centres of development. This because in this areas the average trip-length by car to reach the heavily frequented site is shorter and the supply of alternatives (public transport network, foot and bike-path network) is better.

The model is only targeted to visitors traffic of the site. In the framework of getting a building permit of the specific heavily frequently sites the cantonal parking regulations have to be taken into account. Due to the fact that for “big sites” the parking regulations only defines a minimum standard there is a possibility to apply for more than the minimum during the building permit process. This will be allowed if it can be shown that the number of allowed trips per year will be not be exceeded. This leads to the investor to taken also other measures like parking management, financial incentives etc. into account.

Land use plan

The land use plan is beside the communal structure plan the most important planning instrument at the communal level. Taking into account the requirements of federal and cantonal spatial planning law and of the cantonal and communal structure plan the land use plan defines the effective use of the land. The land use plan is not binding only to the authorities but to every one, that means also to investors and landowners. Land use planning is assigned the important task of laying down the boundary between building zones and non-building zones. Building zones must respect the planning aims and principles of the Federal Law of Spatial Planning. In addition there, there are an increasing number of functional spatial planning standards, in particular those of environmental law. Designation of a building zone requires, for example, that certain noise pollution values are not exceeded. Inextricably linked with specification of building zones (subdivision between housing, services, industry, central zones etc.) is the task that these should then be serviced for development and made ready for

building (art. 19 of Law on Spatial Planning). The restriction of building to building zones only makes sense if building zones market out for the needs of fifteen years ahead are also made ready for building in appropriate stages. Being made ready for building necessarily includes carrying out building land rationalisation if the existing arrangement of plots is unsuitable for appropriate building. The federal law authorises the competent authorities to initiate building land rationalisation themselves without the agreement of the landowners. The Cantons often link servicing of building land with building land rationalisation in a uniform procedure. Without reorganisation of the arrangement of plots, there would be no usable building land corresponding to spatial planning aims to meed the needs. Another task of the communes is the financing of building land infrastructure provision. It is a matter of the Cantons or communes to regulate this. *Landowners are usually involved in the financing of building land infrastructure provision with contributions ("causal taxes").*

One element of land infrastructure provision is the transport accessibility. Transport accessibility is meant by law the accessibility of a building zone with streets. Public transport accessibility as accessibility by bike and pedestrians is at the time not[2] *regulated in the land use plan. The accessibility with alternative modes to the car is subject to the communal, regional or cantonal structure plans but not of the land use plan.*

Communal land use planning consists often in a map (land use plan) and the building regulations. The building regulations are defining in a very concrete way the requirements of the federal and communal planning laws. The communal building regulations normally include general rules, existing planning instruments, designation of zones and zone rules, general building regulations, procedures and regulation to obtain building permits, final regulations and sanctioning procedures if the regulations are not respected. *In the most communes further accompanying regulations exist, e.g. regulation on infrastructure provision, street regulation (there the streets in the area of the commune are classified along there function; the amount of allowable traffic is defined per street class) or parking regulation.*

Communal parking regulations

Parking regulations are normally defined by the communes itself if the cantonal spatial planning and building regulation or the cantonal structure plan mentions it specifically as a task of the communes or doesn't mention it at all. Theoretically it is possible that the Canton defines the parking regulation for its communes but in practice this is not happing.

For the calculation of the parking standards per zone the communes are normally referring to the standards defined in the so-called VSS Normative SN 640 281 (see table 4). The VSS is the association of Swiss Transport Experts. The SN 640 281 is composed by the table of parking standards (see table 4), the allocation of site types (see table 5) and the parking standards in relation to the standards and site types (see table 6). With this distinction the accessibility of a specific site with public transport and the amount of slow traffic (amount of pedestrian and bicycle traffic) in the surroundings is taken into account.

With regard of car less housing the actual normative only states, that for "special situations like car free housing and others a deviation of the actual standards should be taken into consideration.

As already mentioned the commune itself decides how and to what extend the communal parking regulation refers to the actual normative. In practice this is be done by the most communes in Switzerland.

[2] But there are strong political voices that public transport accessibility should also included in the article 19 of the Law on Spatial Planning.

Table 4: VSS parking standards SN 640 281 (in act since February 2006): specific standard values

Use	**Unit (e.g. gross floor space = GFS)**	**Amount of parking fields**	
		Employees / residents	***Clients / visitors***
Housing	Per 100m2 GFS or per one apartment	1	0.1
Industry	100 m2 GFS	1.0	0.2
Stock ground	100 m2 GFS	0.1	0.01
Business (with high client frequencies like bank, post office, medial centres, etc.	100 m2 GFS	2.0	1.0
Other Businesses (with lower client frequencies like assurances, etc.)	100 m2 GFS	2.0	0.5
Retail (with high client frequencies like, shopping centres, etc.)	100 m2 sales floor	2.0	8.0
Other Retail (with lower client frequencies like book store, etc.)	100 m2 sales floor	1.5	3.5
Hotel	One bed	0.5	
Youth hostel	One bed	0.1	
Restaurant, Bar, Café	One bed	0.2	
Clinic, small hospital	One bed	1.0	0.5
Senior residence, sanatorium	One bed	0.5	0.3
Cinema	One seat	0.2	
Theatre, opera, etc.	One seat	0.2	
Museum, gallery, etc.	100 m2 floor	1.0	
library	100 m2 floor	1.0	
Disco	Per seat or per m2 dance floor	0.3	
Church, etc.	Per visitors seat	0.1	
Cemetery	100 m2 floor	0.1	
Kinder garden	Per classroom	1.0	0.2
Primary and secondary school	Per classroom	1.0	0.2
Music school	Per teaching room	1.0	0.2
Trade school	per scholar	0.3	
University, Business school	Per student	0.4	
Meeting and conference rooms	Per seat	0.12	
Skating rink	100m2 skate floor and in addition per visitors seat	2.0 + 0.1	
Indoor swimming pool	Per wardrobe place and in addition per visitors seat	0.2 + 0.1	
Outdoor swimming pool	Per 100m2 ground floor	0.4	
Gymnasium	Per 100 m2 ground floor and in addition per visitors seat	2.0 + 0.1	
Fitnesscenter	Per wardrobe place	0.3	
Athletic field	Per 100 m2 floor and in addition per visitors seat	0.4 + 0.1	
Stadium (football, ice hockey)	Per visitors seat	0.15	
Tennis ground	Per one single field and in addition per visitors seat	2.0 + 0.1	

Table 5: VSS parking standards SN 640 28: assignment of site types

Amount of slow traffic in % of overall traffic of persons	*Public transport frequency weighted with the amount of residents in the area served by public transport and during the relevant operation time of PT*		
	> 4 times per hour	*1 to 4 times per hour*	*Not served with PT*
> 50%	A	B	C
25 to 50%	B	C	D
< 25%	C	D	E

Table 6: VSS parking standards SN 640 28: parking standards in relation to the assignment of site types

Site type	Mimum amount of parking field (in % referred to standards in table 4)	Maximum amount of parking field (in % referred to standards in table 4)
A	20%	40%
B	40%	60%
C	50%	80%
D	70%	90%
E	90%	100%

Parking regulation of the city of Zurich, 1996 (actually under revision)

The parking regulation of the city of Zurich is in force since 1996. It refers to the law on spatial planning and building regulations of the Canton of Zurich. Actually the regulation is partially under revision. The applied standards defined as normal requirement are:

	1 parking per m2 space	Amount of parking for visitors, clients, etc. in %	Remarks
Housing	100 (120)	10%	In the actual revision amendment from 100 to 120m2 is foreseen
Business			
<= 500 m2 GFS	120	25%, with high share of clients traffic = 50%	
> 500 m2 GFS	210	25%, with high share of clients traffic = 50%	
Shops			
<= 2000 m2 GFS	100	75%	
> 2000 m2 GFS	160	75%	
Restaurants, Bars, etc.	40	75%	
Stocks, etc.	350	15	

In addition the regulation also differs between areas of the city and impacts of NO_X and defines reduction factors to the normal requirement:

	Amount on the base of the normal requirement values considering quality of accessibility with public transport		Maximum values as long as maximum NO_X standards are not over exceeded
Area	*Minimum*	*Maximum*	
A (old town)	10%	10%	10%
B (city centre)	25%	50%	45%
C (areas close to the city centre and centres of districts in the city)	40%	75%	70%
D (areas around centres of districts)	60%	105%	95%
E (other areas)	80%	130%	130%

The most important foreseen amendments of the actual revision of the parking regulation are:

- car less housing: sites with car less or free housing can be released partially or completely from the obligation of the parking regulation if a reduced need of parking is guaranteed by a mobility concept and a permanent controlling concept. The tenant is obliged to guarantee the normal parking amount defined by the regulation if the rules defined in the mobility concept are surpassed repeatedly.

- parking for two-wheelers: the till nowadays applied directive shall be integrated in the parking regulation. That means that it becomes legally binding. The directive include:

	1 parking field per	*Therefore amount for client, visitors in %*
Use		
Housing	40m2 GFS	10%
Offices	500 m2 GFS	50%
Retail	160 m2 GFS	75%
Shopping centres	200 m2 GFS	75%
Restaurants, Bars		10 parkings

- integration of trip quota model for heavily frequented sites

Parking regulation of the commune of Cham, 1996 (in force since Mai 2007): Integration of Mobility Management

The parking regulation has one article which refers completely to Mobility Management (Article 9):

If in a business zone (according to the communal land use plan) 50 ore more car parkings are foreseen in a common accessible area then a mobility management concept has to be delivered with the building permit. The concept has to show how the mobility of employees, visitors and clients can be assured with other modes than the car, e.g. public transport, by bike and by foot. Furthermore the concept has to include binding objectives and measures and a controlling instrument. Those will be accorded by contract between the commune and the landowner at form a part of the building permit.

The regulation also refers to car less housing areas and to the application of trip quota models (Article 10):

The council is allowed to reduce the normal requirement of amount of parking at special circumstances. A reduction at car free or car less housing is possible if the rules are fixed by contract and insert in the register of real estates. At sites used for business the council is allowed in accordance with the Canton to fix a allowed maximum of car trips instead of the number of parking.

Special land use plan

The special land use plan is an important communal planning instrument applied in certain areas of the territory or for specific themes of urban development. The realisation of greater developments often needs a lot of procedures and permits. In the land use plan all this requirements are coordinated. The special land use plan is often applied for the building of shopping centres, sports stadiums, greater leisure facilities, revitalisation of districts etc. Such greater developments need an overall assessment of all spatial and environmental related elements with the participation of the population.

In most of the Cantons different types of special land use plans are known: master plan, district plan, etc. The names of the plans are not used coherently. According to the federal Law on Spatial Planning special land use plans have to complete beyond others following requirements:

- the plan has to be enacted by the public authority (commune, Canton) also if it compiled by privates,
- the plan has to be approved by the Canton,
- the plan has to be compiled according the established special procedures,
- it has to be established in a process of participation,
- the content of the plan has to be communicated.

The special land use plan is composed by a map (where on the level of parcel the use is indicated) and the special land use regulations. The special land use plan does not substitute the building permit process. It is an element of the planning phase where a lot of regulations are already fixed. The special land use plan offers also the possibility to local authorities to fix agreements by contract with landowners.

Special land use plan in the city of Zurich: the case of Sihlcity

Sihlcity is a multifunctional site with different type of uses (retail, shops, cinema, hotel, services, fitness, wellness, etc.) with an overall area of around 42'000m2, located in the city of Zurich. The rentable area extends to 97'000 m2. Sihlcity was opened at March 2007. It has around 19'000 visitors per day and around 2300 working places.

Sihlcity was subject of a specific land use plan. In this process transport accessibility was regulated beyond others. The main elements where therefore fixed in a contract. Following main elements with regard to transport issues have been included in the contract:

- public transport: the landowner has to finance the running costs of an extended bus line and extend tram line;
- bike parking: the land-owner has to construction 600 parkings for bikes
- motorized transport: the access ramp between Sihlcity and the main road has to be paid by the land-owner
- parking: the maximum number of car parking is 850, a parking management concept with paid parking has to be introduced
- CarSharing: dedicated parking space for Mobility CarSharing has to be assured
- Trip quota model: A maximum of 8'800 trips per day (in and out) are allowed. This amount has to be reached within 5 years starting from 10'000 trips per day. In the night a maximum of 1'300 trips are allowed and in the peak hours a maximum of 800 trips per hour.
- home delivery service: a home delivery service by bike has to be introduced by the landowner.

In addition to this requirements to be completed by the landowner the city of Zurich improved the accessibility by bike of Sihlcity. The public transport company made an integrated communication campaign a few weeks before Sihlcity was opened. It has to be stated that the site is well connected by all modes of transport. There is a stop of the regional railway system just in front of one of the main entrances to the area. Furthermore a bus and tram line serves the site also. On the other hand the site is also well accessible by car due to the fact that one the

main highways around the city is just ending at approximately one kilometre of distance. Except the requirements defined in the contract the landowner has introduced other mobility management measures. Employers have for instance no parking permits and accessibility information to the site with all transport modes are included in all information mediums (website: www.sihlcity.ch, brochures, leaflets, etc.). Within the shopping are public transport timetable information on an electronic board is available.

The landowner communicated after 100 days of opening following results:

- Frequencies: more than 1.65 Mio. of visitors, that means around 19’000 visitors per day,
- home delivery service: 1’800 deliveries in 100 days, around 20 deliveries per day,
- client streams: 72% with alternative modes, 28% with the car,
- parking: not fully occupied during the week, on Saturday fully occupied, medium permanence per car: 2 hour and 30 minutes,
- amount of car trips: 360’000 car trips in 100 days, that means average of 3’600 per day (10’000 respectively 8’800 allowed by contract),
- clients public transport in number of clients getting and descending from the vehicles at the transport stops: increment of more than 100% in relation of the situation before opening Sihlcity.

1.2 Sustainable transport in the LUP process

1.2.1 How far sustainable transport is an objective for an outcome of the LUP process?

The Report on the Swiss Planning Policy Guidelines, which was approved by the Federal Council in 1996, establishes the Confederation's strategies for action in spatial planning policy. It is based on the planning aims and principles of federal Law on Spatial Planning. In the interests of sustainable development of the living and working environment, the strategies of the Swiss Planning Policy Guidelines aim to consolidate the network of towns, to maintain and improve quality of life and of the environment in built-up areas, to strenghten rural areas, to protect nature and the landscape, and to ensure the better integration of Switzerland within Europe.

In its already mentioned planning principles the Law on Spatial Planning which is the reference law for all spatial planning activities of the Confederation, the Cantons and the communes the integration of spatial planning and transport is clearly stated. As also already stated an important element of Swiss Planning policy is the orientation towards decentralised concentration.

On the level of Confederation the integration of transport is on the base of the mentioned sectoral plans. Those are defining beyond others the transport infrastructure supply on a wider scale. In the cantonal and the often existing communal structure plans transport is a part of it. See for that also the example of the Canton of Zurich and Berne in the former chapter. Less integration is of course taking place on the communal level, especially at communes in the rural areas. With regard of public transport the Confederation in his duty "to assure comparable access to basic needs and public services for all members of the population and for all parts of the country" co-finances together with the respective Cantons the regional bus lines.

1.2.2 Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in the LUP? Are there any conflicts between policies at different levels of government?

See the section before and the former chapter. In the Law of Spatial Planning the primary aims for Swiss Spatial Planning on all the levels are the economical use of the limited area, the co-ordination of all activities with spatial impact and the demand that the activities of the authorities which have spatial impact should be oriented towards a desired spatial development. So the reference in the law is clear. Conflict are of course existing and its beyond others also a consequence of the Swiss Tax System. The tax system is organised in a very federal and decentralised way. The main tax income is generated on the level of communes. That has the consequence that the communes are in concurrence between each other in attracting for example big developers. Therefore often the margins of the existing laws and regulations give space of interpretation and economic development is often given a higher priority. This situation is tried to be corrected on the cantonal level in the way that zones for economic development of cantonal importance are already defined in the cantonal structure plans, often along public transport axes or in centres with good accessibility with sustainable modes and high population densities. Although this strategy is a good base it doesn't assure that the use of the sustainable modes.

The dimension of building zones should be law not exceed the prospective needs in the timeframe of 15 years. This need is based on forecasted and often also desired development of the population and the work force in the commune. This leads to the fact that sometimes building zones have been made to large because the forecasted and desired development didn't took place.

1.2.3 Do any of the policies seek on certain elements?

POLY-CENTRIC URBAN STRUCTURE

Decentralised concentration is one of the main planning aims of Swiss Spatial Planning. This aim is reflected in all structure plans of the cantonal and communal level and in the relevant sectoral plans of the Confederation.

MEDIUM AND HIGH LAND-USE WITH A MIX OF DIFFERENT USES

Yes the communal land use plans does reflect this policy also defined in the cantonal and communal structure plans.

CONCENTRATING TRIP GENERATING DEVELOPMENT ALONG PT CORRIDORS AND NODES

This policy is defined in the cantonal structure plans. But not in every canton it is clear expressed. With regard of heavily frequentend sites some Cantons have included aspect like allocation, accessibility with all modes etc. very in detail (see example of the Canton of Zurich or Bern in the chapter 2.2), others not. The Confederation has in 2006 expressed its recommendation to the cantons to include the rules and requirements with regard of heavily frequented sites already in the cantonal structure plan. But not all Cantons have done it so far. Amendments in the cantonal structure plan have to be accepted by the cantonal parliament. So allocation and restrictions targeting heavily frequented sites are often also subject of political debates. Especially in politically conservative dominated cantons any kind of obstacles to the economy are very hard to overcome.

RE-USE OF BROWN FIELD SITES

Yes structure and land use plans takes this strategies in consideration. And in practices the re-use of brown field sites is often done because former industrial areas are normally located in very central areas.

TRANSPORT IMPACT ASSESSMENT

Transport impact assessment as a planning instrument does not exist. But especially on the level of special land use planning the accessibility with all types of transport is an important element which is taken into consideration in the planning process. Changing sites if one is unsuitable on transport ground doesn’t happen at all. The commune and the canton defines a suitable transport network in their structure plans. Accessibility to parcels is meant in the land use plan as street accessibility. In the framework of building permit process the commune can oblige the developer to a financial contribution for getting the parcel accessible also with PT.

MAXIMUM PARKING STANDARDS

As already mentioned in the former chapter 2.2. there is a national normative on parking standards. Communes are mostly taken reference to this normative. In very dense areas like Zurich, Berne, Basel, Geneva (which at the time are governed by social and green parties) the standards are more restrictive than as declared in the normative. This because in this cities - despite the political aspect - there is also a very good public transport supply. The communal parking regulations are in the most cases defining a range of minimum and maximum standards. As far as known there are no cases where only maximum standards are applied in the regulations. But there are still communes where a minimum requirement on the amount of parking is defined, especially in the rural areas.

1.2.4 Carried out work on the effect of integrating LUP and sustainable transport on the market

Developers are binded to building regulations and land use plans. So it is depending how strong the planning instruments on the cantonal and communal level are applied. In general the most conflicts with developers are existing with the question of parking spaces in the process of getting building permits. Therefore big centres like Zurich have a comfortable role because although they have a rather restrictive parking policy they can offer a lot of other market advantages to the developers. On the other hand big developers have realized that a good public transport accessibility is also an important location factor. Green field development nearby highways is still happening in Switzerland but the tendency seems to go in the other way. That means that important developments are located more an more in centres and along public transport axes. The planning instruments and the environmental law is sustaining this tendency. But at the end it is a political decision how the single cantons and the communes interpret the margins left open by the law.

1.2.5 Organisational/Institutional integration to encourage LUP and transport integration and barriers of integration

The Canton and the communes are those entities which are responsible for the supply for public transport. They are financing the supply and they are mostly organised in so-called transport associations. Exception is the already mentioned situations in rural areas where the Confederation is also co-financing the supply. How and in what quality the supply has to be is at the end a political decision. The cantonal and communal structure plans are defining the measures. If there are important improvements on the network where a considerable financing is needed then it has to be decided by the parliaments, sometimes by the population (with voting).

The structure plans are the basic instruments. Once they are politically approved they are forming the legal base for implementation.

There are no barriers of integration because transport planning is a part communal or cantonal structure plans.

1.2.6 Where integration of policies exists – any evidence of its success on the ground?

Yes of course. City centres are regenerating. The construction of heavily frequented sites in the green field nearby highways is getting more and more difficult. Re-use of brown field sites is advanced. And in general the supply on public transport is highly developed especially in Swiss Agglomerations.

Integration of MM is indirectly promoted by strongly formulated parking regulations. In very few cases the integration takes place in the parking regulation itself (see the example of the parking regulation of the commune of Cham). There are good examples of integration as mentioned in chapter 2.1.

As mentioned before at the end it is not a matter of content and scope of the existing planning instruments but of the political willingness to assure that integration happens. Therefore cities like Zurich are of course more advanced then small communes with finance problems located in the agglomerations and in rural areas. The same situation also states on the level of the Cantons.

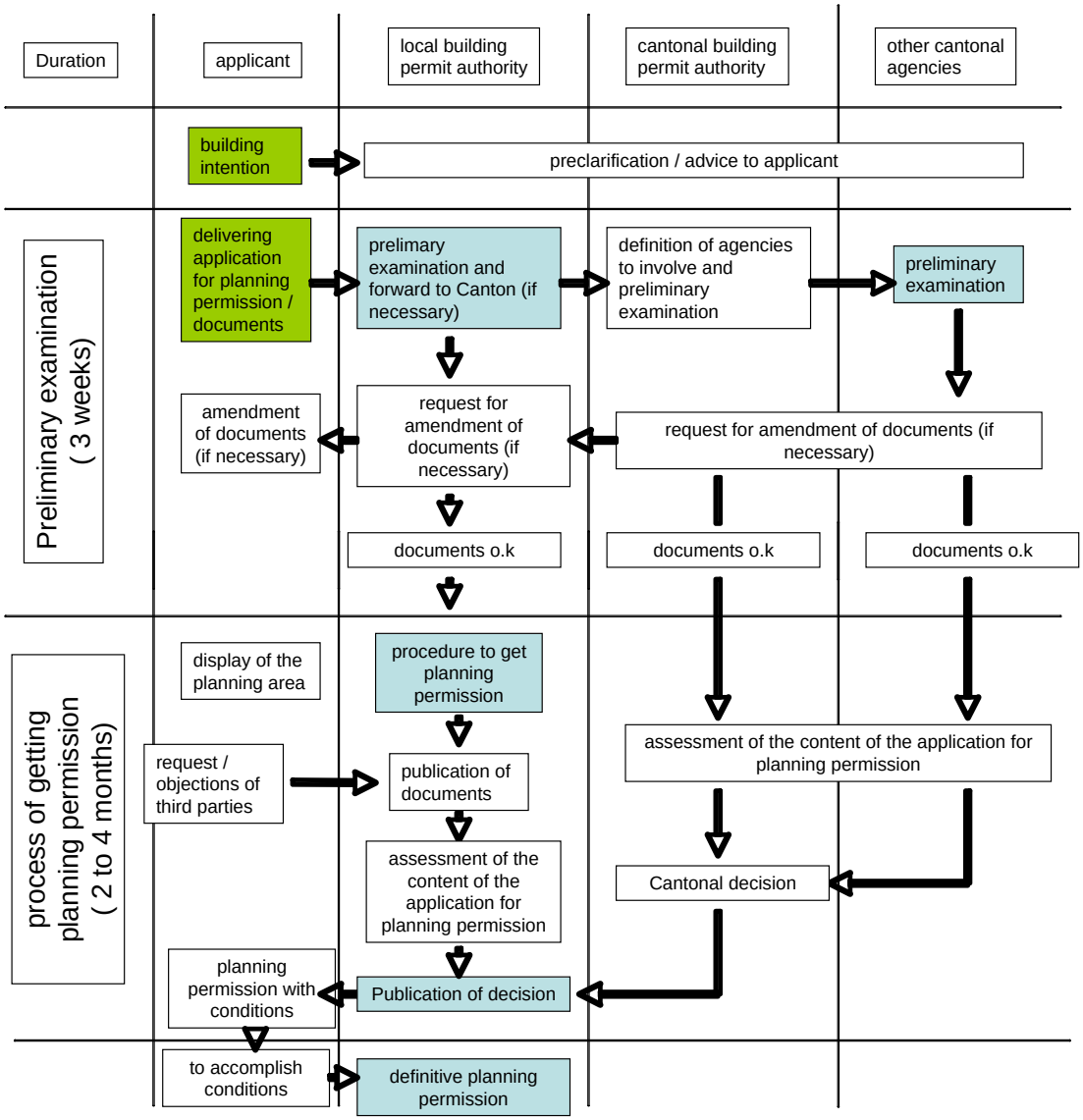
On the other side the promotion of car less or free housing is still in the early beginnings.

2 Integration of MM and LUP

2.1 Steps of the building permit process

The steps of the building permit process are defined in the spatial planning and the building regulations of the Cantons. Those are referring on the Federal Law of Spatial Planning. Depending on the size of applied development a normal building process is getting into act or a specific land use plan has to be delivered (see case of Sihlcity in the chapter 2.1). In addition applicants of developments where more than 300 parking places are required have also to deliver a environmental impact assessment study. The formal process is shown on the case of the Canton of Zurich (see figure 7). Normally the communes have their own building regulations which are based on the requirements of the cantonal regulation.

Figure 7: Process to get a building permit in the Canton of Zurich



The first step is the preliminary examination process. That means that the landowner has to deliver the application for planning permission and the relevant documents. Several aspects have to be treated: amount of GFS subdivided by different type of use, specific building designs, landscaping etc.

Transport matters have to be treated in different ways. If a development request enters under a normal building permit process than normally the amount of required parking spaces per type of use is the only indication which has to be delivered. If by law (more than 300 parking spaces requested) an environmental impact assessment study is needed than this has to be delivered by the applicant. The same goes for developments which need a special land use plan. Normally applicants which have to deliver a specific land use plan have also to deliver an environmental impact assessment study.

The preliminary process is a formal process. The objective is to prove if all the information needed was delivered and compiled in the right way.

If the preliminary examination process is approved then the process of getting planning permission starts. There the assessment of the content of the application of planning permission is in the centre of the work. The work is coordinated by the communal building authority. The authority has the duty to involve all the relevant communal departments to give their statements and also to coordinate the work with the cantonal building permit authority. On the cantonal side the building authority has to include all the relevant departments on the cantonal side. In the mean time the documents have to be published because the procedure foresees the right for objections by third parties. Third parties can be e.g. neighbours or environmental organisations. If there are no objections and everything is o.k. and the laws and regulations are respected, than the building permit can be issued in 2 to 4 months. If not than the procedure has a much longer duration. The communicated decision of the local building permit authority can also be legally objected by the applicant if he thinks that e.g. the required conditions are legally not corrected. This can end to the Federal Court.

NORMAL BUILDING PERMIT PROCESS

For developments of smaller sizes there is no need of involvement of the cantonal building permit authority. The commune can decide itself. The right of objections by third parties remains. From the transport point of view the transport department in the commune if the parking regulation is respected. If not, than a planning condition can be that the amount of parking shall be reduced. If the communal parking regulation, like in the case of the commune of Cham (see example in Chapter 2.1), foresees the introduction of Mobility Management than this can also be defined as condition.

BUILDING PERMIT PROCESS WHICH REQUIRES AN ENVIRONMENTAL IMPACT ASSESSMENT STUDY

This is the case where more than 300 parking spaces are required. The environmental department of the Canton assesses the content of the study normally. If they come to the end that the environmental impact generated by the planned development does exceed the legally defined air pollution and noise emissions standards than a condition can also be the reduction of the requested amount of parking spaces and / or that a trip quota model has to be applied. This depends if the cantonal law and building regulation or the structure plan foresees this (see the case of the Canton of Berne and the Canton of Zurich for e.g. heavily frequented sites). In addition the transport department of the commune has to assess if the requests of the communal parking regulations are respected but not from an environmental point of view.

BUILDING PERMIT PROCESS WHICH REQUIRES A SPECIFIC LAND USE PLAN

If a development requires a specific land use plan than transport matters are already treated in this planning process. This can lead, like the mentioned case of Sihlcity in Zurich that the applicant has to fulfil certain transport conditions, which are fixed in the plan and in a contract. This can also include mobility management measures like the Sihlcity case shows, the implementation of a trip quota model or the co-financing of the

improved public transport infrastructure by the applicant. Also here an important part is the assessment of the requirements of the communal parking regulation is respected. If the Due to the fact that a specific land use plan has to be published the right of objection of third parties exists here too. The specific land use plan has to be approved by the commune and the canton before the building permit process starts. That means that all the necessary conditions, including transport matters are defined in this process and the process of getting a building permit should not be complicated anymore.

2.2 Planning instruments included in the building permit process

The most important planning instruments are:

- cantonal spatial planning and building regulation
- communal land use plan and building regulation
- specific land use plan
- communal parking regulation (based on the national normative)
- communal and cantonal structure plans
- cantonal measure plan for environmental protection (which defines the noise and air pollution standards)
- Law on Environmental Protection (which describes when an applicant has to deliver an environmental impact assessment study)

Those instruments are already described with examples in the former chapters.

2.3 How are the planning instruments applied in practice?

It is difficult to give a general answer on this. Spatial planning in Switzerland is organized in a very federalistic way. Of course the Law on Spatial Planning defines aims, principles and also the rules for the building permit process. Those than are defined very concrete on the cantonal and then local level. The Confederation has not a decisive power of enforcement certain decisions taken by the communes or the cantons. Except the Law on Spatial Planning or the Environmental law is heavily not respected.

With regard of the building permit process there must be known that communes are in general in concurrence between each other in attracting big developers because especially of tax reasons. Big cities with central function are therefore in another position than small communes in rural areas. The same goes for cantons. That means that building regulations or parking regulations give certain margins of interpretation.

The special land use plan is an instrument which gives a certain flexibility. Deals or agreements by contract are possible with landowners. How strong for instance conditions in transport accessibility are applied and enforcement against the landowner is done at the end depends from case to case and from the circumstances of the cantons and communes.

Of course a Canton of Berne with his cantonal trip quota model for heavily frequented sites or the city of Zurich or the commune of Cham with their rather restrictive parking regulations are forerunners. And there are other cases like that in Switzerland. But often it happen that especially communes do not like to overload a planning permission with conditions because they have fear that the developer goes to another commune.

2.4 To whom are the planning instruments adressed?

- cantonal spatial planning and building regulation >> public authorities
- communal land use plan and building regulation >> to everyone, that means also to landowners
- specific land use plan >> to land owner(s)
- communal parking regulation (based on the national normative) >> to everyone
- communal and cantonal structure plans >> to public authorities
- cantonal measure plan for environmental protection (which defines the noise and air pollution standards) >> to public authorities
- Law on Environmental Protection (which describes when an applicant has to deliver an environmental impact assessment study) >> to everyone

2.5 Flexibility of instruments in order to include MM

In general all relevant and mentioned planning instruments are able to support the set-up of Mobility Management, sometimes in a direct, sometimes in an indirect way. Herewith some statements with regard to the most important instruments touching the building permit process:

COMMUNAL PARKING REGULATION

Communal parking regulations have a strong influence on the set-up of mobility management on the site level. If the parking regulation has a restrictive approach with regard of the amount of parking spaces per type of use and location then the supply on parking for new developments granting for permission will be rather small. That leads indirectly to the situation that developers have to introduce supporting measures because parking supply does not correspond to the offer. The parking regulation of the city of Zurich has this indirect effect for all new developments in the city. The revision of the parking regulation foresees that parking standards for bike parking will be included in the parking regulation. Till now only recommendation guidelines to biking parking where given to applicants for planning permission with a remark that the applicant can be enforced to install bike parking. If bike parking requirements is included in the communal parking regulation than this requirement is further enforced by law. The same goes for the requirements of trip quota models and the possibility of the reduction of the parking standards for car free or car reduced housing. If they can be insert in the parking regulation than the requirements are empowered.

The example of the parking regulation of Cham shows that the regulation gives the possibility of inserting directly the requirement of implementing mobility management as an article.

SPECIFIC LAND USE PLANS

Specific land use plan is a further instrument where mobility management requirements can directly fixed in a plan respectively in a contract with the applicant. See therefore the case of Sihlcity.

BUILDING PERMIT PROCESS

If the communal authority is not willing to fix legally the requirements for mobility management the possibility remains to give the applicant advices to mobility management. This is a strategy which the Canton of Aargau with his mobility management platform *aargaumobil* (www.aargaumobil.ch) will start next years. To raise awareness on this issues the platform will give courses to local and cantonal building authorities on the one hand and to employees of the transport department of the canton which are included in the assessment of building permits on the other.

How much the existing planning instruments and the building permit process support or hinder mobility management depends on the concrete formulation of the content of the instruments. This at the end reflects the political willingness and the importance which the authorities gives to mobility management and to parking management. This differs from commune to commune and from canton to canton. There are existing, like already shown in the former chapter, some forerunners.

2.6 To which other instruments and laws are they referring?

As already mentioned the law on environmental protection is important in the building permit process. It defines if an applicant has to deliver an environmental impact assessment study or not. This is the case if the development foresees more than 300 parking spaces.

A further important law is the so called *right of objection for environmental organisations* (www.verbandsbeschwerde.ch). This right is only open for national organised environmental organisations, which exist more than 10 years. Those organisations have the right to object at developments which have to deliver an environmental impact assessment study. If they think that results of the study do not reflect the requirement of the law, they have the possibility to object against a building permit decision or the decision regarding a specific land use plan. The Swiss Transport and Environment Association is very active in this field especially with regard of heavily frequented sites. The practice is that applicants agree to the conditions imposed by the associations. In other situations the two parties are going to the court. The court has at the end the power of decision.

2.7 Countries where MM is integrated in the building permit process: How this works?

see chapter 3.5 and examples in chapter 2.1

2.8 How is the practise and what problems and barriers?

As already stated do the existing planning instruments and building permit procedures permit the set-up of mobility management. At the end the political willingness counts if supporting regulations are inserted in the structure plans (for example with regard to requests related to heavily frequented sites), in the specific land use plans, in communal parking regulations and in the building permit process. Forerunner examples as showed in the former chapters exist but of course the integration or the support of MM in the planning and building permit process has not at all become a standards.

Finally, it is not a problem of lack of instrument but of political willingness.

Country report: UK

Table of Contents

1 LUP and sustainable transport – preconditions for integration of MM and LUP – the UK

1.1 Analysis framework: integrating transport and LUP

The analysis framework for the UK is intended to serve as a guide to consistent information gathering so that as far as possible partners will gather comparable information. The purpose of this first analysis framework is to identify the state of preconditions for the integration of MM into LUP in European countries represented by the WP D partners and, in addition, in Ireland and the Netherlands.

1.1.1 The legal framework underlying the planning system

The governance framework in which transport and land use planning take place

There are three levels of government active in planning in the UK: elected national government, appointed regional government, and elected local government.

The top level makes planning law and produces guidance (this is not law but only advice) to lower levels of government on the objectives that their plans should seek to achieve, the way these objectives should be achieved, and how the control of new development should be carried out.

Regional government is made up of appointees from the various local governments in the region. It produces statutory regional spatial strategies (RSSs). These must take into account national government objectives and policies, as well as regional issues. The RSS contains a non-statutory regional transport strategy which local councils must take into account when drawing up their (statutory) local transport plans. The RTS should be coordinated with the RSS so that, for example, areas identified for major new (re-) development in the RSS will be those that are well served by a variety of means of transport. The RSS is likely to contain policies that support sustainable transport e.g. most will contain policies such as "new development must be sited in order to reduce the need to travel, especially by car". Transport infrastructure schemes will be included in the RTS and in general their impacts on land-use will be considered, at a broad level; those proposed schemes that are likely to cause a large amount of pressure for new development in greenfield areas may be ruled out or changed, because their land-use impacts are judged to be too unsustainable.

In Scotland and Wales there are no regional authorities for planning, although in Scotland there are regional authorities for transport.

Local government makes decisions on planning permission, in accordance with its own local plan (LDF) which it produces. The LDF, and decisions about planning permission for individual sites, must take into account national guidance and the RSS, as well as the LDF. The LDF should take into account the LTP for the area (e.g. large developments should not be planned for areas where there is little transport investment planned or transport available), although the extent to which this occurs in practice varies a great deal. As detailed in Table 3.2, there is a system of transport assessments for individual new developments to ensure that their transport impacts are mitigated. In addition, planning applications for certain sites may be ruled out immediately because their location (e.g. on the edge of town) is judged unsuitable from a sustainable transport point of view.

In some areas local government is further subdivided into County Councils, which have a transport role, and District Councils, which carry out local planning including the granting of planning permission for new development. In other areas, these two functions are combined into one (Unitary) local authority.

Coordination is not perfect but the land use planning system is relatively well-integrated largely because there is quite a high degree of central government control. This is because RSSs and LDFs have to be approved by central government and because central government can if it chooses take individual planning decisions out of the hands of local government. At a national and regional level transport and land-use policy are relatively

coordinated and moving in the same direction of trying to make settlements, and travel, more sustainable – or at least, to have lower rates of growth in car use in new developments, compared to old ones. At a local level, especially where transport is the responsibility of County councils, but planning the responsibility of smaller District Councils, there are conflicts, as the smaller councils are generally more interested in development and less in unsustainable transport patterns.

Planning instruments that exist

National government produces legislation governing the operation of the land-use planning system and guidance to regional and local authorities on how they should both set planning policy (e.g. how plans should be drawn up) and the factors that they should take into account when making planning decisions for particular developments. This is called Planning Policy Guidance and is published on many topics, including transport (PPG13). These documents are available at http://www.planningportal.gov.uk/england/professionals/en/1020432881271.html .

National government also has the power to "call-in" specific development decisions where it feels that it has a particular interest in the case and/or where it believes that the local authority has not taken into account its own, or regional or national, planning policy in reaching its decision to grant or refuse development. Therefore, national government in the UK has a significant influence over local planning decisions that is absent in many other countries.

Each region of England is required to produce a Regional Spatial Strategy (RSS) which sets out the "broad development strategy for the region for a fifteen to twenty year period"3. This statutory document outlines the government's transport and planning policy which then provide part of the framework for determining planning applications in the region. An example of a draft RSS is available at http://www.southwest-ra.gov.uk/nqcontent.cfm?a_id=836. An example of a draft regional transport strategy is available at http://www.gos.gov.uk/gosw/transport/regtransstrat/.

Local Government organisations are required to produce their own local policy that reflects national and regional policy and guidance. The Unitary and District Councils must produce Local Development Frameworks (LDFs) that reflect the policies outlined in the RSS as well as their own local priorities and objectives and which provide a key part of the framework for planning decisions on individual developments. These LDFs are also documents with legal weight and cover a period of 10 years. An example of a draft LDF is available at http://www.colchester.gov.uk/Info_page_two_pic_2.asp?sec_id=1283.

The two principal legal mechanisms by which MM can be required of developers – the planning condition and the planning obligation (or agreement) were not designed specifically for transport-related measures but to secure any developer contribution or activity related to the development. A condition is as its name suggests a requirement on a developer to put something in place for the development to go ahead: an example could be the provision of cycle parking. If it is not in place, the development should not open. A condition could also be used to regulate the hours of operation of car parking within a site. An obligation is negotiated and is used to secure funds from a developer to provide infrastructure and (recently) services on or off the site; these are supposed to be in some way related to the development. A travel (MM) plan that legally required the developer to fund additional bus services and to meet mode share targets could only be brought about through an obligation.

Legal and theoretical scopes, functions and contents of each instrument

National planning law is drawn up by Parliament and is the product of the thinking of the government of the day, influenced by major lobby groups. The key influences on planning law are land and home-owners who want to protect their property values and amenity; the countryside lobby (very strong in Britain) who want to limit urban sprawl; the development industry; and the environmental lobby. The power of the latter varies over the years, but it is quite strong at present (2007). So the planning system has to keep these groups happy, which means striking a balance between controlling and permitting development, making the planning and development process speedy

[3] www.planningportal.gov.uk accessed 31 August 2006

and efficient, and protecting the environment. It is interesting that in the 1980s the then conservative government significantly weakened the planning system for ideological reasons. However, the development industry then lobbied the government for a strengthened planning system, because it found that it needed a stronger framework within which it could operate, presumably more profitably.

Regional and local government has considerable power to make plans which then govern where development can take place. However, this power is strongly mediated through the lengthy plan-making process, which involves much consultation/lobbying, and a public hearing process, after which a representative of central government makes recommendations about the plan before it is finally adopted.

Local government also has considerable power to make decisions on individual planning cases – including imposing conditions on development -, again mediated by the power of national government to intervene, and by developers' ability to appeal against a decision. Local councils in economically buoyant areas also have a lot of power to negotiate planning obligations with developers, because these developers want to develop there and so don't mind paying for a few extras. This is much less the case in areas where development pressures are lower.

Guidance from national government to local government on how to draw up its Local Transport Plan makes clear the importance of sustainable transport supporting land-use. Thus LTPs should consider the main development nodes in the council's area, and the transport investments and services that are required to ensure that access to these is as sustainable as possible.

1.2 Sustainable transport in the LUP process

How far sustainable transport is an objective or an outcome of the LUP process

Land use policies and plans at all three levels of government generally state that LUP should be used to make transport more sustainable, and this is an important output of the LUP process. This is particularly so for national and regional policy and plans; and less so at the local level. This is because local plans are often produced by local authorities that do not have a transport function, or with less input from transport planners. However, guidance from central government to local government on how to draw up its local plans clearly states the importance of using land-use as a means to tackle transport problems.

The mechanisms to be used include denser development, locating trip-intensive development near major public transport nodes, putting development along corridors, not allowing sprawl or development in small communities, and stimulating a mix of uses. In addition, maximum parking standards are supposed to be set for all development, and national standards exist for larger developments.

Is the integration of LUP and sustainable transport supported by policy from all levels of government involved in LUP? Are there any conflicts between policies at different levels of government?

See above for an answer to this. Generally "using land use to reduce the need to travel" is a key planning objective at all levels of government.
Possibly, local government places a higher priority on economic development.

Existence of policies towards a compact city

For this purpose, the analysis framework has identified policies that seek:

- A poly-centric urban structure.
- Medium and high land-use densities with a mix of different uses.

- Concentrating trip generating development along PT corridors/at nodes. Nodes and corridors identified in strategic and local plans, perhaps by the use of accessibility measurement.
- Re-use of brownfield sites.
- Transport impact assessment including changing sites if one is unsuitable on transport grounds.
- Maximum parking standards

National policy (PPG13) mentions all of these as desirable outcomes as a means to reduce the need to travel. All RSS and LDFs (regional and local plans) will refer to them to some extent, therefore. However, the degree to which they refer depends on the priorities of the authority drawing up the RSS or LDF.

Examples of regional and local plans that attempt to develop these policies include the Lothian (Scotland) Structure Plan and the Edinburgh Local Plan. The former seeks to concentrate major new employment and shopping only in three main locations, two of which are regional town centres and the third of which is a major brownfield site in the north of Edinburgh. All are chosen in part because they have (relative to other parts of the region) good public transport accessibility and are close to major areas of housing, so people would not have to travel far to go there. The latter seeks to concentrate major trip generating uses (shopping and employment) only in Edinburgh city centre and the northern development area, in order to protect city centre retailing and to facilitate travel by public transport, which is focused on these areas.

There is clear evidence that plans have changed as a result of these policies. In addition, planning decisions have changed; since the early 1990s, the approval rate for major out of town retailing has declined, for example.

Any work that has been carried out on the effect on the market of integrating LUP and sustainable transport

In general developers have worked with these new policies. However there has been no systematic review of developer responses; evidence is anecdotal.

Organisational/institutional integration to encourage LUP and transport integration

With the exception of London, all public transport in the UK is provided by the private sector, in some cases acting under contract to government, in some cases (e.g. buses) entirely independently of government, although with significant injections of public money. The railways are planned by the public sector but infrastructure improvements are planned and delivered by a quasi-private body, Network Rail. New roads and roads maintenance are often delivered privately (under contract from central r local government) and the contracts to do so often give the private sector contractor considerable freedom. So the public sector has varying levels of influence over transport planning – it is very important to remember this. A key example of this is the way in which the privately planned, built and operated Birmingham Northern Relief Road – a motorway – is lobbying for development, and offering to build a new side road at zero cost to the public sector – without necessary regard to land-use policies in the area.

In general, though, in the public sector, the same organisations are responsible for planning transport and LUP. The only exceptions are District Councils – responsible for planning decisions – in areas where there are also County Councils, responsible for transport planning. However, such areas cover a minority of the English population and none in Wales and Scotland. Also in the major English cities there are bodies responsible for coordinating public transport (PTEs) but they are closely linked with their constituent unitary councils who do land-use planning and local transport plans. In London, the Mayor is responsible for public transport, main roads and strategic transport and land use planning, and the 33 local authorities carry out local planning, local planning decisions and local transport implementation. Therefore, institutionally, there is reasonable integration. However, the degree to which this results in transport input to planning policy making and planning decisions, and vice versa, depends on the individual nature of each local/regional organisation, and on the politicians that ultimately control them. In some organisations, there is a lot of integration and in others, much less – but it is very difficult to generalise about t.

Barriers to integration

As noted above, local politics and the nature of the specific organisations is a barrier.
The fact that RSSs are statutory but RTSs are not is something of a barrier to giving greater weight to transport considerations in regional spatial planning.
Where there are still local District Councils and separate County Councils, integration can be problematic as District Councils know less about transport, but are responsible for granting planning permission.

There are different timescales for the preparation of Local Transport Plans and LDFs (local plans).

Where integration of policies exists – any evidence of its success on the ground?

Yes, city centres are regenerating – a result, in part, of these policies – and development is at higher density and located closer to public transport services. Alternatives to car use for accessing new development are considered at the stage of drawing up land use plans, and in individual planning decisions. Policies requiring MM for new developments are included in all national, regional and many local plans, and these result in developments with lower levels of car use than there otherwise would have been. The rate of growth of edge of town employment and retail development has slowed in favour of more central locations. Mixed use developments are more common. However this is anecdotal evidence – there has to date been no systematic review.

Yes, transport trends are becoming less car-dependent in certain cities, for example Oxford, York, Einburgh, Brighton. Land-use plays a part in this but it is very difficult to disentangle its effects from those of other measures.

2 Analysis framework: integrating MM and LUP in the building permission process – the UK

In tandem with an analysis of framework conditions (the integration of sustainable transport and LU planning), there is of course a need to assess how far MM has been integrated into the process of granting permission for a given building or development in the WP D partners' member states, plus Ireland and the Netherlands. This section sets out the framework for gathering comparable data on this subject, as detailed below. The term "building permission process" refers to the decision on whether or not to grant planning permission for a particular development.

Detailed steps in the building permission process

A developer or occupier of a site decides that they want to (re-)develop their land or change the existing use of the land.

They apply to the local authority for permission. There are two stages: outline and detailed permission. Outline permission gives approval in broad detail for a piece of land to be (re-)developed for a given land-use, and includes transport matters. The definition of land-uses is quite broad – outline permission could be granted for a warehouse but this could be developed as an office without re-applying for planning permission, even though the two uses are quite different.

Detailed permission includes matters such as specific building designs, landscaping and so on.

For a development over a given size (as defined in PPG13) the local authority will ask the developer to provide some or all of the following evidence:

- A plan of the site as it will be developed, including the indicative location of buildings, site access points, car parking, loading areas, and proposed improvements (if any) to the surrounding road network.
- How the development conforms with and contributes to the delivery of policies and land-uses set out in national planning guidance (e.g. PPG13 – but there is national guidance on many different factors to be taken into account e.g. housing, minerals), in the strategic plan (Regional Spatial Strategy) and in the local plan (Local Development Framework). So for example the RSS may include a policy to locate shopping centres and offices close to areas well served by public transport. The LDF will contain a map showing the land in the area and the land uses that the local authority wishes to see on that land. **If a development does not conform with national and/or regional and/or local policies and/or with the LDF map, the developer can still apply for planning permission, and it may be granted, if there are other good reasons why it should go ahead – and the developer has to make the case for these.** However, a development that does not conform is less likely to get planning permission. The policies cover most impacts of a development e.g. on environment, social development, community, education, the local economy, social inclusion – not just transport. Generally local economy is the policy that carries most weight with elected councillors, except in areas of very high economic growth.
- Other good reasons for the development e.g. its beneficial impacts on the local economy and specific factors related to this particular development. These are called "other material considerations".
- For some large developments (e.g. a major shopping centre), a separate environmental statement.
- How services such as water and sewage will be provided to the development and the site's impact on the existing water and sewage system.
- Depending on the site, a flood report.
- For larger developments or those where a high transport impact is anticipated, an assessment of the likely transport impacts of the development on the surrounding road network and in some cases public transport, walking and cycling networks. This Transport Assessment (TA) will include an analysis of the accessibility of the development, where its users are likely to travel from, and how and when they are likely to travel. It will consider where the development traffic will put pressure on the existing network, and the steps that the developer proposes to mitigate these negative impacts. Traditionally this assessment has led to the developer paying for improvements to roads and junctions near to the development in order to cater for the predicted development traffic. More recently (since around 1998), and depending on the local authority involved, the TA will include measures to manage the mode share of trips to and from the site, and facilities (e.g. bus stops, new bus services) paid for by the developer to improve alternatives to the car for travel to the site. The TA will also include the proposed number of parking spaces on the site, which should not exceed those in PPG13, for sites over a threshold size (see Appendix 1 for these standards and thresholds). In areas

where there is a County Council that is the transport authority and a District Council that decides on planning permission, the TA is submitted to the County which then makes recommendations to the planners in the District, who may choose to accept or ignore all or some of these recommendations. Even in areas with only one local authority that has transport *and* planning functions, the TA will often be considered and negotiated by one department that then makes recommendations to the planning department which, again, can be ignored. If the development is near a national road then the national roads agency (the HA) is involved in the TA and it generally seeks to make the TA very effective so that there is no net negative effect of the development traffic on the trunk road. The HA is an important lobbyist for MM plans in new developments in England.

- (Sometimes) proposals for financial contributions by the developer for public facilities related to the development e.g. new schools, public housing, new parks, new roads, junctions and other transport facilities.

Planners working for the municipality will consider the pros and cons of the developer submission and likely negotiate with the developer, particularly for large developments. They then make a recommendation to the municipality's elected members (councillors) about whether to accept the application, reject it, or to accept but with some conditions and/or obligations attached – the councillors then decide. Decisions are made on a case by case basis and there is no formula for working out whether a development should get permission. The municipality has a target time of 42 days to decide the application (a government target, not a law).

Once outline permission is granted the developer must submit an application for detailed permission. It is decided in the same way as for outline permission. If both sets of permission are granted (and it is quite unlikely that a development with outline permission will not get detailed permission) then the developer can start building. They can only open the building once it has been inspected by a municipal building inspector who grants a *building permit* – this certifies that the building meets all relevant standards (e.g. fire safety) and is fit for use. The development can also only open once all conditions have been complied with – this might include things like cycle parking being provided, or access control on the car park.

If planning permission is refused, the developer may decide to appeal to an inspector appointed by central government. If the local authority has made an unfair decision (e.g. rejected a development that is in complete conformance with policy, whilst approving another next door) then the inspector may overturn the local authority's decision and in some cases award costs against the authority. This can make some authorities reluctant to refuse many developments.

Central government staff also "keep an eye" on large developments. If a development is granted permission by a local authority when it is not in conformance with policy (especially national policy) then national government has the power to re-consider and to overturn the local authority's decision.

Certain types of development, mainly on government, railway and airport land, are exempt from the need to gain planning permission. There are limits to the scale of this "permitted development" – a new shed is OK but a new airport terminal needs planning permission.

Which planning instruments are included in the building permission process and how are they specified in terms of content

The main instruments are as follows. They are defined in Table 3.1:

- National planning guidance e.g. PPG13 on Transport.
- Regional Spatial Strategies (formerly Structure Plans). In Scotland there are only regional plans for the four main city regions, Aberdeen, Dundee, Glasgow and Edinburgh. Outside these areas there are only local plans.
- Local Development Frameworks (formerly Local Plans).
- Planning conditions.
- Planning obligations (called agreements in Scotland).
- Parking standards.

How are the planning instruments applied in practice

As outlined in the section on the building permission process, there is considerable scope to apply the instruments flexibly, although this flexibility is somewhat constrained by the possibility of central government over-ruling a

local planning decision. This flexibility is a product of the fact that there is no formula for deciding whether planning permission should be granted – each case is considered on its merits in relation to the published guidance and policies, but also in relation to "other material considerations". Local practice and perceptions, and the enthusiasm of national government for enforcing its own guidance, also play a role. For example, the re-use of a brownfield site with a constrained road access may be OK in one local authority because the traffic engineers there are happy to live with a sub-standard junction to access the site, but in another local authority, the opposite may be the case.

Yes, for example, in some cases guidance on implementing MM through the planning process will be ignored or implemented half-heartedly. For example, there is considerable evidence that, while many local authorities ask developers to compile travel (MM) plans as part of the planning permission process as recommended in PPG13, these are in some cases little more than paper documents that are then not implemented, and the local authority does not follow them through (see Rye, Young and Ison, forthcoming). Or authorities in areas of economic decline that are scared of frightening off developers with too many demands will not ask for any MM measures or any developer financial contributions (planning obligations), whilst authorities in economically buoyant areas will ask for a great deal.

Another example is parking standards: for developments smaller than the thresholds set out in PPG13, local authorities in Scotland are supposed to have developed their own maximum parking standards – this is what national government guidance tells them to do. However, the guidance is not law, only advice, and so Rye (2006) found that the majority of Scottish local authorities still have minimum parking standards for smaller developments – they largely ignore the national guidance, and so far national government has not followed up on this.

To whom are the planning instruments addressed

The planning instruments are used by the local authority with power to make a planning decision. They must be taken into account by any developer who wants to stand a chance of securing permission for their development. However, large developers can and do invest a lot of effort in influencing national guidance, RSSs and (especially) LDFs, when these are drawn up by local authorities, as there is a long and involved procedure of consultation and public hearings before they are finalised. The LDF releases land for development and therefore has a critical impact on land values.

What flexibility do these instruments offer in order that MM can be included, and what is their ability to support, hinder or allow MM and supporting measures

The inclusion of MM in the building permission process is strongly encouraged by national guidance and in Regional Spatial Strategies, and this is reflected in the high proportion of local authorities (70% according to a survey by Young (2006)) that have policies stating that for developments larger than a certain size, developers will normally be expected to develop a travel plan (MM plan) for the development. The MM is normally part of the TA (see above) so must be submitted at outline stage, although it may be refined and become more detailed in the detailed planning permission process.

In theory any MM measure related to the site can be required or negotiated from developers. Where they are negotiated, they will then be agreed and set out in a legal agreement so that the results of the negotiation become legally binding on the developer and sometimes on the authority. These measures can be outside as well as inside the development e.g. it is possible for local authorities to negotiate with developers so that they provide money for new bus services for the development.

MM measures that developers and site occupiers will often provide for developments in the UK include most of those listed in the MAX definition of site-based MM measures. However, there is a tendency for most MM plans that are secured to contain measures that are cheaper and easier to implement, such as cycle parking, promotion of alternative modes, and carpooling measures (as found by Green, 2006 in a survey of travel planners in UK local

authorities). Only the more advanced MM plans include measures such as parking management, improved PT services and reduced PT fares funded by the developer/site occupier as part of the planning obligation.

In a small number of cases the MM plan will include mode share targets. This means that within a specified time after opening the development, the mode share for specified trips to and from the development must reach certain targets. If these targets are not met (i.e. more people use the car to get to the development than is specified by the target) then sometimes there are financial penalties attached – the developer or occupier must pay the local authority a certain amount of money which is then used to further mitigate the transport impacts of the development. However, very few – perhaps less than 10 – developments in the UK have reached this stage of enforcement of targets and, in general, the enforcement by local authorities of MM plans required through the planning process is a legally untested area.

There are maximum parking standards for new developments over certain threshold sizes, as set out in PPG13 and its equivalent in Scotland. These maxima are generally not enough for everyone who might want to drive to a development to find a parking space when they get there. In addition, local authorities themselves may adopt more stringent maxima for all or part of their area (e.g. in town and city centres, generally very little new parking will be permitted with new development). Sometimes parking standards are linked to public transport, walking and cycling accessibility with less parking, but denser development, permitted in areas of higher accessibility. According to work by Young (2006), maximum parking standards are an important stimulus to MM plan activity for organisations in England. Residential MM plans are according to government work somewhat reduced in their effects because developers are reluctant to limit parking in new housing developments (to which the maximum parking standards in PPG13 do not apply).

To which other instruments and laws (e.g. in other sectors or in higher levels than the local level) are they referring and what is their content

The latest English law governing the planning system, passed in 2004, places a statutory duty on local authorities to use the planning system to bring about sustainable development and protect and enhance the environment. This can of course be interpreted in several ways, but it can be seen as supportive of the use of the planning system to secure MM for new developments. The law on planning obligations (and the money that developers pay to local authorities as part of this) is being changed to one that is less case by case and more formula-based. However, the current use of obligations for MM plans is specifically mentioned and protected in this new law.

In those countries that already include MM in the building permission process, how this works in relation to the process, instruments and laws identified above; and who is responsible for this integration, what are benefits of the integration of MM

This question is generally answered by the response to the first two questions in this table.
Government *Guidance* on MM and on parking standards is largely driving the use of MM in the planning process in the UK. This guidance is not law, but it has considerable importance nonetheless when planning permission decisions are made – and these of course are legal decisions.

The UK is quite fortunate because in its hierarchical planning system, regional plans must take note of central government planning guidance, and local plans must take note of that guidance and of regional plans. There is a system of public and government scrutiny of these plans before they are adopted which helps policy integration between them. Therefore, there is a mechanism to make these plans relatively consistent with each other and this helps the implementation of MM through the planning system.

It appears from work by Green (2006) and Young (2006) that there is not enough monitoring of MM plans required through the planning process, after developments have opened. The monitoring that has been carried out at a number of sites (see DfT, 2002) shows impressive results – an average reduction in car use of 14% - but there is always a tendency for the sites that are monitored to be those that are better-performing. Nonetheless, it is likely that there are beneficial impacts occurring.

How the practice is and what problems, barriers, etc. are encountered

As noted above, there is a lack of monitoring of MM plans implemented through the planning process. This is due to lack of local authority resources, or poorly specified planning obligations that do not include resources for monitoring. Where plans have been monitored, they appear to work.

There is a problem with securing MM through the planning permission process when a development is built by one developer, to be sold on to occupiers who, at the time of planning permission being given, are unknown. This is called speculative development. Central government has issued guidance on a two stage process, using planning obligations (which run with the title of the land and therefore affect any future owner), to deal with this, but it is still a complex process. The same issue may arise when a site gains outline planning permission and is then sold on before detailed permission is applied for.

MM is only one objective of the LUP process. In economically buoyant areas (e.g. Surrey, Berkshire, Oxfordshire – to the west of London) where there is pressure from residents to control the traffic impacts of new developments, and where there is a lot of development pressure, MM can be a very important objective. In less economically buoyant areas, some observers say that only "lip service" is paid to MM, and economic development remains the over-riding objective of the planning system for local authorities.

6.10 Appendix 10

Country report: Slovenia

Table of Contents

3 LUP and sustainable transport – preconditions for integration of MM and LUP – Slovenia

3.1 Analysis framework: integrating transport and LUP

The analysis framework for Slovenia is intended to serve as a guide to consistent information gathering so that as far as possible partners will gather comparable information. The purpose of this first analysis framework is to identify the state of preconditions for the integration of MM into LUP in European countries represented by the WP D partners and, in addition, in Ireland and the Netherlands.

3.1.1 The legal framework underlying the planning system

Spatial Planning

National spatial legislation, which determines spatial planning on all levels, was last changed in Slovenia in the spring of 2007, while more detailed instructions and acts for a practical application of the changed planning procedures were approved at the end of October 2007. This overview tries to present the new situation in spatial planning. In case new practices have not been implemented yet or no practical experience is available, an overview of the situation according to the old law is given.

Presently, spatial planning takes place at two levels, i. e. the national and municipal levels. The representatives have been elected for a four-year term of office. The third level, i. e. regional level, will be introduced after the administrative division of the Slovene territory into provinces has been approved in the parliamentary procedure. With provinces, part of spatial planning competences will be transferred from the present level to the new regional level.

Slovenia 2007 – number of inhabitants 1.96 mio, number of communities 210, average number of inhabitants in a community 9.353, max Ljubljana 265.881, min Osilnica 332, proposed number of provinces 14, average number of inhabitants in a province 144.000, max 498.000, min 46.000.

National level

On the national level the preparation of laws and by-laws in the field of spatial planning falls within the competence of the Ministry of the Environment and Spatial Planning (Ministrstvo za okolje in prostor, MOP). They also prepare national spatial plans. The state or MOP, respectively, are responsible for determining spatial development goals, guidelines and directions on the level of state and all other levels, for taking spatial planning decisions of national importance, and for supervising the legality of spatial planning schemes on the level of communities.

The process of acquiring a building permit falls within the competence of the state. It is determined in the Construction Act (Zakon o graditvi objektov) which is drawn up by the MOP.

Regional level

The new law requires that a regional spatial plan be made on the regional level, which is a novelty in Slovenia (it will presumably be put into force with the introduction of provinces).

Municipal level

On the municipal level, spatial plans are prepared by municipal departments of spatial planning. Municipalities are responsible for determining goals and guidelines for spatial development in a municipality, the use of space, setting requirements for approving interventions into space, and taking decisions concerning spatial planning of local importance.

A municipality prepares a municipal spatial plan draft and sends it to MOP who forwards it to all competent authorities. These can propose spatial planning guidelines that fall within their competence. All municipal spatial acts must comply with other spatial acts on a higher level.

The new Spatial Planning Act (Zakon o prostorskem načrtovanju) was passed only in April 2007, so no experience has been gained about how communication is performed between different levels.

Transport planning

National level

The Ministry of Transport (Ministrvo za promet, MP) is responsible for preparing and implementing transport policy and for strategic planning of national transport systems. MP helps in the preparation of spatial strategies, especially in planning transport infrastructure.

Regional level

The organization of the transport sector on the regional level has not yet been defined. All levels above the local level are administered by the state for the present.

Municipal level

Municipal administration departments are responsible for planning transport on the municipal level. In practice, strategic transport planning is undertaken by departments of spatial planning in most municipalities, within the scope of municipal spatial plans, while transport departments fulfil operative tasks which are often independent of strategic guidelines. There are no integral local transport strategies in Slovenia. Strategic elements of transport systems are included into spatial strategies, only, and they almost exclusively concentrate on infrastructure, which makes them incomplete (no MM).

1.1.2 Planning instruments that exist

National level

Državni strateški prostorki načrt (DNSP) (The National Strategic Spatial Plan) is the top and the most general document about spatial planning. It determines goals and guidelines for national spatial development and spatial plans of national and local importance considering public benefits (environmental protection, nature conservation, sustainable use of natural goods, and public health protection).

Državni prostorski načrt (DPN) (The National Spatial Plan) is concerned with spatial planning for structures of national importance, (determined in DSPN), which should be carried out according to definite time schedules.

Strategija prostorskega razvoja Slovenije (SPRS, 2004) (The Spatial Development Strategy of Slovenia) and **Prostorski red Slovenije (PRS, 2005) (The Spatial Order of Slovenia)** are equivalents to DSPN established by the former act. Both are still valid as the new DSPN has not yet been prepared by the new legislation.

Besides formal documents, the Government of Slovenia and individual ministries are engaged in preparing resolutions which provide guidelines for development in their fields of activity. The **Resolucija o prometni politiki Republike slovenije (The Resolution on Transport Policy in the Republic of Slovenia),** which was prepared by the Ministry of Transport in 2005, is among the most relevant documents, yet it is rather vague as it does not contain actual guidelines and measures to be implemented on the local level.

National programmes contain details (time, financial details and spatial details) of the planned projects of the national importance and form a basis for project preparation and construction. Two most important national programmes in the field of transport are the highway and railway programmes. The elaboration of the national programmes for public passenger transport (PT) has been proposed several times, yet the proposal remained unrealised.

Regional level

Regionalni prostorski načrt (The Regional Spatial Plan) will presumably revive when management on the regional level is implemented. It will help in establishing inter-municipal harmonization, which is especially important for spatial and transport planning.

The preparation of documents in the field of transport planning has not been foreseen on the regional level for the present.

Municipal level

Občinski prostorski načrt (OPN) (The Municipal Spatial Plan) is an act which determines the goals and guidelines for municipal spatial development, provides spatial solutions of local importance and sets requirements for situating structures in space by considering guidelines set in national spatial acts, municipality development needs, and safety requirements. The OPN includes a strategic and realization part.

The strategic part contains a settlement plan, guidelines for development of settlements, and boundaries set for settlements.

The realization part determines the areas of intentional use of space, requirements for spatial plans realization, and areas for which a detailed spatial plan should be made.

Občinski strateški prostorski načrt (OSPN) (The Municipal Strategic Spatial Plan) is a strategic part of the Municipal Spatial Plan, yet it can be passed as an individual document.

Občinski podrobni prostorski načrt (OPPN) (The Detailed Municipal Spatial Plan) is a planning act which includes detailed spatial regulations for areas defined by the OPN (the Municipal Spatial Plan). This document is a basis for acquiring a building permit. It determines the type of utilisation, exploitation and densities for each spatial unit, as well as requirements to be considered dealing with public, green or parking surfaces.

All strategic spatial acts should be long-term (for the period of cca 20 years), while all other spatial acts should be medium- or short-term (10, 5 years).

The building permit is delivered by an administrative unit, which is an office of national administration, for structures which are not of national importance. The planned structures must comply with spatial acts on all levels. With respect to building procedures and maintenance, structures may be divided into complicated, less complicated and simple (as defined by a by-law). The procedure of acquiring a building permit depends on the type of the structure. For MAX, less complicated and complicated structures are relevant which are not of national importance. To acquire the building permit, the investor or the authorized designer should first obtain the **location information** which determines all construction requirements to be observed at a location site. If a building permit application has been submitted for a structure in the area which is regulated by OPPN, project consents are deemed to be obtained from competent authorities already in the elaboration of OPPN. If a building permit application has been submitted for a structure in the area which is regulated by OPN, project requirements should be set before the start of the project, and project consents to project solutions should be obtained from all competent authorities. A request for setting project requirements should include a draft project, while a request for consent should include that part of the project for acquiring the building permit which refers to the subject of consent.

Presoja vplivov na okolje (PVO) (The environmental impact assessment) is an environmental instrument which originates in Zakon o varstvu okolja (ZVO) (The Environmental Protection Act). It is a procedure with which it is established whether an intended intervention into space can harm or degrade the environment or whether the intervention is possible in an environment considering the intervention effects. More precise requirements about when the assessment is to be carried out are determined in a special ordinance. The PVO is carried out after an environmental protection consensus has been delivered by the Ministry of the Environment and Spatial Planning. The consensus has a function of a preliminary decision before the space intervention permit is delivered.

1.1.3 Legal and theoretical scopes, functions and contents of each instrument

In the last decade, spatial planning in Slovenia has been characterized by frequent changes of spatial legislation which result from the situation in the transition period after the national independence in 1991 and partially from joining the EU. The new Spatial Planning Act was passed in April 2007. It regulates basic spatial acts and gives directives for their elaboration and adoption. It also gives directives, in a rather general way, for elaboration and adoption of planning instruments, while more detailed directives are given in by-laws which were published in October 2007.

PRS (the Spatial Order of Slovenia), which was prepared on the basis of the previous act in force and which will be replaced by DSPN, determines the rules for spatial planning on all levels. PRS also provides spatial planning rules and requirements to be observed in strategic and implementation spatial acts on the local level and location requirements for realizing spatial plans, planning procedures and construction.

Because the provinces have not yet been established, it is not clear which competences will be transferred from the national and municipal levels to provinces.

OPNs are prepared by municipalities and form the basis for the majority of construction activities on the local level. In the preparation of OPNs, the municipality cooperates with the ministries which should approve the act before it is being passed. If an OPN does not observe national directives, a municipality must provide reasons for these discrepancies. The OPN must be also prepared in accordance to directives set in national by-laws, which are, however, rather vague. They provide only the structure of municipal acts, while drawing up their contents is mostly left to municipalities.

After an OPN or OPPN are passed by a municipality, the latter sets location requirements to influence the decision on delivering a building permit, although the final decision on the permit is made by the State. The problem that frequently arises in municipalities is the lack of professional and expert staff for adopting decisions.

1.2 Sustainable transport in the LUP process

1.2.1 How far sustainable transport is an objective or an outcome of the LUP process

Sustainable development is one of the important guidelines in drawing up spatial acts on the state and municipal levels. Unfortunately, guidelines are not directly transferred into measures and are not implemented. One good example for this is the development of transport and spatial planning in the capital town Ljubljana. For the last 20 years, its spatial plan has contained a strategic guideline to replace car transport by public and non-motorized transport means. In all these years, the re-introduction of a tramway was foreseen, as well as accelerated development of non-motorized transport and renovation of the town centre which could be accessed by public passenger transport. Development trends of the city transport, however, took a different course than the one foreseen. Transport policy in the city supported the use of personal cars, which resulted in a sharp decline of public transport. The city centre experienced a significant regression, the inhabitants decreased for some 10%, and the activities (especially shops) were transferred to suburbs and into the surrounding municipalities. Lately, some new trends have been perceived which give hope of changes for the better. The city centre is being closed to motorized traffic in spite of a planned increase in parking places in the centre and on its boundaries. Solutions are being searched for enhancing the offer of public transport and non-motorized transportation means.

2.2.4 Do any of the following exist - policies that seek:
-A poly-centric urban structure.
-Medium and high land-use densities with a mix of different uses.
-Concentrating trip generating development along PT corridors/at nodes. Nodes and corridors identified in plans, perhaps by the use of accessibility measurement.
-Re-use of brownfield sites.
-Transport impact assessment including changing sites if one is unsuitable on transport grounds.
-Maximum parking standards.

A poly-centric urban structure

A poly-centric urban structure has been a strategic guideline in national and local spatial strategies for decades. On the national level it is included into SPRS as a basis for the arrangement of settlements in the country, while

on the local level it is used in bigger towns, especially as a basis for the arrangement of central activities. In spite of the mentioned guidelines in spatial acts, the majority of Slovene towns transferred a whole range of central activities (especially shopping and entertainment centres) to the surrounding locations which are accessible by a car. There is no policy to oppose such trends for the present.

Medium and high land-use densities with a mix of different uses

PRS determines that one of the main guidelines in planning inhabitation on the local level should be the necessity to increase inhabitation densities on unused or rarely used land, to undertake building activities within the existing settlement boundaries without affecting green surfaces or other open spaces, and to re-build degraded areas within settlement boundaries.

In national documents, a mix of different uses is a tool for lowering and shortening journeys within settlements. Mixed areas are a type of land use, applied in municipal spatial plans (OPN), yet no instruction or guidelines exist for the type and quantity of activities in these areas. The editor of the OPN defines in detail areas of mixed uses on the local level, yet the quality of his/her solution depends on their experience.

Concentrating trip generating development along PT corridors/at nodes. PT nodes and corridors identified in plans, perhaps by the use of accessibility measurement

PRS determines that central activities should be located in the near vicinity of public transport nodes and that shopping centres, universities and intermediate and primary schools should be accessed by public transport. It suggests that a five-minute walk should be assured from residential areas, mixed areas, special areas and social infrastructure areas to PT stops. Bigger towns have incorporated this idea into their spatial strategies, yet the success remained rather low because the plans do not prohibit development at other locations. PT corridors and nodes alone do not sufficiently sustain development in the existing city transport policy.

Re-use of brownfield sites

SPRS and PRS bring suggestions for internal development of settlements, re-use and renewal of degraded areas, and renovation of old industrial areas. In several towns this policy is carried out in practice, especially in old industrial and army areas.

Transport impact assessment including changing sites if one is unsuitable on transport grounds

According to the Slovene planning practice a transport impact assessment study should be submitted by an investor to the municipality as part of his/her building permit application project, especially in cases when the municipality estimates that the new structure will greatly harm transport flows in the vicinity of building locations. The same requirement can be made by the manager of national roads (Direkcija za ceste – DRSC) when they anticipate that the new structure will have a harmful effect on national road traffic. The decision in favour of a transport impact assessment study is subject to the judgement of the responsible person in municipal administration or DRSC as no formal basis exists in the ordinance or by-law. A transport impact assessment study generally results in passing infrastructure measures, and very rarely in changing location of the prospective construction.

Maximum parking standards

National orientations regarding parking standards are vaguely exposed in PRS. Detailed requirements are left to municipalities. In practice parking standards are defined in OPN. Lately, some national construction by-laws have

been passed which require 1.5 parking places per apartment throughout the state (year 2003), 2 parking places per a nursery unit (year 2000) and 5% of obligatory parking places for the disables (year 1997) These requirements are compulsory.

In Slovenia, no municipality act exists that would determine maximal parking standards. Spatial planners use the available, mostly out-dated technical guidelines, which, however, are not compulsory. An attempt (a study) was undertaken to change the existing practice in Ljubljana in 2005, applying maximal parking standards, but hasn't passed the political approval.

The town of Maribor passed a spatial act in 2006 in which the number of bicycle stands is determined with respect to the activity.

Summary

On the conceptual level, spatial acts contain several up-to-date policies which originate in the integration of spatial and transport planning. It is difficult to implement these acts, especially in the environment without a sustainable transport policy and in which activities are often located on areas accessible by a private car. The non-existence of regional plans is also problematic as it results in poor coordination among neighbouring municipalities. The consequence of this in the metropolitan area is the transfer of activities from one municipality to another.

2.2.5 Any work that has been carried out on the effect on the market of integrating LUP and sustainable transport

There has been no work in this area

2.2.6 Organisational/institutional integration to encourage LUP and transport integration

The integration of spatial and transport planning, both national and municipal, is poor in Slovenia. According to EEA (2001), the complete integration on the level of ministries should be defined as a joint vision of future development which will encompass joint activities and measures defined in strategies that are elaborated, approved and implemented by the competent authorities. In Slovenia, unfortunately, the cooperation as defined in EEA is poor, which is seen in the fact that the information about the preparation of a strategic document is only forwarded to other ministries (and municipal departments) in the phase when the document has already been presented to the government for approval. Especially the MP was known to act in this way in preparing transport policy and national the railway programme in 2005. MOP, on the other hand, seeks the cooperation of other ministries in the preparation of spatial documents.

The situation on the local level is the same, mostly in the biggest municipalities. Departments responsible for planning, transport and environment cooperate in the preparation and implementation of strategic documents in a limited extent. Barriers to integration

2.2.7 Barriers to integration

Barriers are mostly limited awareness of the importance of LUP and transport integration, and the non-introduction of sustainable transport in cities. The lack of staff and low staff education in municipality administration are also a big problem.

1.2.6 Where integration of policies exists – any evidence of its success on the ground?

None

2 Analysis framework: integrating MM and LUP in the building permission process – Slovenia

2.1 Detailed steps in the building permission process

The procedure of acquiring a building permit depends on the type of the structure (3 types defined by a by-law – 1 complicated, 2 less complicated and 3 simple). Simple structures defined by by-law (e.g. fences, playgrounds, temporary structures etc.) don't need planning permission.

To acquire the building permit, the investor or the authorized designer should first obtain the location information which determines all planning and construction requirements to be observed at a location site.

If a building permit application has been submitted for a structure in the area which is regulated by OPPN, project consents are deemed to be obtained from competent authorities (e.g. water, gas and electricity supply, road administration etc.) already in the elaboration of OPPN.

If a building permit application has been submitted for a structure in the area which is regulated by OPN, project requirements should be set before the start of the project, and project consents to project solutions should be obtained from all competent authorities (see above). A request for setting project requirements should include a draft project, while a request for consent should include that part of the project for acquiring the building permit which refers to the subject of consent.

Decision of whether or not to grant planning permission is made on the basis of beaurocratic procedure, which checks the fulfilment of all requirements prescribed by law (not the content of the project). If successful, building permit application process ends with a permission to build.

Construction phase starts after receiving a building permission. Authorised designer prepares a project for construction on the basis of project for a building permit application. After the construction designer prepares document of actual state of the structure. Permit for use is granted by the national administrative agency (same as for building permit) on the basis of the late document and inspection of the structure made on site (mainly by building and fire inspectors). In practice investors apply for the permit for use only for more complex structures (not for individual housing).

2.1 Which planning instruments are included in the building permission process and how are they specified in terms of content

National government (MOP) prepares planning guidance in a form of by-law that is intended to guide local authorities how to prepare local plans (OPN, OPPN) and thus indirectly influence granting building permission.

Local authority is allowed to impose a planning condition in OPN and OPPN, most common planning conditions are densities, floor space index, parking standards and bike parking in some cases.

According to the Slovene planning practice a transport impact assessment study should be submitted by an investor to the municipality as part of his/her building permit application project, especially in cases when the municipality estimates that the new structure will greatly harm transport flows in the vicinity of building locations. The national roads authority can make the same requirement when they anticipate that the new structure will have a harmful effect on national road traffic. The decision in favour of a transport impact assessment study is subject to the judgement of the responsible person in municipal administration or DRSC as no formal basis exists in the ordinance or by-law. A transport impact assessment study generally results in passing infrastructure measures, and very rarely in changing location of the prospective construction.

As said earlier, local parking standards are left to municipalities and defined in OPN. Some national construction by-laws have been passed lately which require 1.5 parking places per apartment throughout the state (year 2003), 2 parking places per a nursery unit (year 2000) and 5% of obligatory parking places for the disables (year 1997) These requirements are compulsory.

- Planning agreement (Urbanistična pogodba) is a new form of a planning instrument in Slovenia introduced in a new planning law with not much practice. It is meant as a contract between investor and local authority to insure the use or finance part of a development for a public use. Planning agreement can be defined in OPPN or negotiated through the building permission process.