



## **HOTEL**

How to analyse quality of life

An accompanying measure within the EU Fifth Framework Programme  
Keyaction "Improving the Socio Economic Knowledge Base"

# **Toolbox**

**Public report of Work Package No. 6**

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**TOOLBOX**  
**Public Report of WP 6**  
**Deliverable 6**

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## Preface

HOTEL – How to analyse quality of life (QoL) – is an accompanying measure in the key Action “Improving the socio-economic knowledge base” of the EC Fifth Framework Programme. Partners from five different countries are involved in the project:

- Co-ordinator: FACTUM OHG, Traffic- and Social Analysis, Ralf Risser, Austria
- Institut National de Recherche sur les Transports et leur Sécurité (INRETS)- Department d'évaluation et recherche en accidentologie, Stefan Petica, France
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- Lund University, Department Technology and Society, Agneta Ståhl, Sweden

The project HOTEL takes a starting point in a heuristic approach that focuses on different disciplines' practice in connection with the assessment and consideration of quality of life (QoL) and underlying mobility and transport preconditions. The core concept is to find out how aspects of QoL are taken care of in practice in the field of transport, mobility and city planning. With "practice" all kinds of activities are meant that set the scene for the living conditions of citizens. The responsible actors for these activities are politicians and decision makers, planners, implementers and administrators.

The project HOTEL is divided into eight work packages distributed over a life-span of 24 months. In WP 1 State of the Art we look for literature and empirical data concerning the meaning of QoL in general. The central elements of our project are the workshops carried out in WP 2 and 3, to get an overview of QoL assessment in different countries, by different disciplines at different occasions, and the elements and indicators taken care of thereby, and the workshop in WP 5 that is carried out in order to improve frames for QoL assessment and implementation of results. A toolbox for interdisciplinary use (WP 6) will result, and a pilot study to validate the toolbox is planned (WP 7).

WP 1 (State of the art) WP 2 and WP 3 represent the data collection phase. WP 5 to WP 7 reflect the phase where improvements of these procedures are elaborated on and tested. We do expect that the overview that we receive during the data collection phase will bring to light several short-comings in today's practice of both measuring and considering QoL aspects appropriately. All workshops will be carried out under consideration of regions: Central, Eastern, Northern, Southern and Western Europe. Last but not least, a concept for a data-bank for QoL assessment results by different disciplines, at different occasions, and in different regions will be worked out which makes information about procedures to measure QoL and about their results easily available and accessible for both researchers and practical workers in the field. Dissemination of results (WP 8) will be done by electronic media (web-site) and print media (newspaper), and by oral communication, e.g. in the frame of congresses, expert conferences, etc., on the topic that nowadays take place at many different occasions.



# Content

## *Preface*

<b><i>Content</i></b>	<b>5</b>
<b><i>Summary</i></b>	<b>7</b>
<b><i>1 Introduction</i></b>	<b>9</b>
1.1 Objectives of the Toolbox work	9
1.2 Partners in WP 6	9
<b><i>2 Guidelines for decision makers</i></b>	<b>11</b>
2.1 The importance of subjective aspects	11
2.2 Participation and other implementation issues	11
2.2.1 Participation	11
2.2.2 Planning procedure	12
2.2.3 How to measure changes?	13
2.2.4 How to get started?	15
2.2.5 For the toolbox	20
<b><i>3 The questionnaire</i></b>	<b>21</b>
3.1 An instrument to measure QoL	21
3.2 The pilot study	21
3.3 Test site and goals	22
<b><i>4 The Checklist</i></b>	<b>23</b>
4.1 Procedural description	23
4.2 Indicators to be considered according to HOTEL	23
4.3 Comparison to the EU-project WALCYNG	24
<b><i>5 Recommendations for a data base</i></b>	<b>27</b>
5.1 Content	27
5.2 Technical proposal for the implementation of a HOTEL on line questionnaire and knowledge database	28
5.3 Estimated efforts	29
<b><i>6 Application of the HOTEL- toolbox</i></b>	<b>31</b>
References	33
<b><i>7 Appendices</i></b>	<b>35</b>
Appendix 1 QoL-Guidelines for planners and decision makers	35
Appendix 2 Questionnaire used in the pilot study	41
Appendix 3 Screenshots from the data base "embryo"	45
Appendix 4 Consortium of the EU-Project HOTEL	49





## Summary

The starting point for the elaboration of WP 6 "Toolbox" have been the State-of-the-art work and the results of the previous three workshops, held in Lund (WS I) and Paris (WS II) in 2003 and Ferrara (WSIII) in 2004. In particular the one in Ferrara provided a huge amount of useful material for the development of research guidelines in connection with traffic and town planning.

All workshops provided a compilation of keywords for QoL which were compared with official papers, letters and plans from Kristianstad (Sweden). The city of Kristianstad was chosen for a pilot study (see HOTEL Deliverable 7 on The Pilot Study) where the toolbox could be tested. Larger parts of the inner city had been redesigned and rebuilt, among others with one decisive goal: to improve "liveability". Kristianstad thus seemed very appropriate to test the contents of our toolbox. We also found out that in Kristianstad the planners and decision makers responsible for the innovations there had considered roughly the same aspects as we had done in the HOTEL project.

With the materials gathered in the earlier working steps we had compiled a kind of a checklist – the **QoL-checklist** – where questions and aspects that would correspond to the key aspects identified in the frame of HOTEL were summarised.

On the basis of this list the **QoL-questionnaire** was developed that was used in the frame of the pilot study in Kristianstad. The pilot-study team (Lund and FACTUM with the help of the municipality in Kristianstad) carried out road-side interviews with road users at 2 selected locations in Kristianstad (Östra Boulevarden and Nya Boulevarden, sites separated by approx. 150 meters from each others). In parallel, **QoL-guidelines** for planners and decision makers were generated.

For the politicians and decision makers the results of the application of the toolbox instruments, later on, should help to implement the right measures in the right way, and to present them according to the relevance attributed to them by the public. The pilot study in Kristianstad should provide information on whether this can be achieved with the toolbox in its present format, and these results will be considered and shown in the appropriate report (HOTEL Deliverable 7).

Finally we created what we called and "embryo" for a potential **QoL-database** with recommendations of how a data base could be implemented, how to handle qualitative data to achieve harmonisation and how a library of QoL-studies could result in a dissemination of knowledge about QoL. With these recommendations for a data base we expect to make the evaluation in the field of QoL much easier. The results of this work will be an integrated part of the HOTEL-website but of course has to be limited to recommendations as the organisational complexity would exceed the options open to the HOTEL project.

The HOTEL-toolbox for the assessment of QoL in connection with city planning, transport and mobility consists now of three instruments:

1. a QoL-guidelines for planners and public decision makers
2. a checklist containing the indicators that are considered relevant for the QoL of citizens
3. a QoL-questionnaire (see annex) which was pretested in the pilot study in Lund

as well as recommendations for a database where results of QoL assessment at different occasions could be stored.

The quantitative and qualitative analysis of the results of the pilot study carried out in Kristianstad will be parts of the next deliverable – the pilot study report. At the same time the pilot study was also a part of the toolbox-development work, as it served to test the instruments of the toolbox. After the pilot study, the work with the toolbox instruments was finalised, giving them their present form as preliminary tools, outlines or recommendations.

# 1 Introduction

The toolbox of HOTEL will consist of the following instruments that are further discussed in the text of this deliverable:

- QoL-Guidelines for planners and public decision makers (see appendix 1)
- A checklist containing those indicators that according to HOTEL are relevant for the QoL of citizens (see tables 1 and 2 in chapter 4)
- A QoL-related questionnaire (see appendix 2)
- A database embryo (see appendix 3)

## ***1.1 Objectives of the Toolbox work***

The Toolbox resulting from the State-of-the-art work and the activities of WP1 (state of the art) WP2, WP3, WP5 (Workshops I, II & III) and WP 7 (pilot study) will have the shape of preliminary guidelines for research on and implementation of QoL-aspects that, once finalised in further applied research projects, can be used in all European countries. These guidelines will include recommendations how to measure/consider QoL in connection with traffic and town-planning. The assessment modules should be flexible, in order to make it possible to consider characteristics of different groups, regions, or occasions appropriately, but nevertheless to reach comparable results that can be stored in data bases. It should not be necessary that for every new project about QoL (and mobility) a new instrument has to be designed, where the results can hardly or not at all be compared with other – earlier - results. On the contrary, comparability should be in the focus which will make assessment of QoL in Europe easier, better understandable, and more accurate.

The guidelines were tested and their relevance should be demonstrated in the frame of a pilot study in Kristianstad (Sweden). There, satisfaction of citizens with some selected innovation at this site will be assessed. Thereby, it will be analysed to which degree the aspects that according to HOTEL are relevant for QoL are considered as being relevant by the citizens (of Kristianstad), as well.

## ***1.2 Partners in WP 6***

Three partners took part in work package 6:

- FACTUM OHG, Traffic and Social Analysis, Ralf Risser, Karin Ausserer, Nicolas Bein, Austria
- Lund University, Department of Technology and Society, Agneta Ståhl, Sweden
- Comenius University Bratislava, Department of Psychology, Jana Plichtová, Magda Petrjánošová, Slovakia

FACTUM was the leader of this work package. The report has been written by Nicolas Bein Magda Petrjánošová, Jana Plichtová, Ralf Risser, and Agneta Ståhl.



## 2 Guidelines for decision makers

### 2.1 *The importance of subjective aspects*

The general procedures to develop the HOTEL Toolbox were chosen according to the results achieved in the earlier work packages, where Workshop III has the greatest influence. This workshop was carried out in order to synthesise the results from the state-of-the-art study and from the two first HOTEL-workshops: In these earlier workshops the goal was to develop suggestions for possible definitions of QoL. In Workshop III, the task was to present those suggestions to a large number of international experts and, together with them, to develop a framework, or a scenario, of aspects that should be included in the definition of QoL. In this connection, it is very important to underline that experts unanimously argued that subjective criteria have to be considered more and in scientifically sound way in order to be able to assess QoL. Subjective aspects, however, can only be detected with the help of communication with the citizens. This means that for any toolbox that should take care of QoL aspects aspects have to be outlined and questions have to be formulated that take care of this (see also chapter 2.3.4.)

### 2.2 *Participation and other implementation issues*

The State-of-the-art work and the two "analysis workshops" in Lund and Paris brought about a number of assumptions and heuristic conclusions that were further discussed in the "synthesis workshop" in Ferrara, and that are presented here as a part of the basis for the HOTEL toolbox.

#### 2.2.1 Participation

As the experts' discussions confirmed, the participation of citizens seems to be a necessary precondition for success of any project that wants to consider QoL. Moreover, participation is a sign of QoL in the city per se because it is an important component of local democracy.

#### **What happens if participation is missing?**

If there is no participation, one may assume that the local authorities will not be able to make proper decisions because they lack the information about needs and wishes of the population. They can of course guess, but it is very dangerous to try to read other people's minds without communicating with them. If guesses are not correct, the population is unsatisfied and the QoL may even decrease. The same happens if some really good ideas come "from above", but people are not appropriately informed about them. Good intentions of local authorities could in such a case miss their point/goals because of misunderstanding and reactance, and thereof resistance, from the side of residents.

#### **What are the advantages of participation?**

The more intensive the participation is, the higher the QoL will be in the present and in the future, according to our leading assumption. Why? Because citizens who participate are aware of their democratic influence and power, as they experience control over their living conditions. The increased sense of control also strengthens their responsibility and their identification with their living space. This will affect their well-being positively, according to all we know. In this way the living space becomes a part of the "Self". Due to this citizens are more willing to participate in activities that would bring positive changes.

And what is even more important is that one may expect that it increases the probability that their children will participate as well because they will learn from their parents.

In this way experts confirm the socio-psychological knowledge about a correlation between the sense of control and the individual well-being on the one hand and the willingness to participate on the other hand.

In general it could be said that the democratic culture with equal respect for everybody's views and initiatives enhances participation procedures that, again, support democratic attitudes. However, there is also a cognitive facet to participation; Active citizenship presupposes access to all relevant information. Without enough information citizens' participation could have a negative effect.

### **Levels of participation**

There are different levels of participation. For example, there may be cases when the residents are not informed before anything happens but are asked to assess the project afterwards. Or they may be informed before the start of any public project and asked to contribute to the planned project by commenting, criticising, etc. They could also be asked to articulate their wishes and expectations. Sometimes they are also asked to change their habits or preferences. Different target groups may be addressed. E.g., residents are frequently involved in different kinds of participation processes. There are also urban projects where there is co-operation of architects with students, or with children, etc.

The most elaborated form of participation is the participation from the very beginning, where a common vision of future development (see also chapter 2.2.2 Planning procedure, on "Common vision") is developed, including accurate information about the whole decision making process, which provides the possibility to evaluate what was planned and what was really achieved.

Local democracy, NGOs and local associations therefore provide the means for participation and consequently for empowered citizens. Informed and empowered citizens will be strong partners in forming and shaping future development of the city. Moreover, active citizenship represents an important counter balance to the interests of companies, politicians and experts. Citizens' organisations should be allowed to be initiators of change and also watchdogs of politicians and big companies. Their voice should be strong enough to prevent the interests of the wealthy from prevailing over the interests of "small" people.

### **Culture of participation**

During the workshops stories from real life were told about how habits of people (e.g. use of transport modes) could be changed with the help of education, campaigning, economic incentives, etc. Citizens are in these stories considered not only as a source of feed-back, but also as important partners who could contribute to the creation of a new urban culture, e.g. culture of a more "physical involvement" (walking, cycling) that at the same time would mean exercise and health. At the same time, citizens experience that there is some interest from experts and politicians in their needs, their problems, and their ideas.

### **2.2.2 Planning procedure**

As mentioned above, planning any improvements with respect to QoL requires taking into consideration the local traditional, economic and societal context, the culture, established ways of communication and typical ways of decision-making. Therefore appropriate knowledge about every day life in the municipality is helpful (provided, e.g., with the help of ethnographic research). The sociological structure of the city and its diversity must also be taken into consideration.

### Common vision

The concept of QoL (or one special aspect of it) is seen as a common achievement by many actors. The whole process should start with the analysis of the present, past and future situation in the city from an interdisciplinary perspective (including of course social sciences and psychology). Any vision of QoL improvements should be achieved through an open and fair dialogue with different key actors, including the general public.

It should be stressed that a common vision of QoL in the city is not a compromise among different groups of population. It is the outcome of a dialogue among experts, politicians and citizens and should in many cases be "better than a compromise" .

### Objectives

The general common vision should be turned into a set of objectives and these objectives should be implemented according to a time plan and appropriate budget. It is better at first to formulate long-term objectives, which represent the main directions of changes, then mid-term objectives as clearly separate stages on the way there, and finally short-term objectives as specified steps in the process of change.

Each objective should be clearly defined. The advantages and disadvantages of different suggestions of how to solve current problems or how to improve the present situation should be weighted. Possible alternatives are obviously limited by previous developments in the city concerning the division of urban space, natural resources, economic resources, etc.

It is also necessary to take into consideration the social structure, variability of life styles and assessed future migration into and out of the respective city in exactly the same way as during the negotiations of the common vision. It means that concrete QoL objectives should be specified with respect to the particular city, city district or village, to its past, present and assessed future development. There is a question whether and in what sense experts should respect the historical development of the city, not least with respect to architecture questions. However, it is clear that the success of any project depends on the willingness and capability to harmonise urban, technical, environmental, human, social and societal requirements.

### Monitoring changes

The "starting stage" of any public project should be described very clearly so *that the impact of changes brought by a project could be measured or assessed*. Changes should be monitored in every step and feedback from the general public and especially from the "users" – the people concerned with and affected by the changes - should be received at every stage. Reassessment – repeated studies - should be carried out all the time so that in the case of an unexpected, unfavourable outcome the whole procedure can be newly planned. This may sound costly, but probably will help to save money that otherwise is spent for useless projects and for failures and flops that later on have to be corrected.

#### 2.2.3 How to measure changes?

The experts discussed two sets of possible QoL factors that must be taken into consideration and that can be measured, even if in very different ways – the objective and the subjective factors. Another specific category emerged indirectly in their discussion, which should be also monitored, since it is one of the mentioned preconditions of high quality decision making - the communication among the key actors. Of course, to measure changes it is not enough to ask involved parties and target groups afterwards. Effective results require sets of questions about what has been administered before *and* after the change. (Actually and in a more elaborate sense, there are four sets, two measuring the *objective* situation before & after, and two measuring subjective aspects - the satisfaction and opinions of the public – before & after).

### **Objective factors/ Technical and environmental assessment**

Objective factors are used more often, because they are more easily determined and monitored than the subjective factors. Which objective factors to choose depends on the character of the project. For example concerning the public transport system, the following factors could be chosen: average time spent every day to get to work or school, percentage of people using the public transport system, number of busses and trams going from and to one specified direction, frequency during different times of the day and of the night, m<sup>2</sup> of space for one passenger, number of vehicles with wheelchair and baby-carriage accessibility, the viability of smooth changes between different public-transport lines, and between car and the public-transport system, co-ordination of commuter transport inside the city and to the city from a longer distance, etc.

### **Subjective factors/ Human and social assessment**

As has been frequently mentioned, objective factors do not necessarily indicate high QoL or satisfaction of the inhabitants. Therefore they should be combined with subjective measurements, which reveal information about how people perceive and evaluate their place of living, provided services, etc. Moreover, if asking them in an open form they could provide information about what is going wrong, what is missing, etc. For example they could be satisfied with the comfort of public transportation system, but nevertheless miss a good information system. Or they could appreciate the technical qualities of their dwelling but miss a functional community. Sometimes there is a sharp difference between the views of architects, technicians and lay people. There are numerous examples when projects meant to be progressive failed because people simply did not like them, e.g. when people refused to live in futurist buildings. Therefore it is necessary to know the residents' taste and their needs. It is questionable whether their taste should be "changed" or not, e.g. by campaigns, education, etc. Probably there are some basic requirements associated with human needs and physiology, which should be respected and which are stable over time.

As was already mentioned, when people are satisfied with their place of living, they develop a strong attachment to this place. Therefore the most complex indicators of subjective QoL are the sense of belonging to the place and the sense of belonging to the community.

When the experts and practitioners talk about subjective aspects of QoL in cities they typically have in mind an "average citizen" without any characteristics of his/her social belonging or attachment. The consequence is that the life style of the "real people" is not appropriately respected.

In practice the measurement of subjective factors usually focuses on perception and evaluation of a specific segment of the urban space and on its specific functions and services (e.g. transportation system). This specification is needed to receive and to gather usable data that are sufficiently specified. However, the involved people and groups of citizens should also have a chance to express their view freely, to articulate their comments, suggestions and critiques. It is important to ask them questions about how they perceive the QoL in the municipality in general. Questions about the degree of their identification with the place of living should be asked as well.

If there are more stages of a public project, it is reasonable to carry out several measurements in time series. The questions should explore perceptions of the present state and of the changes, their evaluation, the general degree of satisfaction with the new state of affairs, the degree of satisfaction with available options (increased or decreased freedom of choice), perceived problems and obstacles, but also, and this is very important, the expectations and suggestions of the relevant groups of the citizens, and/or the citizens in general.



This makes the inhabitants of any city to active dialogue partners instead of treating them as passive recipients of changes with only the option of being satisfied or not.

### **Communication among the key actors**

An intensified and democratic dialogue among the key actors is one of the most important preconditions for success of any public project including those that have improving QoL as an explicit goal. Therefore it is very important to monitor (especially from the perspective of the prediction of success) the communication between key actors - urban planners, local authorities, politicians, experts, citizens - and whether the perspectives of different interest groups are respected in this process.

Every possible combination should be monitored for the kind, intensity and frequency of and possibility for collaboration: among different types of experts, between experts and politicians/ general public, among different levels of authorities, between authorities and the general public. It is also important to ask, which means of communication are used: meetings, media information campaigns, public debates, collecting comments, suggestions and criticism, etc.

The legislative frame is also very important. Perhaps the public must be asked. But the law gives the right of the last decision to the politicians. In general it should protect those with less power, be it the political, economic, executive or the informational one. Law should create as equal and fair conditions for everybody as possible.

If shortcomings arise, for example, missing communication on different levels, missing feedback because of lack of interest from the side of the public or from the side of authorities, efforts should be made to improve both the situation in communication and to improve the situation in practice, for example, the transportation system. Only a democratic dialogue could bring new solutions that are acceptable for everyone. For example, it is supposed that better informed citizens will be better partners in the frame of the democratic municipal processes. Every good public project could miss its point if citizens do not understand what is going on, what is planned and what will be the advantages for them. If they are informed well and in time, there will be time opportunities for discussion and – if necessary – solutions of problems that may arise, due to misunderstandings or to conflicting points of view.

### **2.2.4 How to get started?**

In each project to be implemented, objectives should be set up with strategies and tactics to achieve them as well as the methods of result assessment and evaluation. This all should happen in the frame of a long-term plan. The starting point of the whole planning process is creating common vision of future development based on an analysis of the present situation in the city. The common vision ensures that the planned solutions will not be disintegrative, of a short-term character, in conflict with other municipal plans, in favour of only one segment of the population or one interest group, but systemic, democratic and supporting a sense of community and mutuality.

### **Planning**

Planning consists of the following stages:

1. analysing the main problems of a particular city,
2. creating a common vision,
3. defining long-term, mid-term and short-term objectives, main strategies how to achieve them and also clear markers of success or failure,
4. monitoring and feedback – an information flow among experts, politicians and the general public

This is a linear explanation of the planning process used to simplify the subject. Planning and realisation are not always two separate processes. In practice the sequences are often overlapping in time. In this way on each stage of planning and realisation there exists some kind of feedback, which provides a chance to recognise failures and to improve what is going wrong.

Another important precondition of success is an interdisciplinary collaboration of experts. To achieve this it is necessary to build effective communication links among experts from different disciplines (architects, technicians, urban planners, sociologists, ethnographers, sociologists, social psychologists). One example of good practice is to bring them together at the beginning of any project. Various social-scientific work methods (workshops, discussions), and related social events that are not scientifically structured represent opportunities for exchanging views.

Because the implementation of any project needs some political support, it is important to carefully build a communication link among politicians, local authorities and experts. The obvious problem is that the politicians favour short-term objectives much more than long-term ones. Another problem is that the interests of those who provide financial resources could prevail and neglect the needs of "small" people (that may be considered as "too costly" and "simply not affordable").

#### 1. Analysing the main problems of a particular city

Without an appropriate analysis of the nature of the problems and without creating a long-term and systematic vision of the future city development, hastily made solutions could even deteriorate the QoL. Experts are aware of that and suggest starting with identification of the main problems, analysis of the problems including a stage of gathering basic information and a comparative study of the past, present and assessed future situation. Some of them are aware also of the importance of sociological research with the aim to identify the societal structure and the needs and desires of the residents, viz. different groups of them with potentially conflicting needs and interests.

#### 2. Creating common vision

Common vision is a common achievement by which the future perspective of the city and the needs of the citizens are put together. In other words, it is a starting point for a master plan, which carefully combines the urban, economic and environmental situation on the one hand and the human and social needs on the other hand.

The core of the common vision forms expert knowledge (urban planners, architects, technicians, social scientists and others). In an ideal case, before the planning process starts the different experts should meet and generate ideas, discuss the general outline and try to integrate several perspectives (ecological, human, technical, sociological, urban, etc.) in the frame of an interdisciplinary brainstorming and dialogue.

Then conditions for a competition among urban planners and architects should be defined as clearly as possible. It is the best way to achieve variability of future visions. After this, a stable basis for a productive dialogue (present state analysis, proposed changes) and for a discussion about the pros and cons should be established.

For informing and engaging the general public, the target groups (all the concerned) should be identified, their participation in the public discussion ensured, and they themselves empowered if necessary. How to achieve this? For instance with the help of information campaigns - expert debates in the mass media and presentation of proposals at different events

and places (e.g. supermarkets, railway stations, bus terminals), where pros and cons are explained. The public should not only be informed, but their opinion on the whole subject should be asked for in different forms. "The public" includes all the target groups (including elderly, children, disabled, minorities) – we can speak about the general public and "the users" as those who will be directly affected by the planned changes in their every day life. There can be different forms of communication: the direct one in the oral way - the door to door approach, public meetings and discussions with participating organisations (NGOs and others) and individuals<sup>1</sup>; and the indirect one on the institutional basis – gathering complaints, comments and public opinion details in more or less systematic ways.

### Examples

Let us say that the common vision is to rehabilitate public areas, give people the opportunity to walk, cycle, and meet and to reduce car use in the city centre. The sociological support for this is to create a new culture of walking, cycling and using public transport. The urban-technical support is to improve the public transport, to increase its quality and aesthetics, to create adequate infrastructure for walking and cycling, to create new forms of transport (collective taxis, shared cars), etc..

### Typical problems and solutions

If the media are not interested:

- establish personal contacts with journalists.

If the general public is passive:

- provide clear, continuous communication about the project with examples, and potential consequences displayed in different forms (on the internet, in the national, regional and local mass media, orally),
- provide all information necessary to make personal decisions (e.g. what are the personal costs of different kinds of transport and their impact on the environment) in different forms (on the internet, in the national, regional and local mass media, orally),
- provide good and bad examples of changing QoL in other city districts or cities,
- organise big entertainment events connected to the activities that belong to the public project in question, in order to make the public interested,
- support long-term systematic education starting in elementary schools,
- facilitate empowerment using best-practice examples of citizens' empowerment, in order to provide motivation to participate<sup>2</sup>.

If the participation is only selective:

- address the opinion leaders of minority groups and civic organisations and follow the appropriate steps suggested above

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<sup>1</sup> An interesting idea with good results is to organise meetings on schools and in kindergartens.

<sup>2</sup> The main principles are: equality of the participants, immediate participation consequences, importance of the emotional involvement.

### 3. Defining long-term, mid-term and short-term objectives

Objectives arise from the common vision. It is important to name them and to check their viability in terms of time, available economic resources and the political will. These three aspects make the objective realistic.

There are long-term (visions, ideals, general directions), mid-term (stages) and short-term objectives (steps). They must together form a logical entity. The politicians are usually concerned about the short-term objectives, because they need to be elected again. The realisation of the short-term objectives could take 4-5 years, but after one year the first evaluation of achieved changes is needed. Evaluation has to be done in connection to the practical action plan. The mid-term objectives can take 5-20 years. We need them to have an operationalisation of the general vision in specified stages. The long-term objectives can change slowly over time as the situation, sociological structure or employment situation changes. Especially the short-term objectives should be defined very clearly and realistic. They should be easily measurable in order to evaluate their success. In contrast to this, it is much more difficult to evaluate mid-term and long-term effects during a process. The problem is for instance that negative effects often only can be measured when it already is "too late".

**How** to define what objectives should receive priority? There are different possible perspectives and it is important to make clear which of them are used and for what ends. The human (or humanistic) perspective stresses the needs of the general public, the economic perspective addresses availability of money, employment possibilities and a costs-effects analysis. The environmental perspective focuses on the environmental sustainability, and the urban perspective on the sustainable development of the city, including its infrastructure. The political perspective is about winning the next elections. Perhaps local authorities could invite different key actors with conflicting perspectives to discuss the subject, and mediate their dialogue, by looking at possible, or maybe even optimum, overlaps of these perspectives.

**How** to achieve a compromise between the long-term vision and short-term objectives? One should for instance organise expert workshops including NGOs and opinion leaders from different groups of the population. A typical higher-level contradiction between short-term and long-term goals is that the final results of longer term efforts (changing modal split towards reduced car use) may be evaluated positively by the general public, but the short-term consequences are perceived negatively (one has to accept that the car be used less starting from NOW). Another example, of a different type, is that building roundabouts is good for traffic safety in a somewhat longer perspective, but has the potential to cause inconveniences at the present moment (difficult to use, *experiencing* safety problems that de facto are not there,, etc.).

The majority of experts is aware of what problematic effects the implementation of any plans could have, if they are not understood clearly by the general public. **How** to inform the public? Some possible ways of informing the citizens and of learning about their opinions are mentioned above under 2 Creating common vision.

**How** to achieve a compromise among different interest groups and competing interests? Often there are conflicts between commercial interests and those connected to sustainable-development concepts. What helps to accelerate transport endangers safety, what is functional is not always aesthetic and vice versa (etc. cubble stones as obstacles for bicyclists). The basic solutions for such conflicts have to utilise all the (more or less conventional) strategies of conflict management – explanation, mediation, direct discussion. Exercises that help to see the situation from the viewpoint of other interest groups could help, as well as seeking for win-win solutions or, if not possible, for the most acceptable compromise (in Switzerland this is adherent to the local referendum model).

A very interesting idea is also to organise pilot studies in order to test proposed solutions on a smaller scale during shorter time periods. Of course this is not possible for all problems. Another – rather new - possibility is computer modelling. (See also "Typical problems" below).

**How** to support effective ways of making decisions? It is important to transform a good practice into legislation (e.g. local referendum). This is supposed to save time and energy.

### Examples

The long-term objective could be the sustainability of the city development. One of the mid-term objectives would be the revival of the historical city. Among several short-term objectives could be e.g. giving priority to pedestrians in the shopping streets in the centre making them accessible only on foot – including public transport - or by bicycle, but not by car. The consequences are a livelier city centre and more profitable shops. The revival of the social life in the centre increases the attractiveness of the whole city and brings more tourists. This starts a prosperity circle.

### Typical problems

If there is not enough money available:

- address big local companies which could participate on the infrastructure building (and most probably gain from it),
- create a local tax found for sustainable development.

If different objectives are in conflict:

- organise expert workshops, find a compromise among different interest groups and competing interests (e.g. creation of new jobs in a new factory versus sustainable environment)

If the general public disapproves the changes:

- improve communication and explanation measures,
- provide economic and other compensations (e.g., a bonus system in a big factory for using the factory bus and not private cars),
- find hidden advantages for an apparently disadvantaged group (e.g. people living in the city centre cannot park in front of their houses, but the aesthetics of their nearest surroundings improves and the noise level decreases, which they certainly will be fond of in the long run),
- change the habits of the population by providing incentives by the public institutions, including economic measures.

## 4. Monitoring and feedback – an information flow among experts, politicians and the general public

There should exist continuous feed-back that supports and optimises the process of planning, monitoring, evaluation and modification of short-term goals. The implementers carry out a continuous monitoring of the new changing states of things in connection with the performed quality, the timing, the budget, the intended and also the unexpected consequences of activities (like for example unemployment rate, criminality rate, etc.). They also measure quantifiable aspects as indexes related to the sustainable environment, number of private cars, number of accidents, etc. The evaluation by experts (also in the mass media), and in an ideal case also by some independent institutions has to be added. One option of evaluation is also by comparison, for example from the historical perspective – the past, the present and the assessed future situation; or by comparing the development in different cities having similar problems.

The achieved results should be published (through mass media, events, etc.). This brings one part of the feedback from the general public, the second part results from the every-day experiences with the change by the "users" – the people directly concerned (including the aesthetic perception). The degree of satisfaction could be assessed by complaint registration and echo in the media, or more systematically, for example with the help of questionnaires, household interviews, observations in situ, etc.. It is a legitimate general conclusion that positive reactions by the general public mean that the needs of the population and of its relevant sub-groups have been respected well, that there has been good communication, and that the public now identifies itself with the common vision.

From the results of such an evaluation the actual course of any public action or project can be corrected if needed.

### **2.2.5 For the toolbox**

The contents of the discussion above are summarised in one of the tools that are included in the HOTEL toolbox: We call this tool the "QoL-Guidelines for planners and decision makers". They can be used like a checklist and remind the responsible step by step of what should be considered when implementing projects that have the goal to improve QoL (see Appendix 1).

## 3 The questionnaire

### 3.1 *An instrument to measure QoL*

From all previous work-steps of HOTEL, and under special consideration of the heuristics developed in the discussion above, as a main result of the expert discussions in the three HOTEL workshops, a number of issues were listed that should be considered when assessing QoL. The "general public and relevant sub-groups of the general public" are in the centre of these heuristics, and another important aspect that was underlined was the communication between different groups of experts and decision makers and the public. These aspects as well as the issues that are – or seem to be – important for all groups, but to a different degree and in different combinations, have to be considered in the HOTEL toolbox that the HOTEL consortium has promised to develop. The "heart" of this toolbox is an interview- viz. survey instrument – a questionnaire that also may contain some open questions - that can be used to measure satisfaction with situations and their changes, and thus to assess changes with respect to QoL.

Such instruments have to be based on assumptions of what elements should be included in order to get a clear picture of QoL and its changes. The list of elements that are relevant according to the findings of HOTEL were listed in what we called a checklist of relevant issues that together constitute QoL.

### 3.2 *The pilot study*

For the pilot study that is shortly discussed here, and that is extensively dealt with in a separate deliverable (HOTEL Deliverable 7), a preliminary checklist was generated. With the help of it the documents sent to us by public officials of the city of Kristianstad, who had offered to carry out the HOTEL pilot study there, were screened. This screening led to the conclusion that modifications of architecture and road-space infrastructure at two selected sites in Kristianstad should have a strong potential to improve QoL of the citizens, because relevant aspects were affected by those modifications. Consequently, and following the assumption that the subjective view is important, as we had learned in HOTEL, we planned to ask citizens about their personal assessment of the changes in Kristianstad. Furthermore, considering the problem of communication between decision makers and experts and the citizens, and the frequently expressed assumptions that there could be critical discrepancies between their assessments, we also planned to ask some experts and decision makers about their assessments.

Our expectation was that this procedure should help us in further developing the QoL indicators that are considered relevant for the QoL of citizens. Moreover, the pilot study should provide input for the design of the database embryo that also was envisaged to be a part of this toolbox.

The questionnaire that we finally have developed refers to QoL indicators in two ways: Firstly, it asks citizens how important they consider that some general issues and certain characteristics of the public space are, to be answered on 5-step Likert scales (from "entirely unimportant" to "very important"); secondly, it asks to assess to what degree both the general issues and the characteristics of the public space have been affected by any measure (different dichotomies ranging from "much worse" to "much better", or analogously).

The plan was that 100 persons each should be interviewed in two different parts of the city of Kristianstad that had been resigned and modified, not least with the goal to improve QoL. The instrument was pre-tested. Additionally, decision makers and experts in Kristianstad were interviewed in order to assess how important they considered certain aspects when making implementations in the public space, and to compare their perspectives with those of the members of the general public.

### ***3.3 Test site and goals***

The goal according to the project proposal had been to find a site where recently substantial infrastructure changes had been implemented with the goal to improve QoL. After discussions in the consortium, the city of Kristianstad was chosen for consideration, as a larger quarter of the inner city had been changed, among others with one decisive goal: to improve liveability.

From the perspective of the HOTEL consortium, the changes that had been carried out in Kristianstad had the clear potential to improve the QoL, making Kristianstad to an appropriate site: Whether changes that from the perspective of HOTEL should theoretically improve QoL, really do so in practice could be tested there, at least roughly, with the help of some empirical data: The way to do that was to operationalise the changes. The changes should then in detail be categorised according to the definition of QoL that was agreed upon in the frame of the HOTEL-project. Then, questions to citizens (residents, others) that refer to these changes should be formulated in such away that the answers reflect the degree of the citizens' satisfaction with them.

There was still another important precondition to choose Kristianstad as a site, namely the full support of one public official of the city, who also is in a position to support the HOTEL consortium in the name of the City of Kristianstad: All work had to be carried out in cooperation with the municipality of Kristianstad, otherwise it would not have been possible to carry our a pilot study within such a short time frame.

The quantitative and qualitative analysis of the results of the pilot study carried out in Kristianstad will be shown in the next deliverable – the pilot study report.



## 4 The Checklist

### 4.1 Procedural description

In order to help us (Agneta Ståhl from the Institute of Technology and Society, University of Lund and Ralf Risser from FACTUM OHG in Vienna, Co-ordinator of the HOTEL project) to prepare the instrument for the HOTEL pilot study (the questionnaire; see appendix 1), Birgitta Brännström-Fors from the Municipality in Kristianstad provided some papers for us that deal with the preparations of, and the discussion around, the changes in the city centre (Nya Boulevard/Torget and Östra Boulevard) in Kristianstad. Our task was to see what key words were used in those official papers, that reflected QoL aspects that in the frame of HOTEL had been identified as being connected to QoL, as a result of studying relevant literature (WP 1), and in the frame of expert workshops (WP 2 to 5). What "key areas" did these official papers refer to? These key areas were listed and commented in order to constitute another part of the HOTEL Toolbox: The HOTEL-checklist of QoL indicators.

### 4.2 Indicators to be considered according to HOTEL

In the course of work in the HOTEL project, summarising results of both the State-of-the-art study and the workshops in Lund, Paris and Ferrara, the following indicators (see table 1 below) were suggested as reflecting a possible concept of QoL in connection with transport and mobility preconditions rather well.

*Table 1: QoL indicators and sub-indicators in connection with transport and mobility according to HOTEL work and their mentioning in the Kristianstad papers*

Indicators	Sub-indicators	Mentioned?
Accessibility	<ul style="list-style-type: none"> <li>- Equality of access → accessibility for people with reduced mobility</li> <li>- Access to public transport</li> <li>- Access to different destinations</li> </ul>	X X X
Comfort	<ul style="list-style-type: none"> <li>- Absence of stress</li> <li>- Square meters of green areas</li> <li>- Square meters of living spaces</li> <li>- Square meters of space for pedestrians</li> </ul>	X } not } mentioned X
Safety	<ul style="list-style-type: none"> <li>- Speed limits/better control of vehicle speeds</li> <li>- Number of accidents, fatalities and injured person</li> <li>- Broad sidewalks, better walking facilities</li> </ul>	X not known yet X
Security (subjective safety)	<ul style="list-style-type: none"> <li>- Subjective feeling of safety of citizens</li> </ul>	X
Sustainability/environmental impact	<ul style="list-style-type: none"> <li>- Traffic calming areas</li> <li>- Decrease of car traffic → increase of cycle, public transport and pedestrian traffic → modal split</li> <li>- Noise and air pollution parameters</li> <li>- Budget for the different mobility modes</li> <li>- Length and size of different networks</li> </ul>	X X not clear X X
Quality of facilities	<ul style="list-style-type: none"> <li>- Consideration of the needs of different target groups (handicapped, elderly, children, etc.)</li> <li>- High satisfaction of citizens with facilities and services</li> </ul>	X to be tested

Indicators	Sub-indicators	Mentioned?
Participation	- Number of meetings of information of the population and publications	X
	- Number of participation activities	X
Time	- Time one has to spend (e.g., those without car)	X
Urban development	- Density - Distance from residence to work and of other trips	} not mentioned

The indicators and sub-indicators summarised in the table above are the nucleus of guidelines for considering QoL aspects in traffic and transport. According to the work in the HOTEL project, active consideration of these aspects is relevant for the establishment of QoL. When reading the papers from Kristianstad dealing with the implementation that we wanted to evaluate in the frame of the HOTEL pilot study in Kristianstad, we found that those aspects in the table where we put a cross are considered in those papers. There are also some question marks, where we were not really sure whether this was an issue, because, for instance, the wording was not clear. Finally, there are some bullet points where we had no data, i.e., where one could assume that this was not taken care of, or taken care of but not mentioned in the paper texts, like urban density (viz. changes thereof), or square meters of living spaces.

### 4.3 Comparison to the EU-project WALCYNG

As a kind of a "validation"-exercise we compared the HOTEL indicators (table 1) with those needs and interests that roads users named in the frame of the EU-project WALCYNG (Walking and cycling instead of short car trips, Hydèn et al. 1998). There, people were asked what preconditions should be fulfilled with respect to transport and mobility preconditions, so that they would be satisfied. Hakamies-Blomqvist & Jutila (1997) conclude from literature studies that the following aspects are relevant for the road users, from a motivational point of view:

- Status, equity, social comparison aspects
- Social communication
- Health
- Aesthetics & environment
- Comfort
- Spontaneous mobility
- Security
- Costs

Satisfaction with respect to these variables, we propose, can well be taken as a synonym of QoL, or at least as a concept that to some degree reflects QoL. In table 2 below, the named needs are put in parallel to the indicators from HOTEL (table 1):

**Table 2: Relevant user needs from WALCYNG, indicators for QoL from HOTEL and verbalisations in the official notes concerning the pilot site in Kristianstad**

		Terms used in the discussions of the changes in the two areas in Kristianstad that belong to the test site for the HOTEL pilot study, reflecting distinct categories belonging to the QoL-domain	
User needs according to WALCYNG	QoL-categories according to HOTEL	Östra Boulevard	Nya Boulevard/Target
Safety/Security	Safety Security (subjective safety)	Safer cycling, fewer conflicts with pedestrians and bicyclists, fewer conflicts between pedestrians and bicyclists, reduce speeds, exclude cars; subjective feeling of safety	Less car traffic, lighting, safe cycle parking; Number of accidents, fatalities and injured person, Broad sidewalks, better walking facilities; subjective feeling of safety
Spontaneous mobility, accessibility, usability	Accessibility, Time	Better fluidity of pedestrian traffic, access to public transport; access to different destinations; length and size of different networks	To go should be possible, accessibility, integer networks, short ways, easiness for pedestrians; access to public transport; access to different destinations; length and size of different networks
Equity	Participation	Participation; equality of access → accessibility for people with reduced mobility; Budget for the different mobility modes; Consideration of the needs of different target groups (handicapped, elderly, children, etc.)	Participation; equality of access → accessibility for people with reduced mobility; Budget for the different mobility modes; consideration of the needs of different target groups (handicapped, elderly, children, etc.)
Comfort	Comfort, Quality of facilities	Restaurants, reduced comfort for car drivers; Absence of stress; Square meters of green areas; Square meters of space for pedestrians	Comfort for pedestrians (cobble stones?), cycle parking facilities, absence of stress; Square meters of green areas; Square meters of space for pedestrians
Aesthetics		Aesthetical design, changes should lead to a more beautiful environment, plants, nicer materials	Nice environment, cobble stones look nice, enhance aesthetics
Social communication	Urban development	More communication between road users, restaurants, participation; number of meetings of information of the population and publications; number of participation activities	Culture, cultural events in the public space; number of meetings of information of the population and publications; number of participation activities
Environmental quality	Sustainability/ environmental impact	Changes should lead to a more beautiful environment Traffic calming areas, decrease of car traffic → increase of cycle, public transport and pedestrian traffic → modal split; Noise and air pollution parameters	Good air, nice environment, no noise; Traffic calming areas, decrease of car traffic → increase of cycle, public transport and pedestrian traffic → modal split; noise and air pollution parameters
Costs/availability		Not commented	
	Others	High satisfaction of citizens with facilities and services	Health; high satisfaction of citizens with facilities and services

Comment: certain terms belong to more than one category

It can be seen, that the HOTEL indicators, as we want to call them, and the WALCYNG indicators overlap well, the main difference being that in the WALCYNG project aesthetics and the cost aspect were mentioned (by the road users themselves), whereas the experts asked in HOTEL did not mention these two aspects, nor was it mentioned in those pieces of literature that we screened. But the notes from Kristianstad showed that aesthetics were a topic as far as both the public officials and citizens are concerned.

This can be deduced from letters that were sent to the municipality in Kristianstad in the course of the public participation process. Costs, on the other hand, were not a topic that was related in some way to well being or so, but just very soberly as an aspect that has to be considered by the public institutions.

The HOTEL Questionnaire (see chapter 2) that will be tested in the frame of the HOTEL Pilot study considers the relevant aspects (those ticked in table 1), and we will see, whether the interviewed citizens are of the same opinion as the experts (including the HOTEL consortium) are.

## 5 Recommendations for a data base

Developing guidelines for an installation of a databank where results of QoL assessment at different occasions by different disciplines are stored was one general objective that was defined for the HOTEL project. A specially adapted databank will make evaluation and harmonisation of data in the field of QoL much easier.

As the establishment of a fully developed database with an online access of course would have exceeded the organisational complexity of the options open to the HOTEL project the partners involved decided to work only on some sort of a data base "embryo" to check out the possibilities the information technology provides. Therefore, with the help of Claes Wessling from Sweden, we created a data base file by using MS Access (see Appendix 4 for some screenshots). If the concept should be put online it will be better to make use of MySQL, though (see ch. 5.2).

In any case, the data base that we recommend should open up the possibility to store verbal materials collected in the frame of communication (interviews, surveys and other types of instruments) with different groups of people (e. g. "experts" and "citizens").

### 5.1 Content

We propose the implementation of the following 3 frames:

1. We recommend to store categories of certain answers in relation to questions (one category of questions can lead to many categories of questions.) For example: What do different groups of people say about their mobility, about their definition of QoL, about the assessment of their own QoL, explanations for the assessment, etc.?

This database thus should be made to include:

- a) Answer categories, e. g. lists of elements that constitute, or belong to, QoL; formulation categories/quotation categories (e.g., "QoL is only an Illusion")
- b) Priority lists: Most important elements from a certain perspective (for smooth mobility, for good QoL, to improve traffic safety, from the point of view of acceptability, etc.). Answers could be put in tables, like frequency of mode use and in some cases answer categories could be standardised, e.g., mode use can refer to Standard modes (car, passenger, walking, cycling, public transport, train)
- c) Scalings referring to both standardised and variable concepts (bad weather keeps me from walking: agree not at all - 1 - 2 - 3 - 4 - 5 - agree fully)

Further it should be accessible by key-words:

- Main-level key-words: For example life quality/quality of life, mobility, mobility impairments (Individual, infrastructure, vehicle-related, social/societal, etc.), traffic safety
- Second level key words: Equity, health, accessibility & usability. "Second level" means that these key-words only lead to data dealing with them in connection with mobility, QoL, traffic safety, mobility impairments

At both levels there should be the possibility to apply key-words within one result pool.

2. As a second point we suggest the implementation of a standardised "HOTEL-Online-QoL-questionnaire" which can be used by Website-Visitors from all over the world with the main focus on mobility/traffic, very similar to our pilot study instrument used in Lund.

Users have to register and quote some demographical variables (age, gender, exact place where they are living) before they can use the data base. This would allow to gain an enormous amount of data as there could be collected both input of individual cases as well as input of major studies. Professional users should contact the webmaster before and receive data later on.

3. Finally a "QoL-Library" - the possibility of storing (researcher/experts should insert their data) other QOL-studies with the help of certain input fields should be established: Title, Subject, Year, Authors, Location, Methodology, Abstract, Key words and LINK to their website

Again there is the importance of a good search function by

- entry: title, authors, location etc. and by
- key-words: for example "life quality/quality of life", mobility, mobility impairments, traffic safety, equity, health, accessibility & usability, etc..

The general access should be open for reading, copying, printing and maybe down-loading, with a registration (i.e., one can only get in by giving ones identity and access data). The use of data is possible when one signs a contract that the "owners" of the data base are informed about this use and about the results.

## ***5.2 Technical proposal for the implementation of a HOTEL on line questionnaire and knowledge database***

### **Guidelines/Solution criteria**

The scheme

- must comply with directions imposed by the Fifth Framework Programme and later ones
- must allow accessibility for impaired persons
- must offer broad browser compatibility by standard compliance and by renouncing on plugins (like macromedia flash or java applets) – plain HTML interface only

Guidelines for server application and database backend should

- consider compliance with open standards and operating system independence
- minimise implementation effort by building on/customising open source programs that already provide the required functionality.

### **Implementation proposal**

The concrete technical implementation and program building blocks are suggested as follows:

- The user interface for the questionnaire, the question repository and the bibliography is to be based on HTML without plugins. Input forms are generated and processed by a J2EE servlet engine (Tomcat/JBoss/Apache) or Apache/PHP \*), retrieving and storing data in a backend database.
- Collected user data from the questionnaire and bibliographic links are to be stored in an open source SQL database that also provides the possibility to access data directly by

database clients like MS Access (ODBC driver). The proposed solution is PostgreSQL or MySQL<sup>3</sup>

- The HOTEL questionnaire, question/answer repository and bibliography is amended by an open knowledge base site, which allows adding articles to the website for any registered user. We suggest this to be based on a so called Wiki system which has become very popular in the scientific/academic community. There are several free, ready-to-use Wiki systems available. We suggest PHPWiki or a functional equivalent\* ([www.sf.net](http://www.sf.net)). A well known Wiki-based system is [www.wikipedia.org](http://www.wikipedia.org), a public encyclopaedia where any user can contribute encyclopaedia entries)
- Access rights and user sign-ins are handled by the means of the mentioned application servers; no implementation but customisation effort.
- Search functions are provided by the database system and a freely available full-text search engine (Apache Lucene or equivalent) (customisation effort only). For the searching for the repository of questions/answer-correlations a separate search form is provided.

### 5.3 Estimated efforts

The following table gives an estimate of the resources needed to establish database according to the description above:

Task	Person days
<b>1. Detailed analysis and modelling of the user interface</b> <ul style="list-style-type: none"> <li>• user input forms for the HOTEL questionnaire</li> <li>• user interface for handling/adding input to the repository questions-answer categories</li> <li>• definition of analysis functions for the collected questionnaire data</li> </ul>	10
<b>2. Implementation:</b> <ul style="list-style-type: none"> <li>• general graphical layout</li> <li>• implementation of online questionnaire</li> <li>• implementation of repository of questions</li> <li>• database model</li> <li>• customisation of Wiki system</li> <li>• customisation of search functions</li> <li>• implementation of online bibliography</li> <li>• data export function/data maintenance access</li> <li>• customisation of security functions (access limitations, user sign in)</li> </ul>	30
<b>3. Test/fixes/refinements</b>	7
<b>4. Deployment</b> + test on target server hosting the application	5
<b>5. Co-ordination/Meetings/Feedback handling</b>	5

<sup>3</sup> The final decision on which of the software will be actually used will be taken in the program modelling phase, based on the fact which platform provides more ready-to-use tools and solutions for the required functionality.

As the table shows, a full implement including maintenance for one year could be achieved by investing appr. three PMs.

**Legal issues**

The implementation would not depend a on software code that could provoke any kind of liability to any 3<sup>rd</sup> party (license fees or the like).

Source codes for the implementation can be provided by the implementor and delivered to any project leads in order to ensure long term maintainability without dependency on a special person/company.



## 6 Application of the HOTEL- toolbox

The character and application of the HOTEL toolbox are summarised and put into a comprehensive frame in the graph on the following page.

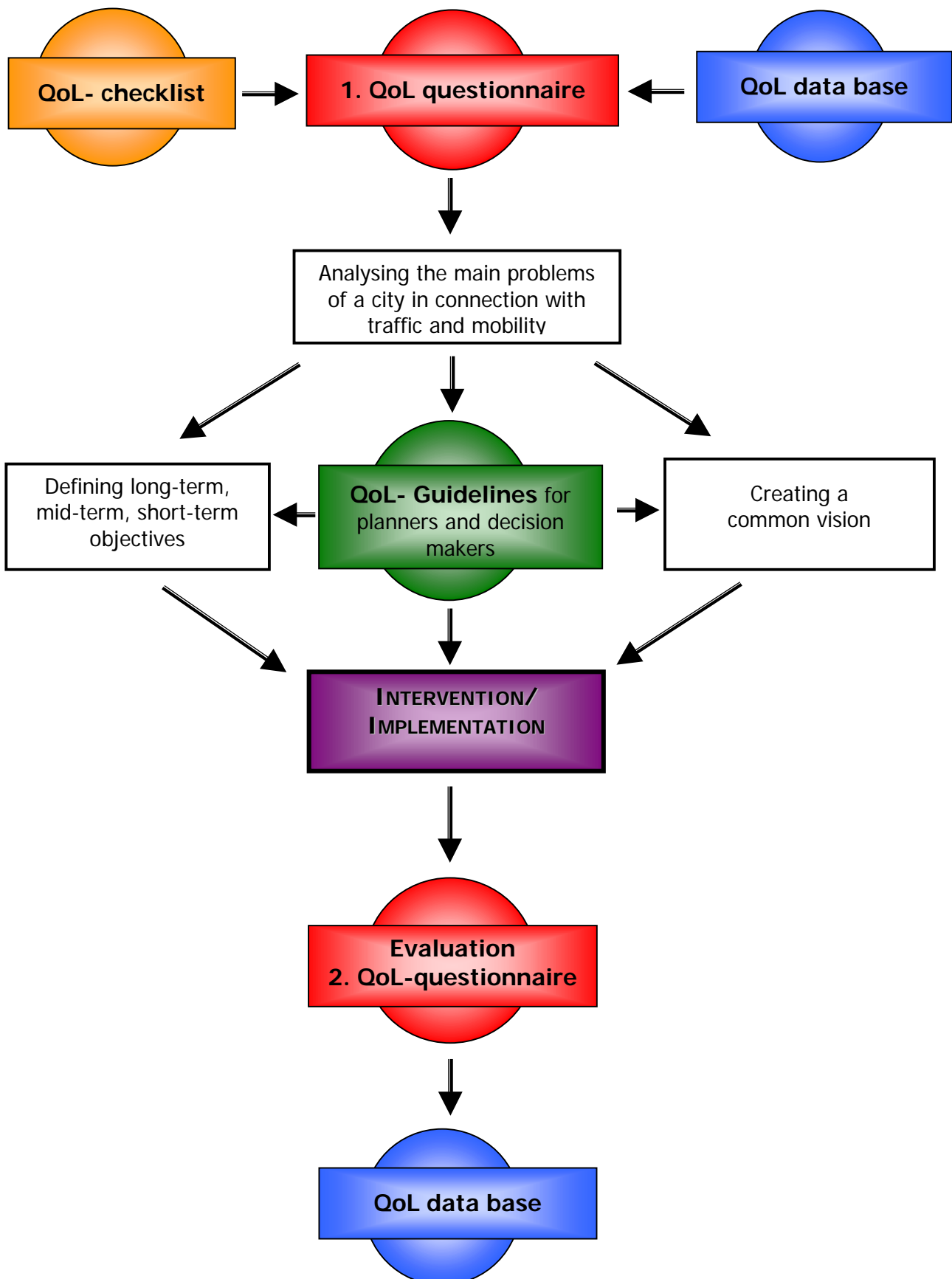
The ideal case referring to the application of the toolbox-instruments can be seen as an open loop with a twofold use of the questionnaire. We are of course not able to force those who are in charge – i.e. decision makers – to use certain instruments. But as psychologists and/or sociologists, who are invited to assess QoL aspects and how they are influenced by different types of implementations, from the planning phase to the very last step of practical application, we certainly recommended to proceed according to the graph.

The graph shows that the analysis of the main problems of a city, or a part of the city, in connection with traffic and mobility - as the starting point for any project – should be backed by research, for instance by following the guidelines that we suggest and using the checklist in order to take care of all important aspects that have to be considered. Appropriate before-data should be taken up with the help of the HOTEL-questionnaire, in order to allow a targeted evaluation of the effects of an implementation. The data should be saved in an adequate data base for verbal data. After the implementation, the questionnaire should be applied again, in order to allow a possible before & after comparison. Repeated studies would allow to differentiate between the phase of getting used to an implementation, and later stages. This type of procedure can be seen as the beginning of the participation process which should be followed by the definition of several objectives of the project. The QoL-guidelines that steer this process will help to create a common vision of QoL and its relationships to traffic, mobility and urban preconditions.

By always keeping the importance of a continuous monitoring and feedback system at the back of one's mind, the measurement of changes will in the future certainly include longer periods of evaluation after implementations: We also will have to learn and monitor more thoroughly what results any changes in systems that affect the public space will achieve in the long run.

This final step that HOTEL envisages is giving the citizens feedback concerning measurements and monitoring of effects, not least treating subjective variables as a kernel issue (e.g., subjective well-being): This will certainly give the citizens the feeling of a comprehensive involvement, and responsibility in the sense of participation). At last all data and insights will again be a valuable contribution to the potential QoL data base.

Figure: Application of the HOTEL-toolbox



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HOTEL-Consortium (2003): Deliverable 3 – Workshop II - Paris

HOTEL-Consortium (2004): Deliverable 4 – Organisation of Workshop III

HOTEL-Consortium (2004): Deliverable 5 – Workshop III - Ferrara



## 7 Appendices

### *Appendix 1 QoL-Guidelines for planners and decision makers*

QoL-GUIDELINES	
<b>A: COMMUNICATION</b>	
<p><b>1. What strategies and tactics do you plan to use to achieve the highest quality of communication?</b></p> <ul style="list-style-type: none"> <li>a. creating a good information data base using available general knowledge and knowledge of interdisciplinary teams</li> <li>b. debating ideas among competing expert teams</li> <li>c. establishing sufficient communication links among all the key actors - experts, politicians, investors, big companies, general public</li> <li>d. 3establishing feed-back: monitoring system, continuous assessment by experts and by the general public</li> <li>e. inviting the general public and NGOs to participate</li> <li>f. establishing contact with teachers, students and school pupils</li> </ul>	
<p><b>2. What principles do you use to manage the dialogue?</b></p> <ul style="list-style-type: none"> <li>a. equal chance to participate, to be heard and his/her views to be taken into consideration</li> <li>b. openness to different opinions (plurality)</li> <li>c. respect for arguments (rationality)</li> <li>d. respect for minority opinions</li> <li>e. right for specific groups to speak for themselves</li> </ul>	
<b>B: PARTICIPATION</b>	
<p><b>3. What do you plan to do to increase participation of citizens?</b></p> <ul style="list-style-type: none"> <li>a. provide sufficient, clear and accessible information for everybody</li> <li>b. keep a constant flow of information among experts, politicians and the general public (media)</li> <li>c. make an informational (informing) and emotional campaign (changing attitudes and habits)</li> <li>d. make the public interested using public events and media</li> <li>e. express respect for general public's opinions</li> <li>f. provide different opportunities for direct communication (meetings, public discussions)</li> <li>g. support the empowerment of citizens (including education)</li> <li>h. encourage underprivileged social groups to participate</li> <li>i. use facilitators, mediators (social workers, sociologists, social psychologists)</li> <li>j. show real impact of participation</li> </ul>	

<p><b>4. How do you invite the residents to participate?</b></p> <ul style="list-style-type: none"> <li>a. through their own proposals, suggestions what should be done</li> <li>b. through their comments, critiques to something already made</li> <li>c. as participants of sociological and socio-psychological inquiries before starting a project</li> <li>d. as subjects of sociological and socio-psychological inquiries after finishing a project</li> </ul>	
<p><b>5. What kinds of participation do you accept?</b></p> <ul style="list-style-type: none"> <li>a. citizens participate directly</li> <li>b. citizens participate via their representatives (through NGOs, local associations, minority group speakers)</li> </ul>	
<b>C: PROCEDURE</b>	
<b>C1 ANALYSIS OF THE MAIN PROBLEMS</b>	
<p><b>6. Which actors do you plan to involve in the process of analysing the main problems of the city (city district)?</b></p> <ul style="list-style-type: none"> <li>a. urban planners</li> <li>b. architects</li> <li>c. economists</li> <li>d. ecologists</li> <li>e. developers</li> <li>f. sociologists</li> <li>g. social psychologists</li> <li>h. urban ethnographers</li> <li>i. historians</li> <li>j. local NGOs</li> <li>k. citizens</li> </ul>	
<p><b>7. Is your analysis sensitive to:</b></p> <ul style="list-style-type: none"> <li>a. different needs of citizens (dwelling, schools, extra-curricular school activities, work, shopping, health care, leisure, culture, social life and communal life)</li> <li>b. needs of different resident groups (pensioners, working mothers, house wives, children, teenagers, disabled, different religious groups, etc.)</li> <li>c. specific needs related to different life styles</li> <li>d. regional specifics of the city</li> <li>e. historical development of the city</li> <li>f. assessed future development of the city</li> <li>g. environmental sustainability of the city</li> <li>h. the idea of a sustainable transport system?</li> </ul>	

<p><b>C2 PLANNING</b></p> <p><b>8. To what degree is your project designed to improve the following?</b></p> <ul style="list-style-type: none"> <li>a. transportation system</li> <li>b. infrastructure for walking and cycling</li> <li>c. dwelling</li> <li>d. health care services</li> <li>e. education facilities</li> <li>f. shopping facilities</li> <li>g. leisure facilities</li> <li>h. culture facilities</li> <li>i. parks and green areas</li> <li>j. preconditions for social life (e.g. common meeting places)</li> <li>k. aesthetic quality of the environment (buildings, streets, places)</li> <li>l. availability of many choices</li> <li>m. safety</li> <li>n. integrity of community</li> <li>o. sense of control</li> <li>p. sense of belonging to the living place</li> <li>q. heterogeneity of social structure of population (e.g. prevention of slums)</li> <li>r. life style of residents (e.g. opportunities for a healthier life style)</li> </ul>	
<p><b>9. To what degree does your plan take into consideration:</b></p> <ul style="list-style-type: none"> <li>a. QoL in general</li> <li>b. QoL of specific categories of the population</li> <li>c. QoL in different districts of the city (preventing of slums)</li> <li>d. common vision (urban plan)</li> <li>e. cost-effects analysis</li> <li>f. political scene</li> <li>g. infrastructure</li> <li>h. mobility options for residents</li> <li>i. fluency of transport</li> <li>j. quality of public transport system</li> <li>k. technical and technological aspects</li> <li>l. environmental consequences (sustainable development)</li> <li>m. social integration</li> </ul>	
<p><b>C3 COMMON VISION</b></p> <p><b>10. Who do you plan to invite to participate in creating common vision?</b></p> <ul style="list-style-type: none"> <li>a. urban planners and developers</li> <li>b. architects</li> <li>c. environmentalists</li> <li>d. economists</li> <li>e. sociologists, social psychologists, urban ethnographers</li> <li>f. politicians</li> <li>g. investors</li> <li>h. representatives of big companies</li> <li>i. general public</li> <li>j. NGO activists</li> </ul>	

<p><b>11. Have you a plan how “to give voice” to the following resident groups?</b></p> <ul style="list-style-type: none"> <li>a. families with small children incl. alternative families (single parents, homosexual couples)</li> <li>b. women</li> <li>c. men</li> <li>d. teenagers</li> <li>e. working parents</li> <li>f. ethnic and other minorities</li> <li>g. disabled</li> <li>h. unemployed</li> <li>i. poor</li> <li>j. children</li> <li>k. elderly</li> </ul>	
<p><b>C4 OBJECTIVES AND STRATEGIES</b></p>	
<p><b>12. What strategies do you plan to use to avoid the negative impact of the short-term thinking of politicians?</b></p> <ul style="list-style-type: none"> <li>a. following common vision</li> <li>b. making compromise between long-term and short term perspectives</li> <li>c. informing public about the whole process of decision-making</li> <li>d. supporting active citizenship</li> <li>e. supporting NGOs</li> </ul>	
<p><b>13. What do you plan to do to achieve a compromise among different interest groups and competing interests?</b></p> <ul style="list-style-type: none"> <li>a. invite both sides to communicate directly</li> <li>b. listen to them carefully</li> <li>c. analyse the type of conflict (explanation)</li> <li>d. find a win-win solution</li> <li>e. look for adequate compensations for the losing side</li> <li>f. organise a local “referendum”</li> <li>g. mediate the debate</li> <li>h. invite a third side (e.g. some NGO)</li> </ul>	
<p><b>C5 MEASURING CHANGES</b></p>	
<p><b>14. How do you plan to assess the consequences of your project on the QoL?</b></p> <ul style="list-style-type: none"> <li>a. surveys</li> <li>b. door-to-door interviews</li> <li>c. public meetings and discussions</li> <li>d. ethnographic studies</li> <li>e. experts’ assessments</li> </ul>	



<p><b>15. How do you plan to monitor and assess the effect of taken measures?</b></p> <ul style="list-style-type: none"> <li>a. systematic measurement of all possible objective indicators (e.g. fluency of transport, number of accidents)</li> <li>b. environmental indicators (e.g. noise level, air pollution, m<sup>2</sup> of green areas)</li> <li>c. subjective indicators – satisfaction (whether residents are satisfied, how they perceive and evaluate changes)</li> <li>d. subjective indicators – sense of control (how residents evaluate the changes in relation to sense of control and freedom of choice)</li> <li>e. societal indicators (e.g. crime rate, unemployment rate)</li> <li>f. quality of communal life (sense of belonging)</li> <li>g. behaviour of people in the changed situation (ethnographic observation)</li> <li>h. complaints registration</li> <li>i. echo in media</li> <li>j. interviews with open questions</li> </ul>	
<b>C6 FEEDBACK</b>	
<p><b>16. What do you plan to do in the case of failure?</b></p> <ul style="list-style-type: none"> <li>a. analyse the main causes</li> <li>b. inform others about the negative experience (case) to prevent repetition of mistakes</li> <li>c. change the ways of communication with the general public</li> <li>d. correct and reformulate objectives</li> <li>e. correct strategies and tactics</li> <li>f. establish open dialogue with experts</li> <li>g. establish open dialogue with politicians</li> <li>h. establish open dialogue with general public, or any specific concerned target group</li> <li>i. stop the project</li> <li>j. identify consequences for other projects</li> </ul>	
<p><b>17. What do you plan to do in the case of success?</b></p> <ul style="list-style-type: none"> <li>a. analyse the main causes</li> <li>b. inform others about the positive experience to encourage imitation (detailed documentation – on the internet, experience exchange with other cities incl. cost/effects analysis, etc.)</li> <li>c. inform others about respective negative side effects</li> <li>d. broaden the scope</li> <li>e. give credit to the efforts of all participants</li> <li>f. identify consequences for other projects</li> </ul>	



## Appendix 2 Questionnaire used in the pilot study

		
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Date \_\_, \_\_, \_\_ (yymmdd) Time \_\_: \_\_

Hello,  
my name is ..... and I work for the municipality of Kristianstad. I want to ask some questions respecting changes here in the city.

Mark the place where you interview:	Östra Boulevarden Nya Boulevarden
-------------------------------------	--------------------------------------

Would you be prepared to respond to some questions? It takes about 10 minutes.  
Before we begin, I want to ask you how often you come here to Östra B /Nya B:

Every day	Several times a week	Once a week	Once a month	Hardly ever, never *
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\*: In this case I thank you, as it is necessary that you are familiar with the area for being able to respond to the questions.

Do you live in Kristianstad?      yes    no

Within the frame of the EU the Technical University in Lund carries out a project that is called HOTEL. Researchers there should evaluate changes that have happened here in Kristianstad at Östra Boulevarden/Nya Boulevarden. They have compiled the list of questions which I want to ask you to respond now.

In the first questions we ask you to tell us how important you think that certain infrastructure characteristics and more general aspects connected thereto are, t.ex.:

	entirely unimportant	unimportant	neither /nor	important	very important
QoL	1	2	3	4	5
Traffic safety	1	2	3	4	5
Usability for elderly & disabled persons	1	2	3	4	5
Smooth flow of traffic for drivers	1	2	3	4	5
Smooth flow of traffic for cyclists	1	2	3	4	5

Smooth flow of traffic for pedestrians	1	2	3	4	5
Equity between different traffic groups (cyclists, drivers, pedestrians)	1	2	3	4	5
Easiness and convenience for car drivers	1	2	3	4	5
Easiness and convenience for cyclists	1	2	3	4	5
Easiness and convenience for Pedestrians	1	2	3	4	5
Beauty & aesthetics	1	2	3	4	5
Environment (noise/air)	1	2	3	4	5
Children's safety/ security	1	2	3	4	5
Elderlies' and disabled persons' safety/security.	1	2	3	4	5
Your own safety/security	1	2	3	4	5

The following questions refer to what changes you experienced due to the modification carried out here at Östra Boulevarden or Nya Boulevarden?

Traffic is now	1 much less safe	2 less safe	neutral	4 safer	5 much safer
Children are now	1 much less safe	2 less safe	neutral	4 safer	5 much safer
I feel now	1 much less safe	2 less safe	neutral	4 safer	5 much safer
Elderly and disabled persons are now	1 much less unsafe	2	3	4	5 much safer
Traffic flow for pedestrians is now	much worse	2 worse	3 neutral	4 better	much better
Traffic flow for cyclists is now	much worse	2	3	4	much better

Traffic flow for car drivers is now	much worse	2	3	4	much better
Equity between traffic groups	much worse	2	3	4	much better
Ease and comfort for pedestrians are now	much worse	2	3	4	much better
Ease and comfort for car drivers are now	much worse	2	3	4	much better
Ease and comfort for cyclists are now	much worse	2	3	4	much better
Usability for elderly and disabled persons is now	much worse	2	3	4	much better
Environment (air, noise...) is now	much worse	2	3	4	much better
Social interaction with other persons is now	much worse	2	3	4	much better
QoL is now	much worse	2	3	4	much better
This district is now	1 much uglier	2 uglier	3 neutral	4 more beautiful	5 much more beautiful
To stay in this district is now	1 much less convenient	2 less convenient	3 neutral	4 more convenient	5 much more convenient

I want to finish by asking you some personal questions viz. by ticking some personal data:

Man  
Woman

Mobility aids:           none  
                                  crutches  
                                  walker  
                                  wheelchair

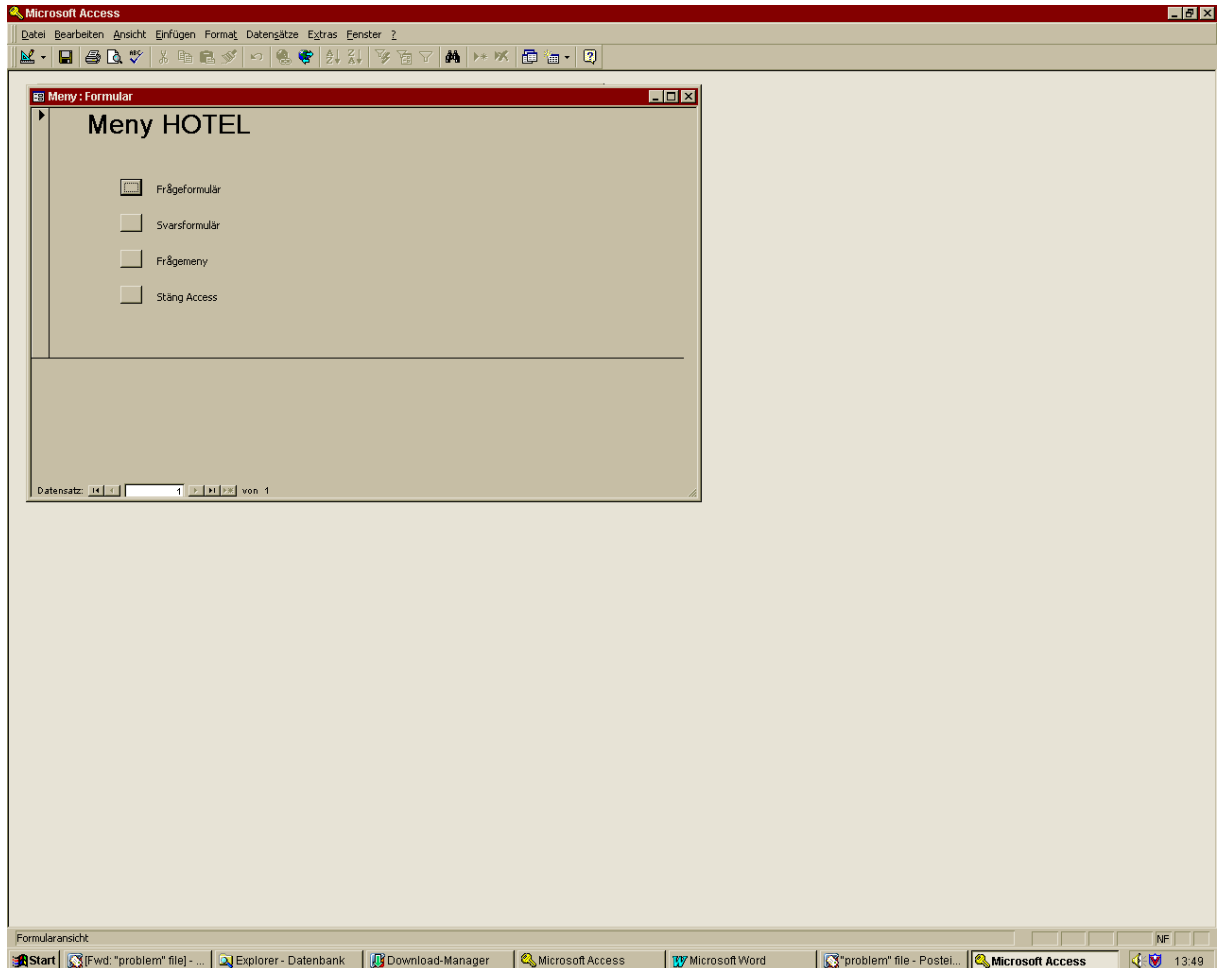
How old are you?:

< 15  
15 – 34  
35 – 64  
65 – 74  
> 75

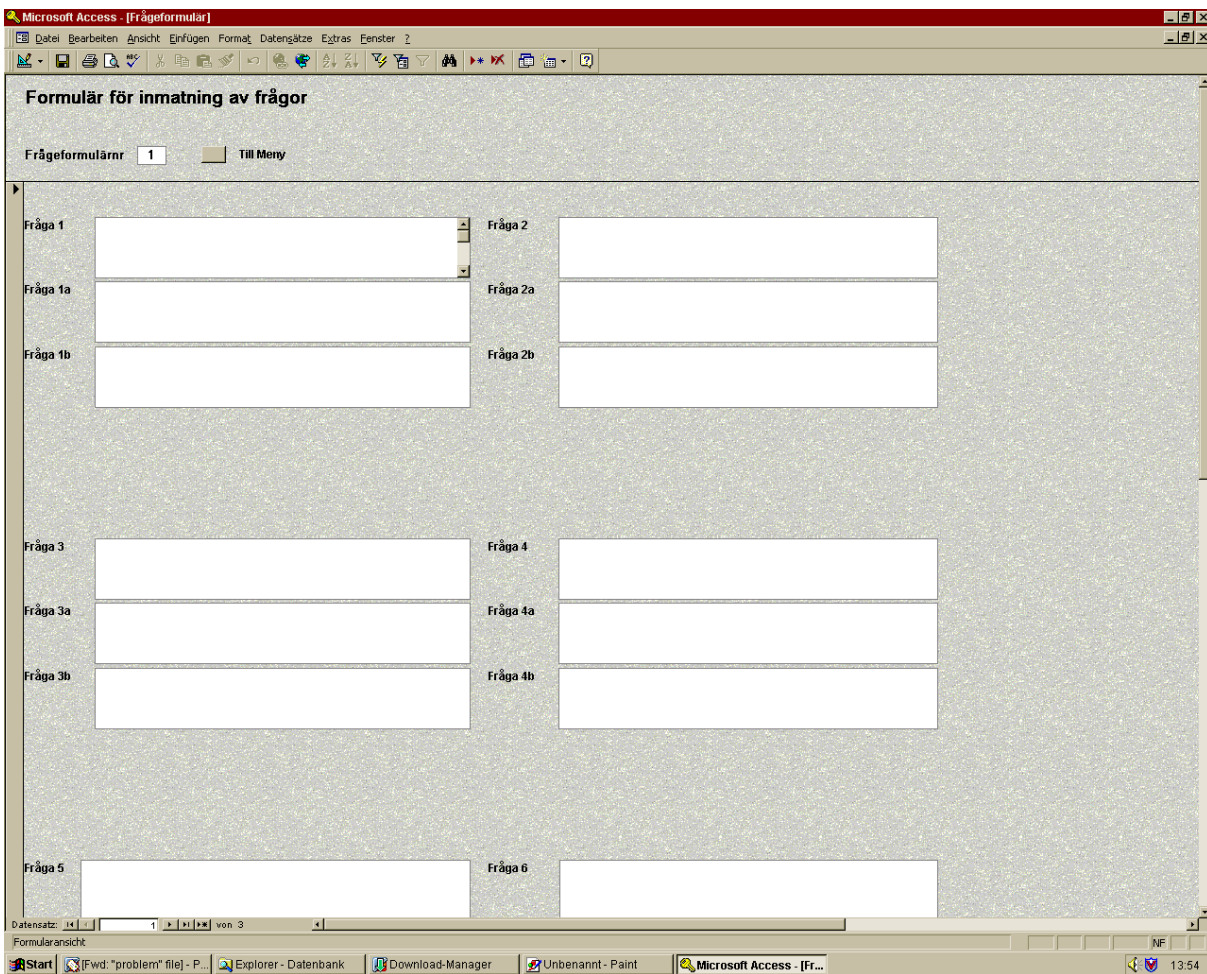
How often:	Every day	Several times a week	Once a week	Once a month	Hardly ever, never
Do you go by bus or train					
By car					
By bicycle					
Do you walk?					
Do you use special transport service for the disabled?					
Others? Which ones: <hr/>					

## Appendix 3 Screenshots from the data base "embryo"

### Screenshot 1/3

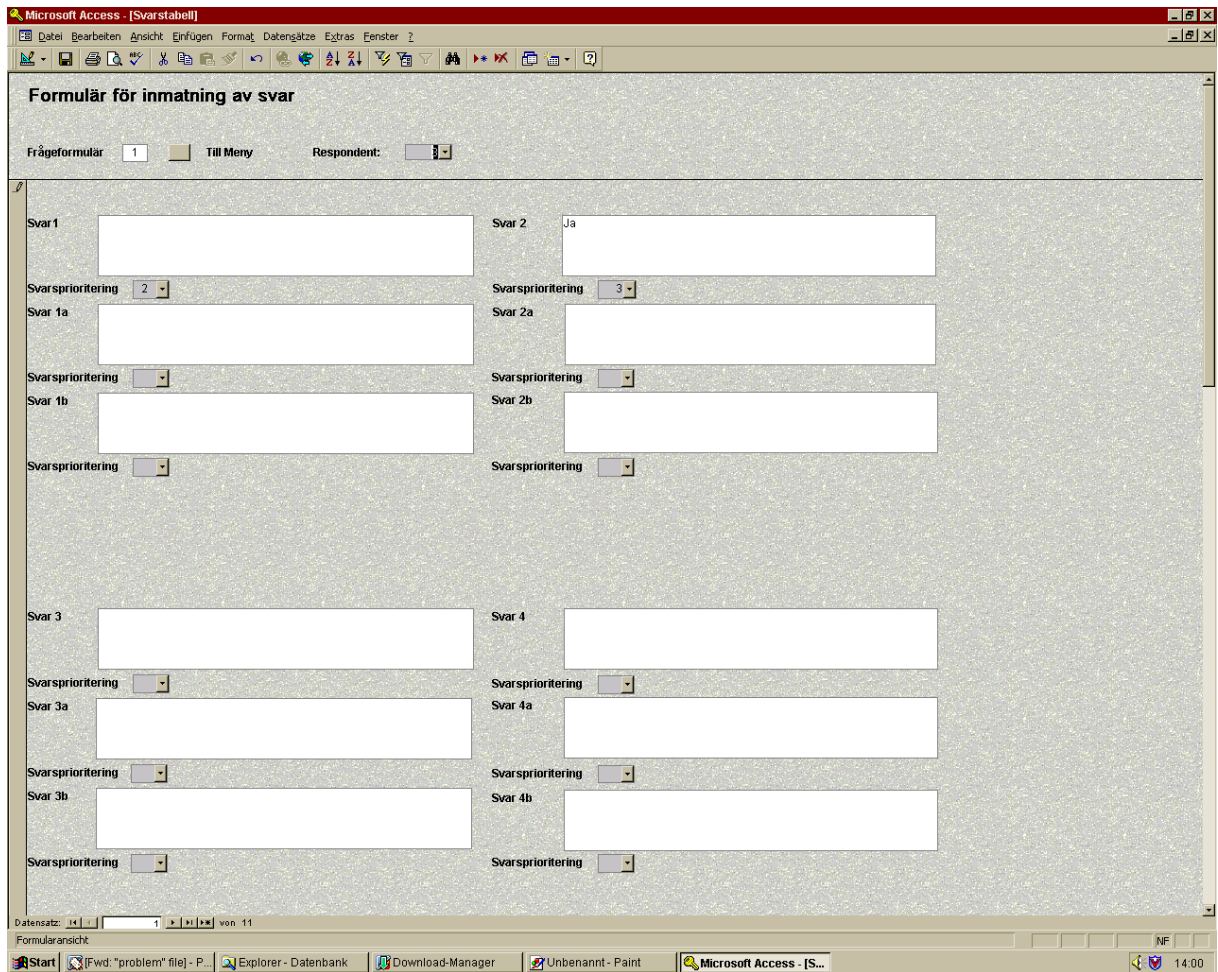


Screenshot 2/3





Screenshot 3/3





## Appendix 4 Consortium of the EU-Project HOTEL

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