



Successful Travel Awareness Campaigns
& Mobility Management Strategies



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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:

**Deliverable D2
WPD Research Plan
Annex D to the Comprehensive Research
Plan**

**Integrating planning and Mobility
Management**

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Checked by: **NU**

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MAX - Introduction

MAX is the EU's latest framework research project on Mobility Management (MM) and Travel Awareness in transport. Four thematic Work Packages (WPs) 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.

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<http://www.max-success.eu>

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List of abbreviations

MM	Mobility Management
RF	Research Field
LUP	Land Use Planning
WP	Work Package
WS	Working Stage

1 Introduction

MAX WP D deals with integration of Mobility Management (MM) into Land Use Planning (LUP). The State of the Art Analysis and several discussions between the WP D partners demonstrated that there is a need to operationalise this broad and widely interpretable thematic field.

WP D covers the whole gamut of site-based MM as it relates to the LUP process, meaning the implementation of MM measures on actual sites and areas (offices, residential areas, shopping centres, etc.) and for actual target groups (commuters, clients, residents).

In the common understanding of the WP D partners, the ultimate objective of the integration of MM into LUP should be to ensure the implementation of MM measures associated with new / renewed buildings or newly-developed / redeveloped areas (e.g. housing estates, shopping centres). In this way, the affected target groups can take advantage of the measures from the first day that the site comes into use.

2 Research Plan

The research plan consists of two thematic Research Fields (RF) and three Working Stages (WS).

The **first Research Field (RF 1)** deals with the **preconditions for the integration** of MM into planning. Framework conditions (legal, political, governance) influence the possibilities of integrating MM into the planning process. Additionally the potential and actual effect of site-based MM is strongly dependent on the quality of the accessibility of a site / area by different means of transport (infrastructure framework and transport service supply). The WP argues that it only makes sense to invite landowners / developers to consider MM if the site-related target groups have the possibility of a real choice between modes to access the site. That means that the whole aspect of the integration of transport (in terms of supply) into LUP with the overall objective of promoting sustainable mobility is part of this RF and has to be considered as a form of precondition in the research for WP D.

The **second Research Field (RF 2)**, which is at the centre of WP D, deals with the actual **planning process for a new or renewed building / area** and asks where and how MM can or should be included. Here the whole process is of interest, from the intention to build and the planning procedure up to the construction phase and putting the site / building into use. The main actors are the landowner / developer of a new / renewed building or a new developed / redeveloped area and the local authority as the main counterpart in the process.

The research in WP D will be organised in three Working Stages:

- **WS Analysis: Data collection and analysis,**
- **WS Simulation: Planning simulation and**
- **WS Guidelines: Guidelines and recommendations.**

Lead partners for each WS are:

- WS Analysis: Napier University
- WS Simulation: ILS
- WS Guidelines: synergio

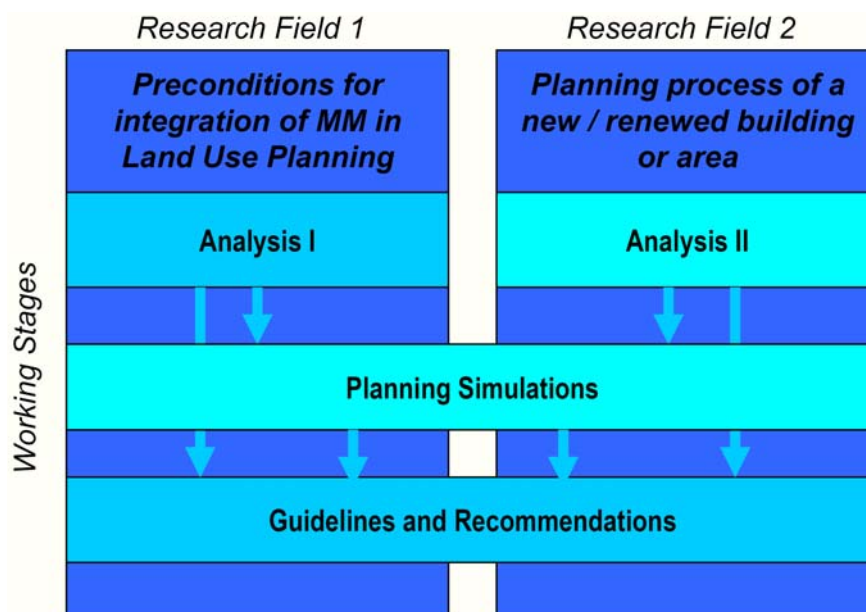


Figure 1: Structure of WP D research

2.1 Working Stage Analysis: Data collection and analysis

2.1.1 Working Stage Analysis I: Preconditions for integration of MM in Land Use Planning

Objective

The scope of this WS is to explore the state of preconditions for the integration of MM into LUP in European states represented by the WP D partners and, in addition, in Ireland and the Netherlands, as these two countries appear to exhibit considerable activity in the field of integrating MM and LUP. WS Analysis I consists of four steps:

- WS Analysis I1: List of MM measures
- WS Analysis I2: Design of a common analysis framework
- WS Analysis I3: Data collection and analysis per country
- WS Analysis I4: Comparison and identification of country related specifics.

WS Analysis I1 List of MM measures: the outcome of this step will be a list of MM measures that could, at least theoretically, be capable of being integrated into LUP. The list should be understandable for persons not familiar with MM, possibly consisting of a short list (just headings) and a longer list with more detailed descriptions. This would serve as a base for a common understanding of integrating MM and supporting measures within the framework of LUP. The list will guide the development of a common analysis framework and the research in both RFs of WP D.

WS Analysis I2 Design of a common analysis framework: in order to gather data on how far transport and LUP are integrated in partner member states, in a way that is as consistent and therefore comparable as possible, common frameworks for analysis must be developed. They will be 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 will 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 will first be applied to one or two countries (e.g. the UK and Switzerland) where the integration of both transport and LUP, and MM and LUP, are believed to be relatively advanced. Once this work has been written up and agreed, it can then 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. The outcome from this step will be a definition of elements for that precondition – for example, the sustainable urban transport plan and its implementation, integration of transport and LUP, awareness of the potential for integration among experts and politicians etc.

WS Analysis I3 Data collection and analysis per country: on the base of a common framework for analysis (WS Analysis I2), the analysis per country consists in identifying the state of preconditions for integration of MM into LUP in European countries represented by the WP D partners and, in addition, in Ireland and the Netherlands. Research target are the framework conditions for MM measures. The research team will also look into the details of existing practise in countries like UK and Switzerland with experience in integration of transport planning (and MM) into LUP as an input for further WS. One point of interest would be, for example, if the planning law in general gives municipalities the permission / the duty to set parking standards. And, if maximum parking standards as a supporting measure can be included into a local plan or, if not, is it instead possible to negotiate this issue in a more informal agreement?

Some of the possible elements of each precondition that will be analysed in each country are as follows (the entire set will be defined in WS Analysis I2):

- the legal framework for the planning system;
- the governance framework in which transport and land use planning take place (e.g. how many levels of government are there and how their responsibilities are interrelated within the LUP process);
- how, if at all, sustainable transport is seen to be either an objective or an outcome of the LUP process and, if so, how this is supposed to be achieved (the existing planning and mobility culture);
- how far sustainable transport and MM has already progressed into policy and into the process of granting planning permission;
- the planning instruments that are used (e.g. planning permission; local plans; planning agreements);
- the legal and theoretical scope, functions and contents of each instrument; and
- 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 or the impacts of maximum parking standards on investment decisions by developers.

WS Analysis I4 Comparison and identification of country related specifics: Here national policy documents, regional and local plan(s) for an area will be obtained and subject to an review against predefined criteria by members of the WP D team to assess the degree to which these plans currently promote the integration of sustainable transport objectives within land-use planning. The overall outcome of WS Analysis I4 is intended to be as follows:

- to have a detailed overview of the existing situation as regards the preconditions for integration of MM with LUP in the WP D countries, Netherlands and Ireland;
- to identify country related specifics; and
- to provide a basis for the more practical stage of the work, the planning simulation.

Methods

WS Analysis I1: Desk research of existing guidance documents on the nature of the planning system, planning policy as it refers to sustainable transport and Mobility Management, and (in brief) planning law.

WS Analysis I2: Desk research, interviews with selected planning authorities in the country. 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 and ongoing EU projects will be reviewed. Particularly useful definitions and points of view were found in the ECOCITY, SCATTER and TRANSPLUS final reports.

WS Analysis I3: Desk research, interviews with selected planning authorities in the country. Using structured interviews, participants’ views will be sought and the summary of interviews will demonstrate attitudes to greater integration, and barriers to achieving it. In each country at least 3 planning authorities will be interviewed, and at least one from each level of government that has any identified planning function. The authorities will be selected to represent a cross-section of views on integrating sustainable transport with land-use planning.

WS Analysis I4: Desk research

2.1.2 Working Stage Analysis II: Planning process of a new / renewed building or area

Objective

The scope of this WS is to explore how the effective planning process of a new / renewed building / area is structured, and where possible opportunities for the integration of LUP and MM might exist. Data collection and analysis will take place for those European countries which are represented by the WP D partners and, in addition, for the Netherlands and Ireland. WS Analysis II consists of three steps:

- WS Analysis II1: Design of a common analysis framework
- WS Analysis II2: Data collection and analysis per country
- WS Analysis II3: Comparison and identification of country related specifics

WS Analysis II1 Design of a common analysis framework: as in WS Analysis I2 the design of a common analysis framework for WS Analysis II1 will also be based on a detailed desk research of existing practise in those countries with experience in integration of MM into planning process. Here the list of MM measures will be used as well (see WS Analysis I1). Specific MM and supporting measures will be looked at, for which the analysis should show if, where and how they can be / or are already integrated into the planning process. Specific leverage points and opportunities as well as barriers for the integration of MM and supporting measures into the local planning process will be analysed and described.

WS Analysis II2 Data collection and analysis per country: On the basis of a common framework the analysis per country consists in finding out, in general but also with reference to actual case studies:

- the detailed steps in the planning process (intention > planning > construction > get in usage);
- which planning instruments are included in the process and how they are specified in terms of content;
- how the planning instruments are applied in practice (political mediation of policies, problems, barriers, etc.),
- to whom the planning instruments are addressed – for example, only to end-users, or to developers, or to those who write plans;
- the degree of flexibility that these instruments offer in order that MM can be included e.g. is there a (legal) possibility to include an obligatory mobility plan for companies in a building permit, and what is their ability to support, hinder or allow MM and supporting measures;
- 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 those countries which are included in the research and that already include MM in the planning 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; and
- how the practice works in general and what problems, barriers, etc. are encountered.

Consideration must be given to the fact that the process of new / renewed building / area takes place at the local level. Therefore it maybe there is no common practice within a country. The country wide analysis should take this into account by selecting cases of good practice as well as cases of bad practice and conclude what corresponds to “average” or usual practice.

WS Analysis II3 Comparison and identification of country related specifics: The intended overall outcome is:

- to provide an overview of the existing situation in the planning process of new buildings / areas in the WP D countries, the Netherlands and Ireland;

- to identify country related specificities;
- to provide a basis for the more practical stage of the work, the planning simulation; and
- to identify good practice, which can be used as examples in the next WS.

Methods

WS Analysis II1: Desk research

WS Analysis II2: Desk research, interviews with at least three selected planning authorities and if possible developers at the local level within each country

WS Analysis II3: Desk research

2.2 Working Stage Simulation: Planning Simulations of the integration of MM in the planning processes of selected developments

Objective

Using a planning simulation, the possibilities of the integration of MM in the process of planning of new or renewed buildings and sites will be explored in the context of concrete cases, each grounded within an actual planning context. The idea is to have at least three cases located in different countries represented by the WP D partners. At least one planning simulation will take place in old Member States (e.g. Germany, Spain) and at least two in new Member States (e.g. Slovenia, Lithuania, Poland). In these planning simulations the identified best practice MM measures and / or supporting measures will be selected and their transferability to single countries and their planning system will be analysed.

WS Simulation consists of four steps:

- WS Simulation 1: Preparation of planning simulations on the basis of WS Analysis I and II findings
- WS Simulation 2: Detailed analysis of legal conditions for integrating the chosen MM and / or supporting measures in the selected countries' planning systems
- WS Simulation 3: Execution of planning simulations in the selected countries
- WS Simulation 4: Summary of results

WS Simulation 1 Preparation of planning simulations: this step will consist in defining the contents and cases of simulation on the basis of important findings from WS Analysis. Participating cities will be selected according to a set of predefined criteria such as minimum size, public transport network etc. Information exchange and discussions with the stakeholders of the selected development will take place as part of the preparation phase. The selected developments and the local planning process will be analysed in further detail and, if feasible, initial feedback on the suggested changes will be requested from participants.

WS Simulation 2 Detailed analysis: The results of the Analysis will be the basis for this WS. If needed, WP D will produce suggestions on opportunities to change planning policy, land use plans and transport planning practice to make their structure more conducive to sustainable transport and thus to MM. These suggestions will be reviewed by a legal expert of the selected country, but mainly this WS will focus on an analysis of legal conditions for integrating the chosen MM and / or supporting measures into the selected countries' planning systems. This is part of the preparation for the planning simulation. The aim is to suggest only suitable MM measures in the planning simulation or to show how existing barriers could be overcome. In this way the planning simulations will not be blocked by unproductive discussions. This task will be subcontracted to legal experts in the defined countries.

WS Simulation 3 Execution of planning simulations: this step will take place in the defined cities by involving relevant actors such as planning authorities, developer / landowners, transport providers, etc. The planning simulation is based on a real situation and aims to solve a given problem. One advantage of a planning simulation is its flexibility. One can choose a certain stage of the planning process regardless of the actual timeframe of the given development. Thus the most interesting point can be selected, at which a particular MM measure(s) would best be integrated. The planning situation can then be simulated as if it would take place as suggested. The simulation offers a mechanism whereby new ideas, solutions and possibilities can be discussed free of normal constraints.

The planning simulation will work as follows:

- A site where a large to medium sized development could occur will be selected. A clear objective of the WP D research team will be to find sites which are indeed very likely to be developed in reality. If this proves infeasible, the simulation might also deal with a hypothetical site. The development type and

size will then be defined. A number of “key actors”, who will be present at the planning simulation, will be briefed in detail about the development and its context, prior to the simulation.

- These key actors will be invited to the simulation meeting to explain how the planning process would occur in reality in their city. The general process will already be known from earlier WS, but to bring actors into the simulation process they firstly have to simulate the standard planning process for a selected development (who takes the initiative; who applies to whom for permission; who else takes part in the decision making process; what other factors might be taken into account in the process; what negotiations take place, between whom and why, and how these negotiations might go; what the role of policies and plans is in the decision making process; etc.).
- The concept of MM as defined in the WP will then be introduced and participants asked how the process that they have just outlined would change if there were some attempt to integrate selected MM measures or supporting measures (such as maximum parking standards as policy) into LUP. If necessary, the participants can also be asked to assume that some changes in the preconditions has taken place (as suggested and reviewed in WS Simulation 2). Here the stakeholders will be involved and WP D can obtain their views about the suggestions. All participants would be asked to comment on the advantages and disadvantages of integrating MM into the LUP process.

By means of the simulation of suggested changes in selected planning situations, WP D seeks answers to different questions (although it may not be possible to include all of them in all simulations):

- How the participants believe that the suggested measures will change the planning process?
- Are these expected or suggested changes in the planning process and legal framework seen to be feasible (politically, administrative, technical)?
- Where would MM fit into the planning process? Would it be likely to be adopted? And, if not, why not and which barriers are perceived (legal, political, cultural etc.)?
- How could plans and practice be changed to influence the location of development towards areas that are capable of being well served by sustainable modes?
- What are developers and other market representatives’ attitudes to MM? What is their perception of its impacts on the market, and of their willingness to include it in developments?
- From the participants’ point of view, what are the expected effects of the MM measure? And how (if at all) will the integration of the suggested measures into the planning process change their effectiveness?

WS Simulation 4 Summary of results: The results of all planning simulations will be summarised.

Methods

WS Simulation 1: Desk research and organisation

WS Simulation 2: Desk research (subcontracted)

WS Simulation 3: Organisation and performance of planning simulations

WS Simulation 4: Desk research

2.3 Working Stage Guidelines: Guidelines and Recommendations

Objective

The final WS in WP D's research is dedicated to the development of recommendations and guidelines regarding the integration of MM in the planning process of a new / renewed building or area.

WS Guidelines consists of two steps:

- WS Guidelines 1: Compilation of main findings of WS Analysis and WS Simulation
- WS Guidelines 2: Elaboration of guidelines and recommendations

WS Guidelines 1: The base for the guidelines and recommendations are the main findings of WS Analysis and WS Simulation which will be summarized as a first step.

WS Guidelines 2: The recommendations / guidelines will first be elaborated in a structured way, relevant to particular target groups. Then there will be an opportunity for some of the participants in the planning simulation to look at the draft guidelines and give comments before the final guidelines are produced.

Possible target groups for the guidelines and recommendations are:

- practitioners in public authorities and land-owners / developers;
- decision makers in public authorities ("campaigning the campaign").

The guidelines will focus on different planning instruments applied in the planning process of a building / area, showing how such instruments can be adapted to incorporate MM. Examples therefore are: Guidance on negotiation with developers, on possibilities to include MM in the regulations governing the granting of building permission, and on strategies to involve and convince developers about the importance of integration of MM into LUP. Examples of MM related products and measures, targeted to the end-users of new developments and available for developers to use, will also be provided.

Recommendations for the better integration of sustainable transport into LUP policy and plans will also be included.

Methods

WS Guidelines 1: Desk research

WS Guidelines 2: Desk research

3 Resource Allocation

	Workload in MM								
	Maribor	ILS	Synergo	Napier	ETT	VGTU	Trivector	CUT	Total
Working Stage Analysis									
I: Preconditions for integration									
<i>I1: List of MM measures</i>	0,25	0,25	0,25	0,25	0	0	0	0	1
<i>I2: Design of a common analysis framework</i>	0,5	0,5	1,5	2	0	0	0,25	0	4,75
<i>I3: Data collection and analysis per country</i>	1	1	0	0	0,5	0,5	0,5	0,5	4
<i>I4: Comparison and identification of country related specifics</i>	1	0,5	0,5	0,75	0	0	0	0	2,75
II: Planning process									
<i>II1: Design of common analysis framework</i>	0,25	0,5	2	2	0	0	0,25	0	5
<i>II2: Data collection and analysis per country</i>	1	1	0	0	0,5	0,5	0,5	0,5	4
<i>II3: Comparison and identification of country related specifics</i>	1	0,75	0,75	1*	0	0	0	0	2,5
WS Analysis Total	5	4,5	5	5 (+1*)	1	1	1,5	1	24 (+1*)
Working Stage Simulation									
<i>1: Preparation</i>	0,5	1	0,5	0,5	0	0	0	0	2,5
<i>2: Detailed analysis</i>	2	2	0	0	2	2	0	2	10
<i>3: Execution of simulations</i>	1	1	0	0	0,75	1	0	1	4,75
<i>4: Summary of results</i>	1	2	0	0,5	0,25	1	0	1	5,75
WS Simulation total	4,5	6	0,5	1	3	4	0	4	23
Working Stage Guidelines									
<i>1: Compilation of findings</i>	2	1,5	1,5	2*	0	0	0,5	1	6,5
<i>2: Elaboration of guidelines and recommendations</i>	2	1,5	1,5	2,5	0	0	0,5	1	9
WS Guidelines total	4	3	3	2,5 (+2*)	0	0	1	2	15,5 (+2*)
Workload after SoA	13,5	13,5	8,5	8,5 (+3*)	4	5	2,5	7	62,5 (+3*)
Total WP D	16,5	15	10	10 (+3*)	5	6	3	7	72,5 (+3*)

Subcontracting

20.000 € is allocated for subcontracting up to four (depend on number of chosen countries for simulation) legal experts for WS Simulation 2: Detailed analysis. Legal experts should be selected by 28 February 2008.

4 Time plan

	2007						2008											
	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Working Stage Analysis																		
I: Preconditions for integration																		
I1 List of MM measures																		
I2 Design of a common analysis framework																		
I3 Data collection and analysis per country																		
I4 Comparison and identification of country related specifics																		
II: Planning process																		
II1 Design of common analysis framework																		
II2 Data collection and analysis per country																		
II3 Comparison and identification of country related specifics																		
Working Stage Simulation																		
1 Preparation																		
2 Detailed analysis																		
3 Execution of simulations																		
4 Summary of results																		
Working Stage Guidelines																		
1 Compilation of findings																		
2 Elaboration of guidelines and recommendations																		
Internal WPD meetings																		