ARTISTS
Arterial Streets Towards Sustainability

Internal Guidance Note

“Case Study Guide”

Date: October 2002

European Commission Fifth Framework Programme
Key Action: City of Tomorrow and Cultural Heritage
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**Glossary**

**Attribute or Street Attribute**
An element of the street that singularly or in combination influences the performance of the street system.

**Case Study Area**
The case study street incorporating buildings along the street (and potentially beyond) and possibly adjacent streets conceptualised and defined by the researcher. The case study area may differ from indicator to indicator depending on how it is conceptualised (reflecting the “open” nature of the street “system”) and the “zoning” of existing data sets.

**Case Study Street**
The length of arterial street selected for research during ARTISTS.

**Character Sections**
Subdivisions of the Case Study Street made by the researcher, based primarily on aspects of built form changing from one section of the street to another. Character Sections are intended to aid description, analysis and reporting of Street Attributes.

**Indicator or Performance Indicator**
A measure indicating some element of performance of the street system in terms of its arterial performance, locale performance or aspects of comprehensive sustainability. These are listed in appendix 3 of the Technical Annex and page 17-18 in D1.2.

**Review Frame**
Tabulated Street Attributes with associated brief guidance notes intended to both –
- guide and structure description and appraisal of the street system; and
- act as a street audit/checklist sheet.
The review frame is appended to D1.2 and the Technical Annex.

**Reference Area**
An area of the case study city, from which data are employed for performance indicator comparison / reference purposes. The reference area may or may not vary from indicator to indicator depending on data availability and “zoning”.

**Street Attribute Descriptors**
Headings within the Review Frame describing one or a combination of street attributes. These are listed at pages 23 to 26 of deliverable D1.2 and listed in appendix 1 of the Technical Annex.
**Introduction to Case Study Guide**

The purpose of the “Case Study Guide” and its following “Technical Annex” is to standardise data collection and organise data in electronic form, and structure the presentation of case study findings in the form of internal reports written in English. These reports will form basis for deliverables and other public publications.
Structure of Contents of Final National Report

Most partners make more than one case study. However, some information is relevant for all case studies from the same city. The structure of contents for a country with e.g. one unchanged street and one reconstructed street as cases all managed by the same local authority is:

Figure 1. Recommended Structure of National Report

1. Country and / or Region
   1.1 Formal / Legal and Traditional Road Planning
   1.2 Financial Structure
   1.3 Reconstruction Experience and Tradition

2. Local Authority
   2.1 Policies and Rationales
   2.2 Processes and Experience

3. Unchanged Street
   3.1 Case Context and Existing Situation
      3.1.1 Case Study Area and Character Sections
      3.1.2 Location
      3.1.3 Built Form
      3.1.4 Traffic Regulation
      3.1.5 Patterns of Use
      3.1.6 Performance Indicators
      3.1.7 Street Classification and Management
   3.2 Long-Term Change
      3.2.1 Built Form
      3.2.2 Traffic Regulation
      3.2.3 Patterns of Use
      3.2.4 Performance Indicators
   3.3 Reference Area
      3.3.1 Area and Data Description
      3.3.2 Performance Indicators
   3.4 Recent Statements
   3.5 Case Summary

4. Reconstructed Street
   4.1 Case Context and Existing Situation
      4.1.1 Case Study Area and Character Sections
      4.1.2 Location
      4.1.3 Built Form
      4.1.4 Traffic Regulation
      4.1.5 Patterns of Use
      4.1.6 Performance Indicators
      4.1.7 Street Classification and Management
4.2 Reconstruction and Short-Term Changes
   4.2.1 Reconstruction
   4.2.2 Built Form
   4.2.3 Traffic Regulation
   4.2.4 Patterns of Use
   4.2.5 Performance Indicators
   4.2.6 Street Classification and Management

4.3 Reference Area
   4.3.1 Area and Data Description
   4.3.2 Performance Indicators
   4.4 Decision-Making and Design Processes
   4.5 Feedback Statements
   4.6 Case Summary

5. Discussion

The headlines for the recommended chapter structure of the National Report are blue in this Case Study Guide.
**Work and Deadlines**

Every partner should first focus on getting the data related to part 3.1, 3.2, 3.3, 4.1, 4.2 and 4.3 collected. This data collection and related presentation of data has top priority. Second highest priority has part 4.4. The other parts have third priority.

The partners in Belgium and Hungary should not make chapter “1 Country and/or Region” nor should they make part 2.2.

There will be some iteration during WP2 and therefore you have to deliver two reports at different times, and therefore there exist several deadlines.

**25 October 2002:**
Send checklists with dots and remarks to Ian Plowright and Soren Underlien Jensen.

**15 November 2002:**
WP1 and WP2 leader will send an example of chapter 1-3 to all partners. This example will provide further guidance on the graphical presentation and amount of text.

**4 December 2002:**
Each country must e-mail (or CD-ROM by ordinary mail) to WP2 leader (Soren Underlien Jensen) and task 2.1 leader (Panos Papaioannue) all data sheets related unchanged and reconstructed street cases and reference areas.

**28 February 2003:**
Each country must e-mail (or CD-ROM by ordinary mail) to WP2 leader (Soren Underlien Jensen) the entire national report with all chapters. All relevant files, maps etc. should also be send.

**15 May 2003:**
WP2 leader will send to all partners a draft version of deliverable D2.1, D2.2 and D2.3, and also a report covering the 9 national reports with all 40 street cases.

**26-27 May 2003:**
The consortium meeting in Porto will include a discussion of the deliverables and the case studies. It will also include a discussion on the potential contents of the final deliverable of WP2 called D2.

**28 June 2003:**
The final deliverable D2.1, D2.2 and D2.3 will be sent to the EU Commission.

**15 October 2003:**
WP2 leader will send to all partners a draft version of D2.

**29 November 2003:**
After quality assessment and editing the final deliverable D2 will be sent to the EU Commission.
**General Comments on the Guide and Case Study Reports**

Our recommendation is that before embarking on collecting data and doing your research, it is worthwhile reading the entire guide and the technical annex, but also perhaps rereading deliverables D1.1 and D1.2. It is especially giving to look at the table of Performance Indicators and Review Frame at appendix 2 and 3 of the technical annex. Such a reading will give you an overview and make it easier to organise your work.

In the Case Study Guide there also is a glossary. It is important to use the same wording throughout the text of reports, and the glossary will hopefully also help you to better understand the text of the guide.

The expected way of making the case studies are described chapter by chapter and part by part in the following. The headings shown in blue in this guide are those you are asked to use within your case study chapters and parts. Several places you may find the headline “Suggested working procedure”, where ways of collecting information are suggested. Please feel free to add comments anywhere in the case studies even though these comments are not asked for in the guide.

Discussion has taken place between work package leaders as to how to achieve some level of consistency of presentation of maps, diagrams etc. across case studies and partners. Rather than employ the skills of a graphic designer it has been decided to encourage each partner to report in a fairly consistent manner. As some will have GIS and/or CAD while other will have no such tools, all are asked to work on base maps (either transferred directly from GIS or scanned from paper copies) using Microsoft Paint. The illustrative diagrams shown in the guide have been prepared in this manner and all are asked to use consistent colour coding. The precise form of presentation will be set out via worked examples (15 November 2002) and a further note on the colours and Paint tools to employ. Unlike the quickly prepared examples in the guide we should remember that all maps need a key, the scale and a north point and reference to copyright licence. The rough examples relating to Brixton are not based on real data and are just for illustrative purposes.

Each case study chapter of your report should follow a similar basic structure with some variation between. This structure and variation is outlined in the following. Each chapter should begin by giving the case context (its location etc) and then describing the observed and measured attributes of the street system. The structure for this description is provide by the **Review Frame**, see appendix 2 of Technical Annex. This review frame has two prime purposes. It is intended to guide a more “urban design” approach to cityscape and activity analysis, which should be presented within the text of your chapters. It is also intended to act as an audit / checklist tool where street attributes descriptions are reduced to single numbers or adjectives such as “good” and “poor” etc in order to aid benchmarking. As it stands, the review frame can and should be used to structure your street description and analysis.
Final National Report – Chapter Structure and Presentation Guidance

The blue headings in the following sections are those you are asked to use within your case study chapters. Where illustrative text is used, this is shown in italics. Only a limited number of illustrative plans have been included in this Guide. More should appear in your chapters as described in the text in the following.
1. Country and / or Region

The purpose of this chapter is to get relevant information about formal road planning, financial structures and core experience related to reconstruction of arterial streets. This information is primarily to be used as background information for the understanding of the processes related to reconstructed streets, but also serves as relevant information for the demonstration cases in WP3. Partners with no reconstructed street cases and no demonstration case should therefore not make this chapter.

We advise research and city partner to make the chapter discussing around a table with relevant information as background. If the situation of the region that the city partner belongs to is very different compared to the country, please describe the situation of the region, otherwise the country.

1.1 Formal / Legal and Traditional Road Planning

Describe the current formal / legal political and public participation processes related to changes of road construction, layout, regulation and / or management of arterial streets owned by the local authority. Make use of the guiding questions below.

If the local highway authority (municipality, city or a like) decide to reconstruct (physical change) and / or change marking of lanes / median and / or prohibit / legalise certain behaviour (e.g. parking of cars and change of speed limit) does this have to be approved by other organisations in order to be implemented? Relevant short texts of laws, circulars, departmental orders, court sentences and alike can be of great help if inserted in English.

If some organisations in the table below are ticked off, please inform if approval from the organisation only is needed for certain changes of layout, regulation and / or management. In the case studies you should already have described duties and responsibilities of local authorities, agencies and other relevant organisations. This description will help you to add remarks about approval for certain changes, e.g. the public transport planning authority has to approve changes of bus shelters … or … the public transport planning authority own and maintain bus shelters and must be viewed as an equal partner in the project definition phases, which involve bus stops.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Approval needed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Police (municipal, regional, state, other)</td>
<td>? yes</td>
</tr>
<tr>
<td>Public transport planning authority</td>
<td>? yes</td>
</tr>
<tr>
<td>Public transport operator agency</td>
<td>? yes</td>
</tr>
<tr>
<td>Regional / state government</td>
<td>? yes</td>
</tr>
<tr>
<td>Regional / state road administration</td>
<td>? yes</td>
</tr>
<tr>
<td>Environmental governmental body</td>
<td>? yes</td>
</tr>
<tr>
<td>Cable and pipe owners (telephone, water, sewer, gas etc.)</td>
<td>? yes</td>
</tr>
<tr>
<td>Others ................................................................</td>
<td>? yes</td>
</tr>
</tbody>
</table>
If some organisations mentioned in the above table do not have to approve changes of layout, regulation and / or management; Is it a tradition of your local government to inform these non-approval organisations about forthcoming changes and perhaps involve them in discussions / negotiations? Is the local tradition more or less the same as of the rest of the country / region?

If the changes of layout, regulation and / or management are illegal to implement without exemption, by whom does the local government have to be granted an exemption?

Is a public participation process formally / legally needed to carry out in order to change layout, regulation and / or management of an arterial street? Is a public participation process formally / legally needed to carry out, when major traffic plans is political processed (e.g. for the entire municipality, city or alike)? May changes of construction, layout, regulation and / or management of an arterial street formally / legally be implemented without being a part of a major traffic plan (i.e. the reconstruction of the arterial street is a “standalone” project)?

Even though a public participation process formally / legally is not needed in relation to reconstruction of an arterial street; Please describe the legal minimum requirements as stated in texts of laws, circulars, departmental orders, court sentences and alike (and perhaps key guidelines coming from national government or central agency) regarding public participation processes (e.g. formally / legally needed regarding municipal plans, land use plans and alike), e.g. announcement in media, duration of hearing period, meetings and call for comments from selected organisations.

1.2 Financial Structure

Here we want you to describe the current / recent financial structure by organisation for changes of layout, regulation and / or management of arterial streets owned by the local authority (municipality, city or alike), and how these organisations raise the funds. The reason why this information is important in the ARTISTS project is to understand the complexity of financial structures and how this affect decision-making and design processes. The “drive” in decision-making is sometimes impeded due to the spread of funds into too many organisations, especially when exercised power and funds do not follow hand in hand. Organisations might be “poor”, but there are major differences between one poor organisation in a decentralised financial structure with many funding organisations and a central poor organisation in a highly centralised financial structure.

Please use your own local authority (city partner) as case and then add comments to whether your local authority differ markedly from other local authorities. The tables next page might guide you, but perhaps you can better describe the financial structure in other ways and please do so if necessary. If different types of reconstruction projects markedly differ in financial structure please add comments. If user fees / charges and / or sale of building sites / options are formally directed towards road / public transport infrastructure investments please add comments.
Financing organisation | Percentage of arterial street construction budget
---|---
Local road administration (your local government) | Round up / down to nearest 5 %
Regional road administration(s) | If below 5 % then “<5%”
National road administration | If 0% then “0%”
Public transport planning authority | 
Public transport operator agency | 
Private investors | 
Local shop keepers and alike | 
Special funds (e.g. parking, user fees / charges, R&D, national targeted etc.) please describe | 
Others | please describe | 

Origin of funds | Percentage of arterial street construction budget
---|---
Local taxes | Round up / down to nearest 5 %
Regional taxes | If below 5 % then “<5%”
National taxes | If 0% then “0%”
Traffic fees / charges (e.g. parking, road pricing) | 
Sale / rental of buildings, building sites / options | 
Others | please describe | 

1.3 Reconstruction Experience and Tradition

This part should not be viewed as a larger analysis but a straightforward and immediate desk / discussion task. Please describe briefly the experience among traffic planners in your country / region related to changes of layout, regulation and management of arterial streets. Please add typical statements about the different types of schemes that explain the experience that planners have. These statements should preferably give a picture of how traffic planners often view them ranking from major failure to major success. Make use of the table on the next page.

You do not have to be precise about the ranking of today’s view, but focus on the experience that exist, whether it is a realistic option to implement on arterial streets in your local area and traffic planners view the different schemes today. Perhaps there are a few schemes you know a lot about then please focus on this regarding the experience.
<table>
<thead>
<tr>
<th>Scheme on arterial streets</th>
<th>Experience?</th>
<th>A realistic option today (yes/no)?</th>
<th>Today’s view?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marking of traffic lanes</td>
<td></td>
<td></td>
<td>Ranking</td>
</tr>
<tr>
<td>New arterial streets by demolishing buildings</td>
<td></td>
<td></td>
<td>1) major success</td>
</tr>
<tr>
<td>New arterial streets in non built-up areas</td>
<td></td>
<td></td>
<td>2) minor success</td>
</tr>
<tr>
<td>Implementing signal-control at junctions</td>
<td></td>
<td></td>
<td>3) mixed attitudes</td>
</tr>
<tr>
<td>Green waves through signalised junctions</td>
<td></td>
<td></td>
<td>4) minor failure</td>
</tr>
<tr>
<td>Reconstruction of round about to other type of junction</td>
<td></td>
<td></td>
<td>5) major failure</td>
</tr>
<tr>
<td>New round about</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prohibit car parking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legalise car parking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marking of car bays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New parking charges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-way to two-way traffic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-way to one-way traffic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More traffic lanes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fewer traffic lanes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road closures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streets without kerbs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closure of tram lines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New tram lines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closure of bus lanes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New bus lanes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closure of cycle lane/track</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New cycle lanes/tracks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrowing footways</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widening footways</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedestrian streets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedestrian crossings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humps / bumps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinch points / chicanes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median / median islands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New trees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removal of trees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others………………….. ?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please describe how experience of arterial street reconstruction schemes has been accumulated in your country / region. Who has accumulated this knowledge in writing? And how is this knowledge presented (guidelines, policies, research results etc.)? Has arterial streets been subject to much research? Are the accumulated knowledge used by
local authorities? Please be inspired by the tables below. Please mention the most used documents with accumulated knowledge in a reference list. If applicable please indicate the extent that knowledge are accumulated and used more precisely than stated below in the tables.

**Way of accumulating knowledge about arterial streets**  
<table>
<thead>
<tr>
<th>Way of accumulating knowledge about arterial streets</th>
<th>Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidelines by national organisation (non-political)</td>
<td>Ranking</td>
</tr>
<tr>
<td>Road standards and guidelines by national agency (cross party)</td>
<td>1) None</td>
</tr>
<tr>
<td>National policies (ruling governments)</td>
<td>2) Little</td>
</tr>
<tr>
<td>University / college textbooks</td>
<td>3) Some</td>
</tr>
<tr>
<td>Research reports and reviews</td>
<td>4) A lot</td>
</tr>
<tr>
<td>Local policies based on previous local experience</td>
<td></td>
</tr>
<tr>
<td>Other.................................................................. Please describe</td>
<td></td>
</tr>
</tbody>
</table>

**Used accumulated knowledge about arterial streets**  
<table>
<thead>
<tr>
<th>Used accumulated knowledge about arterial streets</th>
<th>Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidelines by national organisation (non-political)</td>
<td>Ranking</td>
</tr>
<tr>
<td>Road standards and guidelines by national agency (cross party)</td>
<td>1) Not used</td>
</tr>
<tr>
<td>National policies (ruling governments)</td>
<td>2) Used seldom</td>
</tr>
<tr>
<td>University / college textbooks</td>
<td>3) Used sometimes</td>
</tr>
<tr>
<td>Research reports and reviews</td>
<td>4) Used most times</td>
</tr>
<tr>
<td>Local policies based on previous local experience</td>
<td></td>
</tr>
<tr>
<td>Other.................................................................. Please describe</td>
<td></td>
</tr>
</tbody>
</table>

Suggested working procedure:
First arrange a meeting between research partner, city partner (person(s) with solid experience related to decision-making, financing and planning of arterial streets) and maybe more persons preferably with long-time experience with reconstruction of arterial streets and / or relevant national guidelines and / or experience related to decision-making, financing and planning of arterial streets from other local authorities.

While arranging the meeting please make sure that the following documents are present at the meeting and preferably distributed before the meeting:

1. Texts of relevant laws, circulars etc. describing the formal / legal situation related to decision-making of reconstruction and public participation.
2. Accounts of expenses related to reconstruction of arterial streets owned / managed by the city partner.
3. Books, reports, policies etc. related to knowledge accumulation about arterial street design and management.

The meeting should be viewed as a working meeting, where the text of chapter 1 is discussed, agreed and worked out. Maybe there are a few things to follow-up upon after the meeting.
2. Local Authority

The purpose of this chapter is to get specific knowledge about local policies, rationales, processes and experience. Regarding policies and rationales, the idea is to get a better insight into local views on characteristics of problematic respectively non-problematic streets and traffic situations, and local views on how these problems / challenges can be solved. Regarding processes and experience, the idea is to get a wider insight into the standard procedures of decision-making and design processes and implemented local reconstruction schemes than 2-3 reconstructed street cases can give.

Part 2.1 about policies and rationales should be described for all street cases, i.e. if the street cases have different owners in one country then please describe policies and rationales for each owner, but still focus on city partner. You may therefore have to sub-divide part 2.1 into different street owners. Part 2.1 should mostly be a desk task.

Part 2.2 should only be described in relation to the city partner, i.e. countries without a demonstration case should not make part 2.2. Part 2.2 should be made after the decision-making and design processes for the reconstructed street cases have been completed. Part 2.2 should mostly be a round table meeting task.

2.1 Policies and Rationales

Here we wish you to describe key traffic / land use plans and policies (relevant to arterial streets) in force or policies, which plan philosophy / implementation currently is based upon. This means that only relatively new plans and policies should be described. Each plan and policy shall only be briefly described by some basic elements:

- Aims, goals and targets set in the plan or policy. What is stated as aims, goals and targets? If the plan or policy also explain the background for these aims, goals and targets, please insert a text that shortly present this explanation. (It is this explanation that we normally call a rationale. That answers: “Why do we do the things we do?”).
- Please list the main actions that are mentioned in the plan or policy. Please add briefly, if any, the explanation given in the plan or policy that answers: “Why the action is planned to be implemented?”
- At the end of the text of this part please give your opinion to which types of aims, goals and targets that can be viewed as meaningless declarations of intent and which have been / will be worked hard for in order to achieve. Please also list the core rationale(s) – in other words, which explanation have been used again and again as reason for actions carried out.

2.2 Processes and Experience

Here you should discuss and describe different phases of decision-making and design processes in a wider context after having completed the reconstructed street cases. First
we defined the different phases and then we give some advise on what your discussion should focus on.

Definitions:

The first period that leads to the first decision to design we call ‘**problem identification phase**’. However, the “problem-need” that the design has to solve can be changed several times after the first decision to design. Therefore, the “problem-need” found in the problem identification phase can be viewed as the starting or initiating problem-need, that boost / start the decision to make a project. A phenomenon is that the “problem-need” often is stated as a lack of “solution”, e.g. “we need wider footways” or “a bus lane is missing”. We might say, that sometimes problems-needs seek solutions and sometimes solutions seek problems-needs. It is our perception that the financial situation in most local authorities is a clear lack of funds, and therefore projects where funds seek problems-needs and solutions is non-existing in local authorities.

Most organisations operate with formal systems of ‘**decision to design**’ related to the individual street, which occur prior to the “decision to reconstruct”. These systems of decision vary from one local authority to another. There might be several decisions to design related to the same project.

The period between first decision to design and decision to reconstruct we call ‘**project definition phase**’. This can be a very turbulent phase, which may end with a cancelled project. If it is not possible to extract a first decision to design then define the start of the project definition phase as the start of designing alternative(s).

Definition of ‘**decision to reconstruct**’: This is the time where a majority of politicians formally accept a budget for reconstruction. Financing structure is also decided and finances are allocated. Most often this decision is based on draft / detailed design. Often there is a costs overrun compared to this budget, which sometimes partially is due to changes of design. This means that the design is not “fixed” at the time of decision to reconstruct, but can be altered. (Decision to reconstruct is similar to decision to build – these decisions are often the “point of no return”.)

The period after the decision to reconstruct we call ‘**implementation**’.

Based on the studies of reconstructed street cases we want you to discuss, describe and characterise the local situation regarding decision-making and design processes related to reconstruction / change of arterial streets. We know that there are processes that basically are different in almost all phases of the project, e.g.:

- Reconstructions that are based on well-formulated overall traffic plans, which typically reduce time spent in project identification and definition phases. The barriers to reconstruction are typically lack of money or time in administration.
- Reconstructions where the project identification starts in the media (“it is a good idea to do so and so”), which typically become very long processes of maybe 5,
10 or 20 years. The barriers are often political more or less because the politicians have difficulty in making up their mind.

- Reconstructions that are a resulted of short-term changes or events, e.g. an accident or changes of land use, that may change traffic locally. These projects may be implemented rapidly, if power base and funds are well-organised. But sometimes these short-term changes or events also illustrate the lack of implementation drive that some organisations have.

This means that there might be not one but several typical decision-making and design processes. It is these typical processes related to arterial streets we want you to describe phase by phase. The list of questions below may guide your round table discussion and description in text.

**Project identification phase:**

- What kinds of “problem-need” typically start / boost a project?
- What is the origin of this problem-need, i.e. a plan, a newspaper article, a speech, a meeting?
- Who typically launch these “problem-need”?
- On the basis of what knowledge is this “problem-need” typically launched?
- What kinds of project organisation are typically set up?
- What kinds of data collection, analysis and assessments are often made?
- Is public involvement or public debate typical made in this phase, and what sort of debate is typical?
- Who else discuss the project in this phase?

**Decision to design:**

- Who make these decisions typically?
- Does there exist some sort of system of decision to design?
- How many alternatives are typically decided to be designed?

**Project definition phase:**

- What kinds of project organisation are typically set up?
- Who elaborate the alternatives?
- What kinds of public involvement or public debate take place in this phase?
- Who else discuss the project / alternatives in this phase?
- Who participate in the debate and what do they often say?
- Are field trips / excursions to other countries, cities or sites made in order to get ideas for the alternatives?
- What kinds of analyses and assessments are often made in relation to the alternatives?
- Is there some sort of system in the rejection of alternatives?
Decision to reconstruct:

- How detailed are these decisions typically and what contents do they include, e.g. economy, time-schedule etc.?
- Who make the decision to reconstruct?
- When was the decision to reconstruct made?

Implementation (doing the reconstruction):

- Does the implementation often deviate from the project definition / description of the decision to reconstruct, and on which areas e.g. economy, time, design etc.?
- Please list a number of recently implemented projects simply by describing the reconstruction (what physical changes took place e.g. “On Upper High Street we marked 1.2 km bus lane in both directions by replacing two all-purpose traffic lanes and made bus priority at 4 signalised junctions.”)
- Is some sort of evaluation of these projects often made?

Suggested working procedure:
Start with a meeting, where the local authority is represented by persons with a lot of experience regarding; local traffic planning and project management of arterial street reconstruction schemes. On this meeting you should clarify:

1) Which traffic / land use plans and policies are relevant to describe in part 2.1 and who gather them and describe them.
3) Go through the questions in part 2.2 and decide what information (perhaps drafts of text to part 2.2) and who could be relevant to bring to a second meeting.

Held a second meeting with the relevant people. The purpose of this second meeting is to discuss the text of part 2.1, and to discuss and make part 2.2.
3. Unchanged Street

In this chapter we want you to describe the unchanged street case. Please make one chapter per unchanged street case.

You should show a lot of photos. Below each photo you should write: 1) the year that the photo was taken, 2) street case name and the number of the building, where the photo was taken in front of, 3) direction of photo (e.g. North).

3.1 Case Context and Existing Situation

3.1.1 Case Study Area and Character Sections

For the unchanged street there must be defined a case study area and character sections, please see chapter 2 of the Technical Annex for guidance. Each case study area is typically broken down to 2-5 character sections.

The case study area should be described in broad terms, giving its length and how it has been conceptualised and whether it varies conceptually from indicator to indicator. Any separate character sections should be briefly described. For example -

---

The Brixton case study area is 1.2 km in length, incorporating sections of Brixton Hill and Brixton Road (A23) and forming the “heart of Brixton”. Brixton is the administrative centre of the London Borough of Lambeth, being the location of the Town Hall and many other public administration offices. It is also an important retail centre and node for public transport interchange. The case study area generally follows the rear of those buildings fronting onto Brixton Hill/Brixton Road, although it widens –

- slightly towards the east just south of the railway lines in order to incorporate the market in Electric Avenue and include one of the few streets allowing pedestrians to walk parallel to the high street (i.e. Electric Lane); and
- at the south to incorporate the public open spaces and landmark building on the eastern edge and the two arms of the A23 where it becomes a one-way traffic gyratory.

The study area is divided into three character sections. The most northerly section (section 1) has residential properties built to 4 storeys on its western side and public open space to the east. Section 2 is a “traditional” inner London high street with a mixture of properties. Section 3 is “dominated” by the traffic gyratory but also incorporates a number of public opens spaces.

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The differing nature of character sections could be indicated with photos. Your case study area and character sections should be described and shown on map, see the example on the next page. This map or later maps should preferably also show building numbers, however this is not shown on the map on next page.
3.1.2 Location

The case study location within the city should be briefly described and shown on map. Its relationship to transport networks should be briefly described and shown on maps and any important features highlighted. As well as showing public transport and arterial road networks, you may wish to show cycle networks and pedestrian street networks, if they exist. At least one map in part 3.1.1 or 3.1.2 should show street names of all side streets to the street case.
If you use existing maps as below, please resolve the copyright issues. If you do not use pre-published maps, then it is suggested that you draw on a map (using MS Paint) that includes at least the two arterial streets running parallel to the case study area. Please mark arterial streets based on motorised traffic volumes or current street classification with a “blue pen” and rail / metro stations with a “green pen”. You should use a thick blue pen for arterial streets with many bus lines and a thin blue pen for main streets with few or none bus lines. Mark the case study street with a “red pen”. Remember to insert a legend.

An example of a short description: Brixton is the most southerly station on the Victoria underground line making Brixton an important interchange.

<table>
<thead>
<tr>
<th>Train and Underground Network</th>
<th>Bus Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Map of train and underground network]</td>
<td>[Map of bus network]</td>
</tr>
</tbody>
</table>

---

**Train and Underground Network**

- Brixton
- Vauxhall
- South Bermondsey
- London Bridge

**Bus Network**

- Brixton
- Vauxhall
- South Bermondsey
- London Bridge
<table>
<thead>
<tr>
<th>Streets within the case study locality</th>
<th>Arterial Street Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Map Image]</td>
<td>[Map Image]</td>
</tr>
</tbody>
</table>

Your description of the street case location may also include information about:

- When the district / area was built.
- Knowledge about the residential population.
- Other relevant information that give an understanding of the location.

### 3.1.3 Built Form

Part 3.1.3 is based on the data collected and analysis undertaken following the first section of the Review Frame, i.e. appendix 2 and chapter 3 of the Technical Annex. The intention is to present information relating to built form in an understandable way, so the reader of the case study can –

- get a clear impression of the individual street case and a set of street cases; and
- relate built form to patterns of use etc.

Your analysis and description of street attributes should be guided and structured by the Review Frame. However, the version of the Frame attached to the technical annex is a shortened version compared to some of the early drafts. Elements dropped from the drafts included consideration of urban morphology, grid structure etc. You may however find such elements help introduce your case study and you may wish to describe whether the street is straight or curving, ascending or descending, along with the nature of the surrounding street grid, the block size and granularity. For example, *the Brixton case study street is not part of a “full grid”.* The railway lines cutting
across the case study area have a strong barrier effect. There are no parallel streets adjacent to the case study street running the length of the case study street.

You may wish to draw links with other sections of the chapter e.g. the nature of the Brixton morphology means that there are no alternative north-south pedestrian routes and this may be one of the factors contributing to the high pedestrian numbers on the case study street and the low level of pedestrian service.

E.g. 2 Street Grid and Railways Around the Brixton Case Study Area

Buildings
Following the guidance and structure offered by the Review Frame, you should briefly describe the roofline height and number of floors within each character section and the horizontal spacing of buildings (giving the ratio of frontage space to the space between frontages and using a suitable plan / map). You should map the location of any inactive frontages along with the doorways onto the public realm.
Historical important building and “Landmark” structures should be marked on a map and illustrated with photos (e.g. if they act as a focal point for the street, the photo should show this). They should be briefly described. One way of deciding upon the “Landmark” / significant structures is to close your eyes and think of the street and note which buildings etc. come to mind or you use to orientate yourself.

There should be given a description of the quality of the built fabric (generally or by separate character sections) both in terms of design and maintenance.

N.B. Have you worked through the Review Frame? Have you described –
- ratio of frontage to space between frontages
- historically important buildings or significant structures
- the quality of built fabric, e.g. state of decay, quality of design, building complementarities etc?

Photos may explain a lot. Remember to mention the building numbers.

Perhaps you can have most of the information on one map.

**Space Between Buildings**

Here you should describe for each character section, how the street is physically apportioned (detailed cross section drawings will be prepared centrally within the project). You can insert a table as below, which may help your description.

<table>
<thead>
<tr>
<th>Character section</th>
<th>Street Width (m)</th>
<th>Side Space Width (m)</th>
<th>Width Between Side Space (M)</th>
<th>Median Strip Width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You should describe the nature of the median strip. At Brixton, there is pedestrian guard railing along its length and is intended to separate opposing traffic flows and deter pedestrians from crossing (except at the signal crossings).
You should show on a map the location of trees and other greenery and illustrate with photographs. Guided by the Review Frame you should describe (for individual character sections if necessary) the degree to which greenery shapes the street and is an important formative element. You could also describe whether the trees have other roles / effects such as to provide shade, indicate the edge between side space and carriageway, reduce the visual width of the carriageway or act as landmarks.

Guided by the Review Frame you should describe the street surfaces. You should also show the positions of guard railing and describe its purposes. Also, you are asked to describe places intended for people to congregate, sit etc. and show their location. You should also describe the lighting in the street (for individual character sections if necessary).
You should conclude your description and appraisal of built form with consideration of the secondary descriptors (see review frame) –

- giving the ratio of street width to building height (and illustrating as below), commenting on the level of street definition and enclosure within each character area; and
- describing the transparency and permeability between public and private/semi public realms and degree of surveillance.
**NB Space Between Buildings.** Have you described and illustrated how trees and greenery is influencing the street scape. Does this differ from character section to character section? Have you described the role of the median strip? Does it act as an aid or barrier to crossing pedestrians. Is there a fence or guardrail on the median? Have you described the street surfaces, street furniture, “people spaces” like squares etc. and lighting. Photos may explain a lot. Remember to mention character sections, side street names and building numbers if necessary.

**NB Built Form “End Check” Note.** Have you worked through the Review Frame? Have you described the secondary descriptors –
- ratio of street width to building height;
- degree and sense of enclosure / canyon effect; and
- level of transparency between public and private realm (active frontages and doorways).
Photos may explain a lot. Remember to mention the building numbers.
3.1.4 Traffic Regulation

As with the previous part 3.1.3 Built Form, you should be guided by Theme 2.3 Regulation/Management of the Review Frame. You should describe the existing situation in terms of apportioning and regulation of the carriageway and side space and illustrate with maps, diagrams and drawings.

You should describe and illustrate (separately for each character section if necessary) –
One-way/two way working
Speed limit
Nature of any traffic calming
Number of lanes per carriageway and widths
Division / allocation of carriageway and side space
Pedestrian crossings
Location and type of junctions
On-street parking (… see Review Frame)

Most of the above mention elements are typically shown on plans that include buildings, kerbs, marking and perhaps signs. However, because the street cases often are long and – compared to this – relatively narrow this plan is difficult to show in a report format. A possibility is to show a plan for each character section or to attach the plan as one file or enclosed drawing. Remember that it must be possible to identify the place that the plan represents and how long a metre is.

For each character section there will centrally be made a detailed cross section. However, if you have drawings of cross sections already then please feel free to use them in your description. It should be clear, what the cross section drawing represent.

Next to or below each cross section drawing in the report to the EU commission we hope to have a photo inserted. This photo must be shot recently from the street centre line and in the direction of the street centre line in the Northeast, East, Southeast or South direction and should show a major part of the character section.

NB Overall layout and traffic regulation: Have you remembered to add remarks about the use of the different (traffic) areas, e.g. one-way or two-way, the degree of separation or mixed use, and perhaps give-way rules in mixed-use situations? Perhaps some traffic lanes are so wide that two lines of cars typically use it. Mention the speed limit of the street and if differences of the individual character sections. Add eventual remarks about traffic calming measures. Describe the pedestrian crossing points. Describe the signal-control at junctions and eventual elsewhere. Describe roundabouts and other junctions. Describe junctions as to how pedestrians and cyclists are catered for. Photos may explain a lot. Remember to mention character sections, street names and building numbers.
NB Parking, bus stops etc: Have you remembered to describe the number and types of parking for motor vehicles by operation, time restrictions, charges, user restrictions, etc? Have you described cycle parking stands and motorcycle parking areas, bus stops, stands and shelters, entrances to metro and train stations? Photos may explain a lot. Remember to mention character sections, street names and building numbers.

3.1.5 Patterns of Use

Remember, there is a difference in the extent of data that have to be collected between unchanged streets that are demonstration cases in Work-Package 3 and other unchanged streets. Appendix 4-6 and chapter 3 in the Technical Annex give you information about how to collect data.

Traffic

You should summarise the main features of the vehicular traffic movement by means of the table below.

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Annual Average Daily Traffic</th>
<th>Average Vehicle Occupancy Rate</th>
<th>Peak Hour Vehicle Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars/vans &lt; 3.5T</td>
<td>xx,xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vans/trucks &gt;3.5T</td>
<td>x,xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buses</td>
<td>xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trams</td>
<td>xx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycles</td>
<td>xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles/mopeds</td>
<td>xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>xx,xxx</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It may be that traffic flow and or composition shows significant variation from e.g. character section to character section (or link to link) and if so this should be illustrated by means of a drawing along similar to the one below and separate flow figure given for links or character sections etc. Perhaps the easiest is to have small tables overlaying the map, and where each table refer to a specific street section by using arrows.

Similarly should tables and maps be used to present data about flow across the street for each character section and vehicle speed.

You should mention remarks here about how data was collected and if you have made special observations.
If there have been made other surveys of vehicular movement, e.g. special counts at junctions or counts of parked cars etc., then do not hesitate to present these data.

**Activities**

The review frame was prepared anticipating detailed surveys of pedestrian movement and street activities being conducted at all case studies. It is now decided that such an approach only be adopted at the Demonstration case study. At all other case studies, we ask you only to provide an indication of the observed pedestrian numbers and locations and main stationary activities by means of dots on a plan and illustrative photographs.
The colours in the above will have to be changed to improve clarity, but white is intended to indicate pedestrians, purple show people standing at bus stops, green indicate people standing at market stalls or window shopping and blue indicate people sitting at cafes. Remember to add remarks about the activities.

By using a similar combination of tables and maps as with the vehicular traffic please show the pedestrian movement along and across the street (see also appendix 4 of the Technical Annex). Remember to add remarks about the pedestrian movements.
Ground floor and upper floor land uses should be summarised as shown below and some description given e.g. about types of land use within each character area.

At Demonstration Cases similar mapping approach should be taken to indicate off-street car parking locations and proportions of car parking types. On a separate plan we would ask you to note the location of off-street car parking / parks in each character section. Please give the estimated area of car parking (based on floor areas) for each character section disaggregated into – Public parking, Residential parking, Retail parking, Office parking, Other private non-residential parking.
If there have been made other surveys of pedestrian activities, off street parking or land use, then do not hesitate to present data from these surveys.

### 3.1.6 Performance Indicators

Not all suggested performance indicator data in the data sheet is available for the case study area you choose. In such cases you may have to choose other “statistical boundaries” for individual performance indicators. Perhaps the suggested data are not available at all. Then perhaps other data that can describe the heading (vehicle ownership, population etc.) can be chosen and please then choose and use these data instead.

In this part you should insert a map with the boundaries for performance indicators that are different compared to the case study area and character sections. It has to be completely clear, which data relate to which areas. So add remarks about which areas and data are linked.

Also add remarks about the performance indicator data regarding; 1) what the data represent (the year), and 2) if important in order to understand the data, please also mention how they are collected. These remarks should be mentioned in the excel data sheet and here in the text of this part.

You should then insert a table with the newest data for the performance indicators of case study area and character sections (perhaps other boundaries) that you have been able to find, see below. You may of course use a direct copy of the excel data sheet and paste it here.

<table>
<thead>
<tr>
<th>Performance indicator</th>
<th>Character section 1</th>
<th>Character section 2</th>
<th>Character section 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator 1</td>
<td>xx</td>
<td>xxx</td>
<td>xxx</td>
</tr>
<tr>
<td>Indicator 2</td>
<td>xxxxx</td>
<td>xx</td>
<td>x</td>
</tr>
<tr>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
</tbody>
</table>

In the text you may add remarks about the performance indicators, e.g. the year they represent, links to built form, patterns of use etc. Perhaps you find certain things very important, special or interesting or you simply just want to give some background information that will enables other to better understand the trends.

### 3.1.7 Street Classification and Management

Here you should describe the unchanged street case current street classification, its position in the street/road hierarchy and assigned functions as mentioned in the relevant local traffic plan. Also describe the land use policies for the unchanged street as it is mention in relevant land use plan.
You should also describe duties and responsibilities that different organisations have in relation to this unchanged street, e.g. the highway authority, planning authority, public transport planning authority, public transport operating agency and other organisations. Please also describe how these organisations work together towards shared objectives.

Perhaps the descriptions in this part are the same for other street cases, then just use copy and paste functions.

**3.2 Long-Term Change**

In this part we want you to write about differences of built form, traffic regulation, patterns of use and performance indicators of the arterial street between the existing situation and the situation around 1970. This means that you have to find out how the situation was around 1970.

In the excel data sheet for unchanged street some data are highlighted for the situation around 1970. These data you should focus on first.

A way to get started is to find photos, plans, maps and perhaps a telephone book of the arterial street dated around 1970. Also old traffic and land use plans possibly have a lot of relevant information as well as old statistics. All these things may be in different archives. There may also exist books about the history of the street or a local museum about the city district and alike.

On your field trips to the street you may notice and make notes on paper about buildings, trees, street furniture, lighting and so on that are clearly build / implemented after 1970. The review frame (appendix 2 of Technical Annex) contains a column headed “change” where you can make your own notes etc. regarding information you may have available from which you can briefly describe or illustrate changes. Yet, another possibility is to visit some shops and ask if they have some relevant information, most often you’ll be positively surprised.

We predominantly only want you to describe changes of the case study area and character sections. But there might have occurred major changes in the corridor of the unchanged street case i.e. in side and parallel streets that may have had significant influence on the patterns of use in the unchanged street case. Major changes of the arterial street that is not part of your case study area could also have occurred. These changes could be, e.g. closure for motorised traffic of a parallel street, opening of a large shopping centre in a side street, urban renewal of several blocks of buildings in the corridor, area-wide traffic calming etc. If such major changes have occurred they should be described very briefly by location and type of change.

If you find old photos from around 1970 please insert these in the text where you find it most relevant (make a scan of the photo and insert as file).
3.2.1 Built Form

Look at the existing situation (part 3.1.3) and the old situation. What have changed?

- Has buildings been demolished / built?
- Has the overall use of ground floor of the buildings changed, e.g. from shop to home?
- Has kerbs been implemented or moved?
- Has trees, greenery, street furniture, lighting, etc. been changed / erected / removed?

Please describe by going through the review frame or describe each change from one end of the street to the other.

3.2.2 Traffic Regulation

Look at the existing situation (part 3.1.4) and the old situation. What have changed?

- Traffic control?
- Speed limit?
- Traffic calming?
- Number or marking of traffic lanes?
- Division / allocation of carriageway / side space?
- Pedestrian crossings?
- Layout and type of junctions?
- On-street parking?

Please describe by going through the review frame or describe each change from one end of the street to the other.

3.2.3 Patterns of Use

Here we focus on traffic counts and land use. But you may have been able to find more data. For those data that you have been able to find, please show these in tables and on maps and give a description that focus on the change. These data should be comparable to those of part 3.1.5. You should show both the old and newest data in the same tables and maps so direct comparison is possible.

3.2.4 Performance indicators

Here we focus on population, jobs and road safety. But you may have been able to find more data. For those data that you have been able to find, please show these in tables and give a description that focus on the changes. The area that the performance indicators represent must be the same around 1970 compared to the newest data (part 3.1.6). You should show both the old and newest data in the same tables so direct comparison is possible.
3.3 Reference Area

Here we want you to describe the Reference Area and the performance indicator data that represent the newest data and the situation around 1970. There is a definition for the reference area in chapter 2 of the Technical Annex. Chapter 4 and appendix 3 of the Technical Annex give further descriptions of the performance indicators. The data sheet for the Reference Area must be used to fill in data. Here we would explain the use of the reference area data, which give you a background for selecting the area.

First, the reference area is needed in order to adjust the long-term changes for general developments. Doing so, we will be better able to state whether or not the design and traffic control of the unchanged street case has influenced the development of that particular street. In this sense, the reference area data must be understood as being representing the general development and in this sense work as a control group for the performance indicators of the unchanged street case. Therefore you should be careful about selecting the reference area.

Our discussions have led to the following recommendations about the selection of reference area; 1) the density of residential population and jobs should preferably be of the same magnitude in the corridor of the unchanged street case as in the reference area, 2) a pragmatic approach is needed – select a reference area, where data are accessible.

Secondly, the reference area is needed in order for us to compare across street cases from different countries and cities. The reason why we have to make adjustments before comparing across cases is that each city has its own developmental stage. Therefore it is absolutely necessary that you get as many data as possible for the existing situation.

The reference area for this particular unchanged street may also be reference area to other street cases. If so, please just copy-paste the text you make here to the other cases.

3.3.1 Area and Data Description

The suggested data in the data sheet may not be available in the area you choose for your city. In such cases may be there are other data that can describe the heading (people movement, population etc.) and please then choose and submit these data instead. Another phenomenon may be that some data has other “boundaries” or represent other areas, e.g. data about traffic accidents is from a police district whereas the population data is the area of the municipality.

In this part you should insert a map with the boundaries for the reference area. Maybe some data has “boundaries” different to other data, i.e. represent different areas, e.g. data about traffic accidents is from a police district whereas the population data is the area of the municipality. Then you have to have more than one area on the map. Please then add remarks about which areas and data are linked.
Also add remarks about the data for the reference area regarding: 1) what the data represent, 2) if the method of collecting data or selecting / organising data has been changed during time (i.e. data representing 1970 is not the same as for the newest data), and 3) if important in order to understand the data, please also mention how they are collected. These remarks should be mentioned in the excel data sheet and here in the text of this part.

### 3.3.2 Performance Indicators

Here you should insert a table with the performance indicators of the reference area that you have been able to find, see below. You may of course use a direct copy of the excel data sheet and paste it here.

<table>
<thead>
<tr>
<th>Performance indicator</th>
<th>Newest data</th>
<th>Around 1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator 1</td>
<td>xxx</td>
<td>xxx</td>
</tr>
<tr>
<td>Indicator 2</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

In the text of this part 3.3.2 you may add remarks about the performance indicators of the reference area. Perhaps you find certain trends very important, special or interesting or you simply just want to give some background information that will enables other to better understand the trends.

### 3.4 Recent Statements

We know from other studies that arterial street users to a large extend have accepted the existing situation and therefore rather seldom make statements about the street. Therefore it will not be a surprise if the statements you may be able to find chiefly come from traffic planners, NGO’s and professional organisations or that the number of statements are close to zero.

Most previous studies have focused on the negative aspects of arterial streets, i.e. giving an impression that the arterial street only offers bad experiences compared to other streets. But we also want the statements about positive aspects, benefits and services that the arterial street offers.

Going through the newspaper articles show that the individual streets rarely are discussed, and often only in relation to project definition phases and implementation. However, more general discussions about street activities and traffic often point out a group of streets or an area as the main reason for the statements.

If the unchanged street case is going to be a demonstration case in Work-Package 3 then it is very important that eventual on-going problem identification and project definition phases are described in detail. For demonstration cases you should do both this part about recent statements and part “4.4 Decision-making and design processes” for the phases that the project already have gone through until now. You should then
have the follow contents: 3.4 Statements and Processes, 3.4.1 Recent Statements, and 3.4.2 Decision-Making and Design Processes.

By “recent” we mean the latest about 1-3 years. The idea is to give a current impression of attitudes, opinions and ideas related to the unchanged street case. Each statement should include:

- Text of central parts of original statement (and if very important also graphics and maps that were included in original statement),
- Source i.e. xxx newspaper, xxx project meeting etc.
- Person or organisation that made the statement (do not mention names of individual persons, but their “title”, e.g. citizen, journalist, chair of xx etc.), (do mention names of organisations),

If there exists dozens and dozens of statements please focus on and mention the ones that has major influence on the debate and “the current impression”.

The description should be based on written documents and discussions with traffic planners that have been involved in planning for the arterial street. The written documents could be:

1) Notes and documents from project meetings, public involvement meetings, city council and committee meetings etc.
2) Letters from citizens / organisations to authorities and responses to these letters.
3) Traffic / land use plans and policies, incl. “maps” or estimations of the side effects of traffic e.g. noise, accidents etc.
4) Newspapers and perhaps other media, e.g. NGO’s newsletter, internet-based news services, press releases etc.

Suggested working procedure:
You should start by talking to the relevant traffic planners and arranging a meeting, where you can discuss statements in traffic plans / policies and where to find further information. They will know where to look for information. Most of the relevant information is located in the city partner’s achieves. Perhaps a good idea is to contact a few local newspapers about the street and hear if they could provide you with some relevant recent articles. You should see this part as a straightforward task – if you do not find anything rather quickly do not write anything.

3.5 Case Summary

Here we want you to write a maximum of 10-20 lines that include:

- One sentence about the existing street classification and it’s position in the street / road hierarchy.
- One sentence about the existing overall layout and traffic control.
• Perhaps one sentence about special elements of the existing built form and traffic regulation.
• Short description about the existing situation related to the patterns of use and performance indicators including recent statements.
• Short description about long-term changes related to patterns of use, performance indicators and eventual physical changes.

**Suggested working procedure:**
See chapter 5.
4. Reconstructed Street

In this chapter we want you to describe the reconstructed street case. Please make one chapter per reconstructed street case.

4.1 Case Context and Existing Situation

The way to make part 4.1 and the sub-parts 4.1.1 to 4.1.7 is exactly the same as part 3.1 and the sub-parts 3.1.1 to 3.1.7. Therefore please use the guidance in part 3.1.

4.1.1 Case Study Area and Character Sections
4.1.2 Location
4.1.3 Built Form
4.1.4 Traffic Regulation
4.1.5 Patterns of Use
4.1.6 Performance indicators
4.1.7 Street Classification and Management

4.2 Reconstruction and Short-Term Changes

In this part we want you to write about the reconstruction and differences of built form, traffic regulation, patterns of use and performance indicators of the arterial street between the existing situation, the situation before the reconstruction and the situation around 1970. This means that you have to find out how the situation was before the reconstruction and around 1970.

In the excel data sheet for reconstructed street some data are highlighted for the situation around 1970. These data you should focus on. But please focus on the data for the situation just before and after the reconstruction first.

A way to get started is to find photos, plans, maps and perhaps a telephone book of the arterial street dated for the situation just before the reconstruction and around 1970. Also old traffic and land use plans possibly have a lot of relevant information as well as old statistics. All these things may be in different archives. There may also exist books about the history of the street or a local museum about the city district and alike.

On your field trips to the street you may notice and make notes on paper about buildings, trees, street furniture, lighting and so on that are clearly build / implemented after 1970. The review frame (appendix 2 of Technical Annex) contains a column headed “change” where you can make your own notes etc. regarding information you may have available from which you can briefly describe or illustrate changes. Yet, another possibility is to visit some shops and ask if they have some relevant information, most often you’ll be positively surprised.
We predominantly only want you to describe changes of the case study area and character sections. But there might have occurred major changes in the corridor of the unchanged street case i.e. in side and parallel streets that may have had significant influence on the patterns of use in the unchanged street case. Major changes of the arterial street that is not part of your case study area could also have occurred. These changes could be, e.g. closure for motorised traffic of a parallel street, opening of a large shopping centre in a side street, urban renewal of several blocks of buildings in the corridor, area-wide traffic calming etc. If such major changes have occurred they should be described very briefly by location and type of change.

If you find old photos please insert these in the text where you find it most relevant (make a scan of the photo and insert as file).

4.2.1 Reconstruction

Here we want you to write a short text about the reconstruction. This short text should include:

- **WHERE:** Name of reconstructed street (e.g. Upper High Street).
- **WHAT:** Describe the physical changes (e.g. 1.2 km bus lane in both directions replacing two all-purpose traffic lanes, bus priority at 4 signalised junctions).
- **WHEN:** Year(s) of road works (e.g. 1994).
- **WHO:** Designers of the scheme (e.g. road administration completed design of bus lane, consultants completed design of bus priority at signalised junctions).
- **COSTS:** Actual costs and financing bodies (e.g. 90 000 euros, road administration paid 33% and public transport planning authority paid 67%).
- **ACCUMULATED KNOWLEDGE:** For which topics were there made written evaluations / assessments (e.g. before-and-after study of bus travel speed).

4.2.2 Built Form

Look at the existing situation (part 4.1.3) and the situation just before reconstruction and the situation from around 1970. What have changed?

- Has buildings been demolished / built?
- Has the overall use of ground floor of the buildings changed, e.g. from shop to home?
- Has kerbs been implemented or moved?
- Has trees, greenery, street furniture, lighting, etc. been changed / erected / removed?

Please describe by going through the review frame or describe each change from one end of the street to the other.

4.2.3 Traffic Regulation
Look at the existing situation (part 4.1.4) and the situation just before reconstruction and the situation from around 1970. What have changed?

- Traffic control?
- Speed limit?
- Traffic calming?
- Number or marking of traffic lanes?
- Division / allocation of carriageway / side space?
- Pedestrian crossings?
- Layout and type of junctions?
- On-street parking?

Please describe by going through the review frame or describe each change from one end of the street to the other.

**4.2.4 Patterns of Use**

Here we focus on traffic counts and land use. But you may have been able to find more data. For those data that you have been able to find, please show these in tables and on maps and give a description that focus on the change. These data should be comparable to those of part 3.1.5. You should show both the data from around 1970, data from just before and after the reconstruction and newest data in the same tables and maps so direct comparison is possible.

**4.2.5 Performance indicators**

Here we focus on population, jobs and road safety. But you may have been able to find more data. For those data that you have been able to find, please show these in tables and give a description that focus on the changes. The area that the performance indicators represent must be the same around 1970, just before and after reconstruction compared to the newest data (part 4.1.6). You should show all data in the same table so direct comparison is possible.

**4.2.6 Street Classification and Management**

If the street has undergone changes to street classification, land use policy or authorities / organisations with duties / responsibilities related to the street that is directly related to the reconstruction then please describe the street classification etc. as it were before the reconstruction, e.g. state highway before and municipal street after.

**4.3 Reference Area**

Here we want you to describe the Reference Area and the performance indicator data that represent the newest data, the year just before and after the reconstruction, and the
situation around 1970. There is a definition for the reference area in chapter 2 of the Technical Annex. Chapter 4 and appendix 3 of the Technical Annex give further descriptions of the performance indicators. The data sheet for the Reference Area must be used to fill in data. Here we would explain the use of the reference area data, which give you a background for selecting the area.

First, the reference area is needed in order to adjust the short and long-term changes for general developments. Doing so, we will be better able to state whether or not the changes of design and traffic control of the reconstructed street case has influenced the developments of that particular street. In this sense, the reference area data must be understood as being representing the general development and in this sense work as a control group for the performance indicators of the reconstructed street case. Therefore you should be careful about selecting the reference area.

Our discussions have led to the following recommendations about the selection of reference area; 1) the density of residential population and jobs should preferably be of the same magnitude in the corridor of the reconstructed street case as in the reference area, 2) a pragmatic approach is needed – select a reference area, where data are accessible.

Secondly, the reference area is needed in order for us to compare across street cases from different countries and cities. The reason why we have to make adjustments before comparing across cases is that each city has its own developmental stage. Therefore it is absolutely necessary that you get as many data as possible for the existing situation.

The reference area for this particular reconstructed street may also be reference area to other street cases. If so, please just copy-paste the text you make here to the other cases.

4.3.1 Area and data description

The suggested data in the data sheet may not be available in the area you choose for your city. In such cases may be there are other data that can describe the heading (people movement, population etc.) and please then choose and submit these data instead. Another phenomenon may be that some data has other “boundaries” or represent other areas, e.g. data about traffic accidents is from a police district whereas the population data is the area of the municipality.

In this part you should insert a map with the boundaries for the reference area. Maybe some data has “boundaries” different to other data, i.e. represent different areas, e.g. data about traffic accidents is from a police district whereas the population data is the area of the municipality. Then you have to have more than one area on the map. Please then add remarks about which areas and data are linked.

Also add remarks about the data for the reference area regarding; 1) what the data represent, 2) if the method of collecting data or selecting / organising data has been changed during time (i.e. data representing 1970, just before and after reconstruction is
not the same as for the newest data), and 3) if important in order to understand the data, please also mention how they are collected. These remarks should be mentioned in the excel data sheet and here in the text of this part.

### 4.3.2 Performance indicators

Here you should insert a table with the performance indicators of the reference area that you have been able to find, see below. You may of course use a direct copy of the excel data sheet and paste it here.

<table>
<thead>
<tr>
<th>Performance indicator</th>
<th>Newest data</th>
<th>Year after reconstruction</th>
<th>Year before reconstruction</th>
<th>Around 1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator 1</td>
<td>xxx</td>
<td>xxx</td>
<td>xxx</td>
<td>xxx</td>
</tr>
<tr>
<td>Indicator 2</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
</tbody>
</table>

In the text of this part 3.3.2 you may add remarks about the performance indicators of the reference area. Perhaps you find certain trends very important, special or interesting or you simply just want to give some background information that will enable other to better understand the trends.

### 4.4 Decision-Making and Design Processes

Here we want you to describe the decision-making and design processes phase by phase. The definitions of the phases are the following:

The first period that leads to the first decision to design we call “problem identification phase”. However, the “problem-need” that the design has to solve can be changed several times after the first decision to design. Therefore, the “problem-need” found in the problem identification phase can be viewed as the starting or initiating problem-need, that boost / start the decision to make a project. A phenomenon is that the “problem-need” often is stated as a lack of “solution”, e.g. “we need wider footways” or “a bus lane is missing”. We might say, that sometimes problems-needs seek solutions and sometimes solutions seek problems-needs. It is our perception that the financial situation in most local authorities is a clear lack of funds, and therefore projects where funds seek problems-needs and solutions is non-existing in local authorities.

Most organisations operate with formal systems of “decision to design” related to the individual street, which occur prior to the “decision to reconstruct”. These systems of decision vary from one local authority to another. There might be several decisions to design related to the same project.

The period between first decision to design and decision to reconstruct we call “project definition phase”. This can be a very turbulent phase, which may end with a cancelled project. If it is not possible to extract a first decision to design then define the start of the project definition phase as the start of designing alternative(s).
Definition of “decision to reconstruct”: This is the time where a majority of politicians formally accept a budget for reconstruction. Financing structure is also decided and finances are allocated. Most often this decision is based on draft / detailed design. Often there is a costs overrun compared to this budget, which sometimes partially is due to changes of design. This means that the design is not “fixed” at the time of decision to reconstruct, but can be altered. (Decision to reconstruct is similar to decision to build – these decisions are often the “point of no return”.)

The period after the decision to reconstruct we call “implementation”.

We want you make the description of the processes on a fairly summarising level, i.e. not going into too many details. The description should take a starting point in the questions listed in the following, but the description may include other elements and may be structured in your own way in the different phases.

**Project identification phase:**

- What “problem-need” started / boosted the decision to make a project?
- Who launched this “problem-need”, and on the basis of what knowledge was this “problem-need” launched?
- When was this “problem-need” launched?
- Was there formed some sort of project organisation or appointed a person responsible for the project in this phase, and if so please describe?
- What kinds of data collection, analysis and assessments were made?
- Was there any kind of public involvement or public debate in this phase, and if so please describe statements, forum, etc.?
- Who else discussed the project in this phase?

**Decision to design:**

- What was the contents of the first, second etc. decision to design alternatives?
- When was these decisions made?
- Who made these decisions?

**Project definition phase:**

- Please describe the project organisation that was established in this phase?
- Please describe the alternatives that were elaborated in this phase, and who elaborated them – (architect or design competitions)?
- Was there any kind of public involvement or public debate in this phase, and if so please describe key statements, forum, etc.?
- Who else discussed the project / alternatives in this phase?
- Who were active in the debate and what did they say?
- Was there made any field trips / excursions to other countries, cities or sites in order to get ideas for the alternatives, and if so describe?
• What kinds of analyses and assessments were made in relation to the alternatives?
• What were the expected costs and effects of the alternatives?
• Why were alternatives other than the one implemented rejected, and who rejected these alternatives?
• On an overall basis, what kinds of technical support, national standards, guidelines and networks were used in order to elaborate the alternatives?

Decision to reconstruct:

• What was the contents of the decision to reconstruct, e.g. project definition / description, project organisation, time schedule, budgeted design, reconstruction, operating and maintenance costs, finance structure, competitive tendering, consultants, evaluation etc.?
• Who made the decision to reconstruct?
• When was the decision to reconstruct made?

Implementation:

Here we focus on the differences between the contents of the decision to reconstruct and the actual / reel situation.

• Did the final reconstruction deviate from the project definition / description of the decision to reconstruct?
• Please describe the actual project organisation in this phase?
• Was the time schedule in the decision to reconstruct kept?
• What were the actual costs, and who financed eventual costs overrun?
• Please describe the actual use of competitive tendering and consultants etc.?
• Was there actually made evaluations or assessments of effects?

Suggested working procedure:
This part should be made on the basis of well-prepared round table meetings between persons from the project organisation of the reconstruction and the research partner.

4.5 Feedback Statements

Here we focus on key statements and eventual events that have occurred during the reconstruction and up till today related to the reconstruction or comparison of before-and-after situation. The idea is to give an impression of attitudes towards the reconstruction. Each statement could include:

- Text of central parts of original statement (and if very important also graphics and maps that were included in original statement),
- Source i.e. xxx newspaper, letter etc.
- Person or organisation that made the statement (do not mention names of individual persons, but eventually their “title”), (do mention names of organisations).

Please do only focus on statements of importance, e.g. the Mayor’s speech at the opening ceremony after the reconstruction or a massive protest in Television. The description should only be based on written documents and these could be:

1) Notes, documents etc. related to the reconstruction.
2) Letters from citizens / organisations to authorities and responses to these letters.
3) Newspapers and perhaps other media, e.g. NGO’s newsletter, internet-based news services, press releases etc.

Suggested working procedure:
On a meeting ask research and city partner whether they remember any feedback statements. Otherwise ask relevant local newspapers, if they can remember any debate related to the reconstruction or if they can make a search in their archive. Do not use much time on this part.

4.6 Case Summary

Here we want you to write a maximum of 15-25 lines split into to sections that include:

- One-two sentences about the before and existing street classification and it’s position in the street / road hierarchy.
- One-two sentences about the before and existing overall layout and traffic control.
- Perhaps one-two sentences about special elements of the before and existing built form and traffic regulation.

… and

- Short description about the existing situation related to the current patterns of use and performance indicators.
- Short description about the short-term changes of patterns of use and performance indicators related to the reconstruction.
- Main remarks and assessments about the decision-making and design processes and feedback statements.

Suggested working procedure:
See chapter 5.
5. Discussion

In the Belgian and Hungarian case please complete the discussion of the one unchanged street as part of “3.5 Case Summary and Discussion”. Not all sides of the discussion give meaning with only one case.

The discussion here should be of no more than one to three pages. The discussion should focus on the following four aspects:

Existing situation
What characterises a “problematic / not sustainable” respectively “non-problematic / sustainable” arterial street? Which functions, benefits and services are squeezed or threaten in the “problematic / not sustainable streets”? – Or which indicators are “out of balance”? Who do you believe are the winners and losers in the different street cases? Which factors and design and traffic control elements are important to the sustainability of the street?

Short- and long-term effects
Is it possible to achieve a more sustainable development (economy, social relations, environment and health) by changing the arterial street design? Which types of reconstruction should we focus on in order to achieve a more sustainable development in arterial streets, and what should these reconstructions change? What should not be changed about the existing arterial streets?

Decision-making and design processes (and statements)
Why has some streets been left unchanged and others been reconstructed? Which parts in the processes promote / hamper the possibilities of reconstruction that leads to a more sustainable development of arterial streets? To which degree do different stakeholders push or set back the sustainability of the reconstruction / wanted change? Are the policies and rationales of the city promoting or hampering a more sustainable development of arterial streets? By comparing the processes of the reconstructed streets with the ARTISTS description of the existing situation, how would you characterise the differences of problem identification phase? – And do you think the two different processes will lead to different reconstructions, and if so which one would be most sustainable?

Suggested working procedure:
After having made all the case studies of the country, the research partner should make a proposal to all case summaries and the discussion. A meeting between the research and city partner were these proposals are discussed should be the final meeting of WP2 in the individual countries.