



HOTEL

How to analyse quality of life
An accompanying measure within the EU Fifth Framework Programme
Keyaction "Improving the Socio Economic Knowledge Base"

Toolbox

Work Package No. 6

October, 2004

Work Package Leader

FACTUM

Chaloupka & Risser OHG

Traffic- and Social Analysis

HOTEL Partners

FACTUM • Ralf Risser, Karin Ausserer, Nicolas Bein • Austria

Lund University • Department Technology and Society • Agneta Ståhl • Sweden

Comenius University Bratislava • Department of Psychology • Jana Plichtová • Slovakia

Società Italiana di Psicologia della Sicurezza Viaria (SIPSiVi) • Gian Marco Sardi • Italy

*Institut National de Recherche sur les Transports et leur Sécurité (INRETS) • Department
d'évaluation et recherche en accidentologie • Stefan Petica • France*

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").

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.

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 ¹

¹ 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.

- 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). A well known WiKi-based system is 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.

Legal issues

The implementation would not depend on software code that could provoke any kind of liability to any 3rd 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.

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.

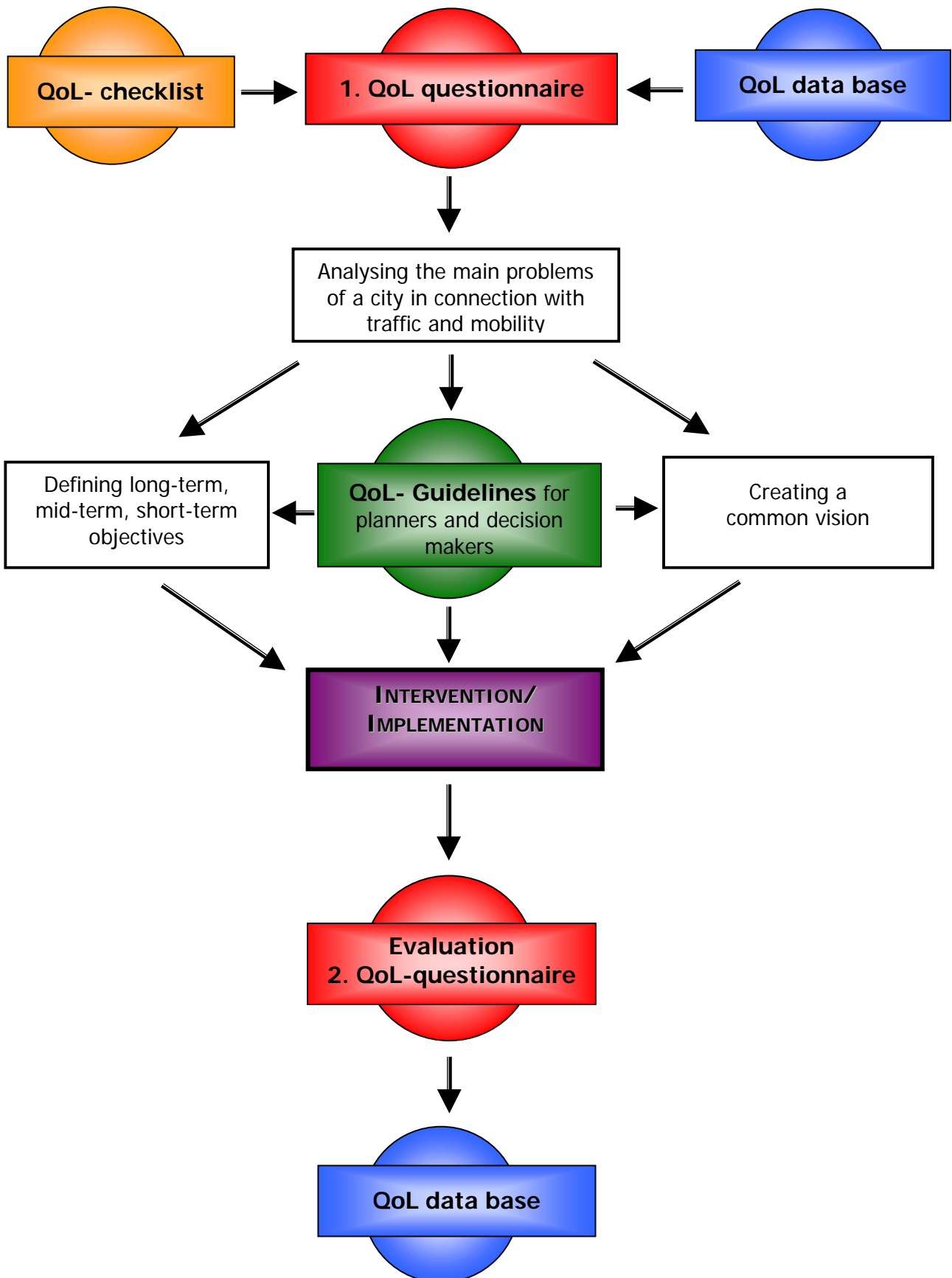
The ideal case referring to the application of the toolbox-instruments can be seen as an open loop with a twofold use of the questionnaire. We are of course not able to force those who are in charge – i.e. decision makers – to use certain instruments. But as psychologists and/or sociologists, who are 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



QoL-Guidelines for planners and decision makers

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

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

C2 PLANNING

8. To what degree is your project designed to improve the following?

- a. transportation system
- b. infrastructure for walking and cycling
- c. dwelling
- d. health care services
- e. education facilities
- f. shopping facilities
- g. leisure facilities
- h. culture facilities
- i. parks and green areas
- j. preconditions for social life (e.g. common meeting places)
- k. aesthetic quality of the environment (buildings, streets, places)
- l. availability of many choices
- m. safety
- n. integrity of community
- o. sense of control
- p. sense of belonging to the living place
- q. heterogeneity of social structure of population (e.g. prevention of slums)
- r. life style of residents (e.g. opportunities for a healthier life style)

9. To what degree does your plan take into consideration:

- a. QoL in general
- b. QoL of specific categories of the population
- c. QoL in different districts of the city (preventing of slums)
- d. common vision (urban plan)
- e. cost-effects analysis
- f. political scene
- g. infrastructure
- h. mobility options for residents
- i. fluency of transport
- j. quality of public transport system
- k. technical and technological aspects
- l. environmental consequences (sustainable development)
- m. social integration

C3 COMMON VISION

10. Who do you plan to invite to participate in creating common vision?

- a. urban planners and developers
- b. architects
- c. environmentalists
- d. economists
- e. sociologists, social psychologists, urban ethnographers
- f. politicians
- g. investors
- h. representatives of big companies
- i. general public
- j. NGO activists

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

<p>15. How do you plan to monitor and assess the effect of taken measures?</p> <ul style="list-style-type: none"> a. systematic measurement of all possible objective indicators (e.g. fluency of transport, number of accidents) b. environmental indicators (e.g. noise level, air pollution, m² of green areas) c. subjective indicators – satisfaction (whether residents are satisfied, how they perceive and evaluate changes) d. subjective indicators – sense of control (how residents evaluate the changes in relation to sense of control and freedom of choice) e. societal indicators (e.g. crime rate, unemployment rate) f. quality of communal life (sense of belonging) g. behaviour of people in the changed situation (ethnographic observation) h. complaints registration i. echo in media j. interviews with open questions 	
C6 FEEDBACK	
<p>16. What do you plan to do in the case of failure?</p> <ul style="list-style-type: none"> a. analyse the main causes b. inform others about the negative experience (case) to prevent repetition of mistakes c. change the ways of communication with the general public d. correct and reformulate objectives e. correct strategies and tactics f. establish open dialogue with experts g. establish open dialogue with politicians h. establish open dialogue with general public, or any specific concerned target group i. stop the project j. identify consequences for other projects 	
<p>17. What do you plan to do in the case of success?</p> <ul style="list-style-type: none"> a. analyse the main causes 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.) c. inform others about respective negative side effects d. broaden the scope e. give credit to the efforts of all participants f. identify consequences for other projects 	

Questionnaire used in the pilot study



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 *
-----------	----------------------	-------------	--------------	----------------------

*: 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/>					

Consortium of the EU-Project HOTEL

Name/Position	Organisation	Address/Phone/E-mail
Ms. Karin Ausserer Mr. Nicolas Bein <i>Researchers</i>	FACTUM Chaloupka & Risser OHG Traffic- and Social Analy- sis	Danhausergasse 6/4, A-1040 WIEN Tel: 0043 1 504 15 46/12 Fax: 0043 1 504 15 48 E-mail: karin.ausserer@factum.at E-mail: nicolas.bein@factum.at
Mr. Stefan Petica <i>Researcher</i>	INRETS Insitut National de Recherche sur les Transports et leur Sécu- rité	2, Avenue du Général Malleret-Loinville F-94114 Arcueil-Cedex Tel: 0033 1 47 407 056 Fax: 0033 1 45 475 606 E-mail: petica@inrets.fr
Ms. Magda Petrjánošová <i>Researcher</i>	Comenius University Bratislava	PO-Box 1 Gondova 2, SK-611 02 Bratislava E-mail: petrjanosova@onlinehome.de
Mrs. Jana Plichtová <i>Researcher</i>	Comenius University Bratislava Dep. of Psychology	PO-Box 1 Gondova 2, SK-611 02 Bratislava Tel: 00421 2 593 393 16 Fax: 00421 2 529 621 29 E-mail: jana.plichtova@fphil.uniba.sk
Mr. Ralf Risser <i>Owner of FACTUM HOTEL Co-ordinator Researcher</i>	FACTUM Chaloupka & Risser OHG Traffic- and Social Analy- sis	Danhausergasse 6/4, A-1040 WIEN Tel: 0043 1 504 15 46/14 Fax: 0043 1 504 15 48 E-mail: ralf.risser@factum.at
Mr. Gian Marco Sardi <i>Researcher</i>	SIPSIVI Società Italiana di psicologia della Sicurezza Viaria	PO Box 211 I-12100 Cuneo Tel: 0039 0171 74 093 Fax: 0039 0171 72 024 E-mail: gmsardi@sipsivi.org
Mrs. Agneta Ståhl <i>Researcher</i>	Lund University Dep. Technology and Society	PO Box 118 John Ericssons vaeg 1; S-22100 Lund Tel: 004646 222 91 32 Fax: 004646 123 272 E-mail: agneta.stahl@tft.lth.se