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Survey methodology definition

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Executive summary

In the framework of the ESTEEM project, the survey action has the objective to analyse the four sub-areas selected in order to investigate the state of the art and identify the strategic priorities for the research on safety and security in transport system.

More in particular, the survey action aims at collecting information on best practices, data, tools and existing strategies within each country, on each subarea selected, in order to identify related specific needs, viable technical solutions and priority research actions on safety and security in each sub-area of MPC’s transport system.

The present deliverable 1.2 provides an overview of the activities performed during the Task 1.2 of the project, aiming at defining the methodology and tools of the whole survey that will be delivered during WP2.

The main steps carried out were the following:

- To define in detail the objective of the whole survey action;
- To identify the main stakeholders involved in the survey;
- To define the tools for the survey. In particular:
  - Desk analysis;
  - Semi structured interviews;
  - Questionnaires;
- To define tasks and responsibilities for the delivery of the survey;
- To define and to validate the specific content of the interviews;
- To provide guidelines for the submission of the interviews.

Every decision on the methodology of the survey and the content of the tools was taken in a participatory way with the representatives of the whole consortium.

In particular, the draft of the first three points of the methodology (objective, stakeholders, tools, task and responsibilities) was described and discussed with the consortium members in the project meeting held in Paris on 23\textsuperscript{rd} June 2008, hosted by INRIA. The specific content draft of the interviews was described and agreed in the project meeting held in Madrid on October 13\textsuperscript{th} – 14\textsuperscript{th} 2008, hosted by Trakteplan.
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Annex 2 - Final users questionnaire format
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Annex 4 – Guidelines for interviews submission
Annex 5 - Guidelines to use quality control tools
1 Introduction

This document is prepared for the Directorate-General for Research of the European Commission as deliverable of the project ESTEEM (Enhancing Safety and security aspects in Transport rEsearch in the EuroMediterranean region).

The general objective of ESTEEM project is to enhance and strengthen the links between the Maghreb transport related research system and three Mediterranean neighbouring EU countries (namely France, Italy and Spain), focusing on the specific theme of safety and security of transport systems and infrastructures.

Therefore it is very important to implement a strong coordination action among the relevant actors in the two regions, ensuring that their future research policies on transport are defined at regional level and not only at the level of the individual countries.

The specific objective of the project is to let the partners share the identification of priority common research themes, responding to identified needs, which should be investigated in future research actions to be carried out at regional level. Thus, the project will contribute both to the definition of the future research roadmaps for both the FP7 Transport programme and the Mediterranean Partners Countries (MPCs) governments as well as to the coordination of high quality research and policies on transport in the countries involved in the project in the area of safety.

The strategy implemented to achieve these objectives foresees four main Work Packages, as follow:

1. identification and selection of thematic sub-areas to be investigated (WP1);
2. analysis of the above mentioned sub-areas in the form of structured surveys (WP2);
3. exchange of results and sharing of the knowledge acquired, in the form of workshops and production of roadmaps for future research actions (WP3);
4. creation of a Network among stakeholders and the project participants and a series of Dissemination Activities (WP4).

This deliverable relates with the activities of the Work Package 1.

The Work Package 1 is divided into two tasks which put the basis for the subsequent Work Packages activities.

Especially, Task 1.1 refers to the sub-areas selection (i.e. definition of four topics to be investigated during WP2 and on which the research roadmaps will be based). Task 1.2 refers to survey methodology definition (i.e. definition of the way the WP2 activities will be performed).

This report provides an overview of the activities performed during the Task 1.2 for defining the methodology and tools of the survey that will be performed during the WP2.

Especially, Task 1.2 activities were:

- Definition of the objective of the survey action;
- Identification of the main stakeholders involved in the survey;
- Definition of the specific tools for the survey. In particular:
  - Desk analysis;
  - Semi structured interviews;
  - Questionnaires;
- Identification of tasks and responsibilities for the delivery of the survey;
- Definition and validation of the specific content of the interviews;
- Elaboration of guidelines for the submission of the interviews.
The document is structured according to these activities. The objective of the survey is described in the Chapter 2. Chapter 3 refers to the stakeholders’ analysis. Chapter 4 describes the survey methodology: tools in detail, tasks and responsibilities. Chapter 5 focuses on the main tools of the survey; it specifies the content of the interviews, their validation and guidelines for their submissions.

2 Objective of the survey

In the framework of the ESTEEM project the survey action has the objective to analyse the four sub-areas selected in order to investigate the state of the art and identify the strategic priorities for the research on safety and security in transport system. More in particular, the survey action aims at collecting information on best practices, data, tools and existing strategies within each country, on each subarea selected in order to identify related specific needs, viable technical solutions and priority research actions on safety and security in each sub-area of MPC’s transport system. More in detail, the aim of the survey is to understand:

- The state of the art of the research and implementation for each sub-area, including an evaluation related to the criteria of effectiveness, economical impacts, impacts on energy and environment, societal impacts (social sensitivity). Some of these criteria were used to select the sub-areas as described in the deliverable 1.1.;
- Future policy development and implementation plans;
- Future research development plans and priorities;
- Best practices to be potentially transferred.

3 Stakeholders analysis

The stakeholders have a relevant role within WP1 activities. In a first step they were involved in the consultation necessary for the sub-areas selection process. They have an active role also within all the survey activities. They are the key persons for providing most of the data and information required for the ESTEEM research fields. In particular, they are one the main source of materials for the desk analysis and the addressees of the interviews.

In line with the main objective of the ESTEEM project, as described in the introduction, the survey involves different categories of stakeholders at governmental and local, public and private level. It was agreed to involve in the project stakeholders belonging to the following categories:

- Public Administrations,
- Training and Research Institutions,
- Companies and Associations,
- Final users

The stakeholders are indicated and contacted directly by each partner within his own country. Each category was detailed in several profiles and put in relation with the four sub-areas as described in “Stakeholders’ profile list” (Table 3.1).
### Table 3.1 - Stakeholders’ profile list

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>STAKEHOLDERS’ PROFILES</th>
<th>SA1</th>
<th>SA2</th>
<th>SA3</th>
<th>SA4</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Road</td>
<td>Road</td>
<td>Road</td>
<td>Maritime</td>
</tr>
<tr>
<td>PUBLIC ADMINISTRATION</td>
<td>Central Public Administrations (Ministry of transport, of Internal Affairs, etc)</td>
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<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Local Public Administrations</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TRAINING AND RESEARCH</td>
<td>Universities</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td></td>
<td>Higher Education Institutions</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>Public Research Centres</td>
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<td>X</td>
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<td>X</td>
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<tr>
<td></td>
<td>Private Research Centres</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>COMPANIES AND ASSOCIATIONS</td>
<td>Professional Association of civil engineering</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Transport private companies (engineering, maintenance)</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Transport public companies (National companies, national agencies, etc)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td></td>
<td>Insurance private companies</td>
<td>X</td>
<td>X</td>
<td></td>
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<td>Insurance public companies</td>
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<td></td>
<td>National Communication companies</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td></td>
<td>Trade unions</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Automobile clubs</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td></td>
<td>Logistic private companies</td>
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<tr>
<td></td>
<td>Port operators</td>
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<tr>
<td></td>
<td>Rail operators</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Port Administrators</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>FINAL USERS</td>
<td>Vulnerable users (cyclists and pedestrians)</td>
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<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Car drivers</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Road Professional drivers (tram, bus, etc)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maritime Professional drivers (vessel)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Railway Professional drivers (train)</td>
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<tr>
<td>OTHER</td>
<td>Other</td>
<td></td>
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</table>
Each partner detailed in the “Stakeholders’ profile list” table all the stakeholders contacted and available to participate to the survey. Especially they provided name, organization and function for each stakeholder, sharing them with all the consortium.

Part of the stakeholders identified in this particular moment of the project will be part of the network build up as foreseen in WP4 and will hopefully participate in the workshops that will take place in the Mediterranean Partner Countries as described in WP3.

Main key stakeholders’ profiles involved in the survey by each country are listed below.

**Algeria**

**Public administration:**
- Central Directorate at the Ministry of Transport. (DTUCR) Algiers.
- Local administration of transportation in the wilaya of Batna (DTW).

**Training & research:**
- Universities: university Hadj Lakhdar, Batna
- Specialized institute: National school of land transportation (ENATT)

**Companies & associations:**
- Local public operator of urban transport. ETUB of the city of Batna.
- Local public operator of urban transport. ETUS of the city of Setif.
- Transport private companies (5)
- Rail transportation (SNTF)
- Port operator (port of Bejaia)

**Final users:**
- Vulnerable users and car drivers: 500 interviews.

**Others:**
- Association: *Tarik Essalama* (road safety), Algiers
- Association: *El Baraka*

**France**

**Public administration:**
- Central Administration (Ministères de l’Écologie, de l’Énergie, du Développement durable et de l’Aménagement du territoire, CERTU [centre d’études sur les réseaux, les transports, l’urbanisme et les constructions publiques])

**Training & research:**
- Academic Institutions (École des Ponts et Chaussées-ParisTech, École des Mines de Paris-ParisTech)
- Public research centres (INRETS [institut national de recherche sur les transports et leur sécurité], LCPC [laboratoire central des Ponts et Chaussées], INRIA [institut national de recherche en informatique et en automatique])

**Companies & associations:**
- Transportation Operators (SNCF [Société Nationale des Chemins de Fer], RATP [Régie Autonome des Transports de Paris], Veolia Transport – Europe leading private operator of ground public transportation)
- Automobile industry actors (PSA, Renault, Valeo)
Final users:
• Vulnerable users (CEREHM [centre de ressources sur la mobilité et le handicap])

Other:
• Consumers & users associations (Ligue contre la violence routière, FNAUT [Fédération Nationale des Associations d'Usagers des Transports])

Italy
The Italian interviews will cover the following profiles:

Public administration:
• Central Administration (Ministry of Infrastructures and Transport, Regional Agency of Mobility of Lazio)
• Local Administration (Province of Rome – Government of Mobility and road safety - key cities like Rome)

Training & research:
• Universities (University of Rome “La Sapienza”)
• Private research centres (Training and research Institute on Transport – ISFORT)

Companies & associations:
• Professional association of Civil Engineers (ISIS, Engineering, Telespazio)
• Transport private companies (Bartolini, J&J, Saima Avandero, Fercam)
• Rail transportation (TSF, RFI, RTC)
• Automobile clubs (The main Automobile clubs in Italy - ACI)
• Port Operators (Port Mobility, Port of Civitavecchia, Port authority of Naples)

Final users:
• Vulnerable users (Italian association of road victims families – AIFVS)
• Car drivers (Italian Association on Signals and Safety – AISES)

Other:
• Consumers & users association (Italian federation of the transport workers – FILT CGIL)

Morocco
The Moroccan interviews will cover the following profiles:

Public administration:
• Central Administration
  – Ministry of Equipment and Transport (Terrestrial transportation direction, CNPAC - National comity for road accident prevention, and SNTL – National society for transports and logistics)
  – Ministry of trade and industry (Direction of standardization)
  – Ministry of interior, national security direction
  – National telecommunication regulation agency (ANRT)
• Local Administration
  – City of Rabat
- Wllaya of Rabat-Salé-Zemmour-Zaër

**Training & research:**
- Universities (Rectorat of Université Mohammed V - Agdal)

**Companies & associations:**
- Civil Engineers (Delta holding)
- Trade Unions (CGEM : AFFM – Transport Federation )
- Insurers (President of maritime insurers comity, automobile insurers: Transport department of Wafa Assurances)
- Transports and logistics association (AMLOG)
- Port Operators (Port of Tangier - TMSA)
- Transport companies (ONCF – National rail company)

**Final users:**
- Car drivers and vulnerable users (traffic accident associations ONG)

**Other:**
- Public and private hospitals (Hopital ibn sina & clinique nations unies)

**Spain**

The Spanish interviews will cover the following profiles:

**Public administration:**
- Central Administration (National, General Directorate for traffic & Regional, for Catalonia and Basic Country)
- Local Administration (key cities of different sizes, big ones like Barcelona and Madrid and medium size like Zaragoza, Vitoria or Bilbao)

**Training & research:**
- Universities (Polytechnic University of Catalonia)
- Public Research centres (CENIT)

**Companies & associations:**
- Professional association of Civil Engineers (COICCP, AEC, ITS Spain)
- Transport private companies (ALSA)
- Trade Unions (The two main groups in Spain -CCOO & UGT-)
- Automobile clubs (The two main Automobile clubs in Spain -RACE & RACC-)
- Port Operators (Port of Barcelona)

**Final users:**
- Vulnerable users (National association for blind people and other disabled –ONCE-)
- Car drivers (traffic accident associations – Stop accidents, AEAV-)

**Other:**
- Traffic safety associations (PAT)
- Consumers & users association (OCU)
- Consultants in vulnerable users road design
4 Methodology of the survey: tools and responsibilities

As described in the Introduction, the main tools foreseen to carry out the survey are:

- Desk analysis;
- Interviews;
- Questionnaires.

This chapter describes their objectives, their structures, their quality control tools and tasks and responsibilities related.

4.1 Desk analysis

The desk analysis will consist in researching all the relevant information related to each sub-area selected through websites, research centres documents and projects, publications, articles, institutional documents, etc.

It is important, in this framework, to know for each country which are the sources of the information and of the data and if they are available and/or accessible.

The desk analysis concentrates on the following key points for each sub-area.

Sub-area 1: Road safety

Key Points
- Accident data collection and analysis
- Road safety management process

Sub-area 2: Human factors in road safety

Key Points
- Education & training
  - Professionals (how they obtain driving license)
  - Users (road education at school – obligatory education – acknowledgement of current road safety situation – voluntary level outside the school by public and private – awareness campaigns – how users obtain driving license – training differences within the countries, if any)
- Enforcement
  - cost of the penalty
  - management of penalties and efficiency of such management (e.g. do the penalties are paid?)
  - check real impact of enforcement strategies
  - communication with people (awareness campaigns – what is done – how such tools are used for road safety improvement - to explain people the objective (safety) of an enforcement)

Sub-area 3: Information systems to improve transport safety and security

Key points
- ITS for road safety & security (information & management systems)
  - impacts of the implemented ITS systems on road safety (are ITS a good investment from a social point of view?)
  - ITS for information on critical points
  - plan for ITS development in countries
harmonization of rules for development of ITS (guidelines – ITS architecture like the Italian ARTIST or the French one)
- availability of existing information / data
- dissemination of ITS solutions to potential stakeholders
- different questions for Public Administrations and universities
- aspects concerning equipments for infrastructure

- ITS for safety & security in ports operations
  - important to interview port operators and to understand what are the problems in term of security and safety

Sub-area 4: Safety aspects for infrastructure design

Key points

- Safety audits / inspections procedures
  - do such procedures exist in the different countries – are they applied – existence of specific normative for safety of infrastructure?

- Rail crossing safety
  - what are the laws – what is done for these points – who is competent for rail crossing safety (Public Administration or rail infrastructure manager or road manager?)
  - number of accident at rail crossing compared with other road accident (and to density of network)
  - plan for future management of crossing (tendency to eliminate the crossings)

- Maintenance
  - how to design and control the maintenance plans? who do the maintenance
  - priorities in maintenance plans (quality of maintenance for different kind of infrastructure, e.g. secondary network compared with principal one)

- Vulnerable users
  - distinction between rural and urban areas (different kind of users: pedestrians, cyclists, moped, etc.)
  - what is done for protection of Vulnerable Users

In the Annex 1 of the present deliverable the guidelines and the control procedures for the desk analysis execution are described in detail.

4.2 Interviews

The interviews have the objective to collect qualitative data and information and to gather opinions from the stakeholders. For this reason, it was decided to elaborate a semi-structured questionnaire which allows establishing a discussion with the stakeholders rather than a knowledge test. This kind of tool allows the interviewer to collect all the information required and also other related relevant issues not foreseen within the format.

During the first project meeting it was decided that the format of the interview could consist in almost 30 relevant questions divided in 5 sets (6 questions for each set). It was proposed to define each set of questions following the five qualitative criteria used for the selection of the sub-areas and the future elaboration of the roadmaps. It was agreed to carry out at least 10-15 interviews with key professionals for each country.
In that meeting it was also decided that the specific content of the interviews would be elaborated in close relation with the four sub-areas selected.

4.3 Questionnaires for final users
During the Paris meeting the consortium decided about the advisability of submitting a questionnaire to final users. It is an important added value for the research, especially in some topics in particular for:

- road safety perception;
- effectiveness of the tools aiming at increasing road safety;
- road accident;
- information systems

The questionnaire will be submitted to the final users on line. Each partner will disseminate it in its own country.

The “Final users questionnaire” format is available in the project web page (http://www.esteemproject.eu/) in the languages of all the project partners countries (Arabic, English, French, Italian, Spanish). The Annex 2 shows the final users questionnaire in English.

4.4 Tasks and responsibilities
Tasks and responsibilities during all the period of the survey submission are divided as follows:

- **Leader of Work Package 2 (WPL):**
  - General work progress control (deadlines)
  - Quality control (completeness, consistency, etc.)
  - Technical advice and contingency plans
  - Results integration and common aspects of reporting (issuing Project Deliverables from data and sub-areas reports from SAL)

- **Sub Area Leader (SAL):**
  - Preparation of specific work material and coordination with LPM on its use
  - Integration of results at Sub-area level according to guidelines from the WPL and eventual specific meetings to deal with this matter
  - Collection and pre-evaluation of the desk analysis results. Production of Sub-area data sheets
  - Control progress within the Sub-area and report to WPL

- **Local Project Manager (LPM):**
  - Responsibility for the local work execution, production of data review and organisation of interview results data sheets, as well as reporting to SAL

The Figure 4.1 shows the structure foreseen for tasks and responsibilities.
5 Elaboration of the interviews

Some of the decisions taken during the Paris meeting changed when the content of the interview was elaborated. The whole set of questions composing the interview was agreed by the partners during the project meeting in Madrid held on 13th and 14th of October. During this process, some little adjustments and specifications were brought to the final definition of the four research sub-areas.

The final content of the interview was shared among the partners at the end of October.

5.1 Definition of the format

As agreed during the meeting in Madrid, the interview format is divided in seven main sections:

- Introduction (it clarifies the aim and the structure of the interview);
- General information (general data about the interviewee);
- Road safety management aspects (sub-area n.1);
- Human factor in road safety (sub-area n.2);
- ITS to improve transport safety and security - for Road and Maritime transport - (sub-area n.3);
- Safety aspects in infrastructure design - for Road and Rail transport - (sub-area n.4);
- EU funding (it investigates the stakeholder knowledge about EU funding scheme and in particular about the VII Framework Programme).

In particular, the sub-area sections are divided in several sub-sections corresponding to specific topics to be investigated. For each of these sub-sections, the questionnaire has been organised as follow:

- General information about the topic;
- Specific issues about the topic (these are potential questions to be used to stimulate the discussion with the person interviewed);
After the sub-sections dedicated to the specific topics, a general question is asked in order to investigate other relevant issues about the sub-area, from the point of view of the stakeholders.

Below, as an example, the organisation of the questionnaire for the sub-area n.1 (road safety management aspects) is reported:

- **Part 1**
  - General questions about the specific topic n.1: road safety data collection
  - Questions about specific issues of road accident data collection (potential questions)

- **Part 2**
  - General questions about the specific topic n.2: road safety management process
  - Questions about specific issues of road safety management process (potential questions)

- **Part 3**
  - General question about other eventual issues

### 5.2 Definition of the specific content, validation and guidelines

The interview format was prepared, as explained previously, with the aim of collecting the opinions of main stakeholders about the arguments investigated in the project.

The purpose of the interview is to learn more about the current situation of transport safety and security in Europe and in the Maghrebian Countries (especially, Tunisia, Morocco and Algeria).

Each of the four sub-areas has been divided in specific topics, relevant for the Maghrebian partners. The specific content for the four sub-areas is described below. The full questionnaire is instead reported in the Annex 3.

**Sub-area n.1: Road safety management aspects**

For this sub-area, the interest is in learning the stakeholder opinion about the aspects concerning the road safety management, with specific focus on “road accident data collection” and the “road safety management process”.

For both these topics, the general questions aimed at:

- investigating if the person interviewed is aware of the current situation of the topic in his/her Country;
- how does he/she consider relevant the topic;
- what are, in his/her opinion, the main issues related to the topic;
- what kind of actions should be undertaken to improve the situation.

The potential questions aimed at collecting the stakeholder’ opinion about specific arguments relating with the current legislation and guidelines, the homogeneity of the procedures, the availability of information and/or data, the effectiveness of the actual procedures, the available resources.

**Sub-area n.2: Human factor in road safety**

The “human factors” topics represent, in the framework of the interview, the set of behaviours of the road users (e.g. drivers, pedestrians, etc.). For this topic we are interested with knowing the stakeholders’ opinion about the mutual influence between human factors and
road safety. In detail, the topics concerning the “users education & training” and the “enforcement” are investigated.

The first topic aims at putting the stress on the road users’ behaviours and on their awareness level about road safety. The enforcement refers to the control and repression measures, influencing the road users’ behaviour and consequently the road safety.

For the users’ education & training, the general questions aimed at investigate the stakeholders’ opinion about the current level of road users’ education & training, the main issues on this topic and the possible actions to be undertaken.

The potential specific questions related with:
- the level of awareness about road safety of the road users (licensed and not);
- the level of awareness about road safety of the young people;
- the level of driving training of the road users and the verifications.

On the enforcement, the questionnaire focused on collecting opinions about the effectiveness of the actual enforcement measures, the main issues and the possible actions to be undertaken.

The potential questions related with the current penalty system, the management of the enforcement strategies and their verification.

Sub-area n.3: ITS to improve transport safety and security
In this topic we are interested with knowing the stakeholders’ opinion about the status of development and the issues of the ITS (Intelligent Transport Systems) in his/her Country. ITS is the integration of information and communications technology with transport infrastructure, vehicles and users. Thus, ITS refers to any system or service that makes the movement of people or goods more efficient and economical, thus more "intelligent".

For first some questions about generic issues, common to all the ITS, are asked. Successively, the aspects concerning the ITS for the road safety & security improvement and for the ports operations safety & security are faced.

The generic questions for ITS for transport safety and security relate with the current status of development and spreading of the ITS and with the actions to be undertaken for an adequate development of the systems.

The potential questions investigate the stakeholders’ opinion about the current legislation and/or guidelines on ITS, the homogeneity of the applications, the knowledge about the existing systems.

Sub-area n.4: Safety aspects in infrastructure design
This part of the interview concerns the safety aspects of the transport infrastructures (especially road and rail infrastructures).

In detail, the focus is on the issues concerning the “infrastructure safety verification procedures”, the “rail crossings safety”, the “infrastructure maintenance” and the “vulnerable users safety”.

Especially, the infrastructure safety verification procedures refer to the application of methods like safety audit and safety inspection, aiming to guaranty adequate road safety level. The vulnerable users are the road users, like pedestrians and cyclists, relatively few protected from the traffic. The users belonging to this category are usually the old people, the young people and the disabled.

On the safety audits and inspections, the general questions relate with the current status of application of these methods and with the actions to be undertaken to improve their diffusion. Specific questions relate with the actual legislation and/or guidelines on this topic.
Concerning the rail crossing safety, the stakeholders are asked to give their opinion about the current status of safety at the rail crossings and about the actions to be undertaken to improve the situation. Also the effectiveness of the laws and/or guidelines is investigated.

Similar general aspects are analysed in reference to the infrastructure maintenance (current status and actions to be undertaken). The specific questions relate with the effectiveness of the actual maintenance management system, the adequateness of the financing for the maintenance and how the planning of the maintenance.

For the vulnerable users aspects, the stakeholder is asked to give his/her opinion about the actual status of the vulnerable users safety and about the actions to be undertaken for the safety conditions improvement.

Specific questions relate with:

- the main risk factors for the vulnerable users;
- the control of vehicles speed in the urban area and in general the regulations;
- the effectiveness of the actual measures in favour of the vulnerable users;
- the economic resources to be used for this topic.

The final version of the interview format was translated in the languages of all the project partners countries: Arabic, English, French, Italian and Spanish.

The content of the interviews was validated carrying out an internet based simulation through a software enabling remote conversations with the representatives of the consortium.

After that, final adjustments and recommendations were summarised within a guideline sent to all the partners.

The final guidelines for the interview execution are reported in the Annex 4.

5.3 Quality control tools

The quality control of the questionnaires execution is a key point for the integration of results to be performed in WP2. A set of tools has been defined in this phase of the work to be used during the execution of the field work. Such tools allow a permanent control on key issues in order to guarantee the quality of the data obtained from the questionnaires.

Quality control is done in a continuous approach by means of periodic reporting from the LPM responsible for the field work. These reports includes both, the progress report to evaluate that work is done according to time schedule and with the plan defined and no relevant deviations are identified and the completeness of the information, adequacy and common approach in the contents and interpretation of the information. The objectives are to have all the information controlled in real time in order to make the adjustments as soon as the deviations from planned work are identified to guarantee the technical objectives of the project, i.e. the relevance of the information obtained and the common approach in order to make possible the comparison and integration of data. The tools are addressed to these objectives, covering all of the above mentioned aspects by means of checking the completeness of the information (no missing), the quality of the data (enough details), adjustment to the aim of each item dealing with, the homogeneity of the information towards comparison, etc...

The final guidelines for using the quality control tools are reported in the Annex 5.

6 Conclusions

The work carried out by the consortium during the task 1.1, the selection of the research sub-areas and the task 1.2 described in this document is the basis to realize the objectives of ESTEEM project. In fact, during the task 1.1 the framework was set up and during the task 1.2 the tools and the stakeholders on which to base the research activities were determined.
During this second phase many adjustments and specifications were done also relating the content of the sub-areas to be analysed.

Exchange of experiences and best practice transfer are some of the follow up of the project, for this reason it is crucial to achieve a complete picture of the situation in each site to compare them and extract commonalities.

To do it in the right way is necessary to know the complete environment of the transport safety and security.

Although project is mainly dealing with land transport we understand that a transport chain approach (linking all the partner countries) is also required giving a multimodal view and introducing a specific link among the partners. Safety and security aspects are included here in this new approach including the port security and port operations safety aspects. These are key aspects to give a complete picture of the transport safety and security in the project area as well as to contribute to explain some issues concerning the flows among the partner countries and how the safety and security aspects influence the transport demand in the area and the modal split.

In order to produce accurate results as detailed as possible easily to become implementable recommendations, the analysis is focussed on road transport, basically in the private traffic, covering both urban and interurban environments. To obtain a complete picture, as mentioned before, it is crucial to collect the different sensitiveness in the field of road safety. All points of view must be taken into account and this means that many stakeholders categories have to participate to the project providing their particular approach.

For this reason on one side the desk analysis will allow us to have a good picture of the state of the art of the transport safety and security, on the other side personal interviewing with key sector representatives is the best way to report experiences and to extract the information on real practices and behaviours.

This second part of our work will allow us to make possible the best practices transfer and to formulate recommendations that could have a strong political support.
Annex 1 - Desk analysis execution guidelines & control procedures

0.- ACRONIMS

The following acronyms are used:

LPM: Local Project Manager, is the person responsible for all matters concerning one specific country (partner). In WP2 LPM is responsible for carry out the surveys and the desk analysis (including all the technical reports defined) as well as for reporting about this work progress

SAL: Subarea Leader, is the person responsible for the subarea technical work. SAL must co-ordinate all partners in the subarea, make the quality control of the inputs received and preparing reports concerning

WPL: Work Package Leader, is the responsible for WP co-ordination, methodology, supervision of works and preparing deliverables

Nomination of positions

SAL’s:
- SA 1: UNIBATNA
- SA 2: IMED
- SA 3: INRIA
- SA 4: EMI

LPM’s:
- Algeria: Farès Boubakour
- France: Michel Parent
- Italy: Antonino Tripodi
- Morocco: Omar Drissi
- Spain: Jaime Salom

WPL2: Jaime Salom

All of them has been defined in previous communications and the nomination of people were agreed in project meetings

1.- TECHNICAL APPROACH TO THE WORKS TO BE DONE

1.1 Objectives

The objectives of this part are described in the document “Desk Analysis – objectives” already circulated by the coordinator. From the practical point of view (work execution) the objectives are:
- To systematise the information as far as possible in order to make the integration possible and relevant form the point of view of comparison as well as common approach and presentation. Furthermore, the results of this
part must be integrated with the questionnaires in order to give a complete picture of the matter
- To provide complete and accurate information always according to the criteria defined in the above mentioned document “Desk Analysis – objectives” i.e.

“The objective of the survey is to identify strategic priorities for the research on safety and security in transport system. More in particular, the survey action aims at collecting information on best practices, data, tools and existing strategies in order to identify related specific needs, viable technical solutions and priority research actions on safety and security transport system.”

“Evaluation related to the criteria of effectiveness, economical impacts, impacts on energy and environment, societal impacts (social sensitivity)”

Please take into account these general objectives when carry out the work and complete the forms. The proposed forms are only a tool to help you to reach the objectives making the work easier.

1.2 Methodology
The work is organised in 4 phases:
- Survey
- Local analysis
- Integration
- Reporting

Survey, including all the works of information searching by means of different ways and tools (internet consultation, specialised revues, technical articles, research centers databases, University bibliotheca, etc…) and selection of the most relevant documents according to the relevance criteria mentioned before and the coverage of different types of documents and knowledge fields as well as the defined subareas and approaches (state of the art, policy and research lines). (to be carried out by LPM)

Local analysis, including the work of classifying the information and extract the basic ideas from the documents consulted and selected as relevant. (to be carried out by LPM)

Integration, putting together all the information, evaluating the completeness of the data to perform the analysis of commonalities and the comparison among different variables obtained from the local analysis. Performing this integration and the comparative analysis at subarea level. (to be carried out by SAL).
Another work in the integration, (to be carried later by the LPM) is to integrate these results with the questionnaire results in order to provide a complete picture of the country situation including the local view and opinion of the LPM which is an important added value for the correct interpretation of local results.

Reporting, reviewing all the information, making high level integration and producing final reports and presentations. (to be carried out by WPL)

1.3 Tools
For the reporting task as well as for the results presentation of the “desk analysis” work, the following tools will be used. In the next chapter an example will be provided to clarify the procedures.

Tool 1 “Classification Matrix”, which will be used for both: technical classification of documents and work progress control.

<table>
<thead>
<tr>
<th>Type of document</th>
<th>Approach</th>
<th>Subarea 1 Road safety</th>
<th>Subarea 2 Human factors</th>
<th>Subarea 3 ITS systems</th>
<th>Subarea 4 infrast. design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislation</td>
<td>State of the art</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Policy</td>
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<tr>
<td></td>
<td>Research</td>
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</tr>
<tr>
<td>Data</td>
<td>State of the art</td>
<td>X</td>
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<td></td>
<td>Research</td>
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</tr>
<tr>
<td>Reports</td>
<td>State of the art</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td></td>
<td>Policy</td>
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<tr>
<td></td>
<td>Research</td>
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<tr>
<td>Best practice</td>
<td>State of the art</td>
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<td></td>
<td>Policy</td>
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<td>Research</td>
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<tr>
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<td>Research</td>
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<td>X</td>
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</table>

The meaning and interpretation of the matrix elements are:

“Type of document” means the different information to be consulted in the selected sources (internet, etc..). The types are: (1) “Legislation”, means all documents related to Law applicable to different subareas. It also includes technical documents from the Administration which are applied to road design, criteria for road safety elements, etc…, lets say all the official guidelines launched by the Administration with the category of Law or not, but mandatory or recommended and normally used by the technicians. (2) “Data”, means just data published, concerning basically on statistics in safety and security, available in the ordinary sources for this desk analysis, i.e. data about accidents. (3) “Reports”, “Best Practice” and “Research” are all documents including specific types of information. They could be articles, books, publications or papers in seminars, etc….. Such documents comes from different stakeholders (University, researchers, users associations, professional associations, civil servants, operators, etc…). Within this group we include three subgroups: “Reports” for the general content and format, “Best practice” when the documents contains this type of very focussed information in very specific cases including large experiences and recommendations, “Research” when the document is specifically related to research work and/or research policy in transport safety & security.

“Approach”, means if the document analysed deals with the “state of the art”, i.e. a document explaining different uses of certain ITS system on road safety or if it is oriented to “policies” and implementation plans, i.e. an article concerning the impacts of implementing a law enforcement to control speed using radars. Research approach is reserved to very specific content just dealing with research work lines looking to the future.
The matrix cells are marked with “X”, since only these cells are expected to be filled with references. Not all cells are available, for instance, Legislation documents do not deal with policy or research approaches, just given rules for today. But, Best Practice document could deal with all approaches from the state of the art in the field to the policy and the implementation results as well as possible recommendations not only in the practical way of implementation (policy) but in the research way to improve the effectiveness of the system, or to make it much more accessible. For instance, an on board signalling system, is state of the art approach since we explain the situation of the technology used (lets say RFID) and the experiences, is policy since (perhaps) there is a project to implement it and a pilot project is already carried out with good results but with some weak points like lack of detection in certain conditions, research approach is also included since the document propose a research line in the detection technology for a certain range of speeds.

Tool 2 “Document ID code criteria”, providing a tool for classifying documents.

In order to make easy the document identification and classification a code system is proposed:

1st item: Country:
   A: Algeria
   F: France
   I: Italy
   M: Morocco
   S: Spain
   T: Tunis

2nd item: Type of document:
   L: Legislation
   D: Data
   G: General Reports
   B: Best practice documents
   R: Research documents

3rd item: Subarea:
   1: Subarea 1
   2: Subarea 2
   3: Subarea 3
   4: Subarea 4
   (if one document deals with more than one subarea just put the number of the most relevant)

4th item: Document number (just the consecutive number, 1 to n for each country)

Example: A document from France dealing with ITS which is a best practice one and is accounted as document number 20, the code will be: FB320

Tool 3 “Documents list format”, to list all the documents with a common criteria.
This tool is focused on producing lists of documents with different classification criteria. All sites must produce one list like that in EXCEL format, to make easy the integration and classification towards the final presentation in the deliverables. The list format is as follows:

### TOOL 3 “DOCUMENTS LIST FORMAT”

<table>
<thead>
<tr>
<th>Country ID</th>
<th>Name (brief description)</th>
<th>Type</th>
<th>Subarea(s)</th>
<th>Approach(es)</th>
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</thead>
<tbody>
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</tbody>
</table>

Each row is devoted to each document reported. Name means a brief description or better the title of the document. In this case if the document involves more than one subarea, all of them must be included in importance order (from more to less). The same happens with the approaches if there are more than one.

Tool 4 “Summary Report Sheet”, to extract and present information from the selected documents of the survey phase. This report consists in maximum one page per document with the following structure:

### TOOL 4 “SUMMARY REPORT SHEET”

<table>
<thead>
<tr>
<th>Country ID</th>
<th>Name (brief description)</th>
<th>Type</th>
<th>Subarea(s)</th>
<th>Approach(es)</th>
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</table>

**Addressed key points in the subarea (Please specify the points within each subarea, using the list of points from the document “desk analysis” provided by the coordinator)**

**Abstract (very short description of the document – objectives, conceptual frame, conclusions- in no more than 3 paragraphs)**

**Contributions to subarea key points identified, according to the objectives of the survey (best practice, data, tools, strategies). To evaluate the contributions criteria defines in the “desk analysis” document must be taken into account**

**Comments in free format**
1.4 Example
We offer an example to make easy the comprehension of the work to be done and the format for presentation.

The case:
To analyse the document called “Ministerial Order 18/2004” concerning the protection of motor bikers in road network in Spain.

The basic ideas
The document is launched by the Ministry of Public Works (General Directorate for Roads), which is the responsible body for roads design. The General Directorate of traffic is responsible for implementation of such protections

The Order provides technical information about the technical profile of the protection (materials, geometry, etc…) as well as guidelines for application (in which cases, where and how).

The forms completion
To complete the forms we start for the TOOL 1. We need the code of the document analysed to introduce the input in the corresponding cell of the matrix. To define this code we will use TOOL 2. We will consider the warning concerning that one document must be allocated only in one cell. We assume it is the first document of the list, then the correlative number is 1. The project affects basically SA1, then the subarea is 1

Since we are talking about a document issued by Central Administration which obliges everybody and it is a technical document for design and implementation the “type” is “Legislation”. The approach is SOA (State of the art), the only allowed for “legislation” type. The country is Spain

The code is: SL11

<table>
<thead>
<tr>
<th>TOOL 1 “CLASSIFICATION MATRIX”</th>
</tr>
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<tbody>
<tr>
<td><strong>Type of document</strong></td>
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<tr>
<td>Legislation</td>
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<td>Data</td>
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<td>Reports</td>
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TOOL 3 “DOCUMENTS LIST FORMAT”

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<th>Country</th>
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<th>Subarea(s)</th>
<th>Approach(es)</th>
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<td>Spain</td>
<td>SL11</td>
<td>Ministerial Order 2004 to protect motorbikers in roads</td>
<td>Legislation</td>
<td>1</td>
<td>SOA</td>
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</table>

TOOL 4 “SUMMARY REPORT SHEET”

<table>
<thead>
<tr>
<th>Country</th>
<th>ID</th>
<th>Name (brief description)</th>
<th>Type</th>
<th>Subarea(s)</th>
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<tr>
<td>Spain</td>
<td>SL11</td>
<td>Ministerial Order 2004 to protect motorbikers in roads</td>
<td>Legislation</td>
<td>1</td>
<td>SOA</td>
</tr>
</tbody>
</table>

Addressed key points in the subarea (Please specify the points within each subarea, using the list of points from the document “desk analysis” provided by the coordinator)

Key points addressed within SA1 are. Accident data collection and analysis
Key points addressed within SA 2 are: Communication with people (awareness campaigns) – what is done – how such tools are used for road safety improvement (to explain people the objective (safety) of an enforcement)
Key points addressed within SA4: Vulnerable users. (1)distinction between rural and urban areas (different kind of users – pedestrians – cyclist - moped...) and (2) what is done for protection of V.U. (plans...) - legislations for V.U.

Abstract (very short description of the document – objectives, conceptual frame, conclusions- in no more than 3 paragraphs)

The Order aims to reduce fatalities in the road critical points (curves), by means of protection of the road elements which could be dangerous for vulnerable users like motorbikers after a fall down in the road. The measure proposed is the installation a complementary road fence completion in the lower part of the present ones (or the conventional protection for cars) in order to avoid damage to fallen motrobikers impacting to the vertical elements for sustentation of the fences. Tests proves that this measure reduce drastically the number of dead people for this cause.

Contributions to subarea key points identified, according to the objectives of the survey (best practice, data, tools, strategies). To evaluate the contributions criteria defines in the “desk analysis” document must be taken into account

To SA1 / Accident and data collection analysis: The presence or not of the protection is a key issue in the accident investigation
To SA2 / Awareness campaign: There is no specific campaign at the moment to show progress in such way. General campaign for motorbikers safety aspects has been periodically issued and disseminated by mass media, mentioning sometimes this aspect.
To SA4 / Vulnerable users. This is a clear contribution to motorbikers safety in interurban areas. Impacts in accidents or fatalities reduction not available yet. Cost of the measure is not so high and the expected impact relevant. Users groups (motorbikers) asked for such type of measures and insist in front of the Administration to force the installation of such protections

Comments in free format

The Order is from 2004 and today the new projects takes into account this recommendations. Concerning existing roads without protections the General Directorate for Traffic is assigning some resources each year to develop specific projects and installation of protections for motorbikers in the most sensitive roads (the ones with more motorbikes traffic). The areas protected actually are very limited, but this is a policy of the Public Administration.
2.- FOLLOW UP PROCEDURES

2.1 Roles and responsibilities

Local Project Managers (LPM):
- Produce monthly progress reports and send them to SAL and WPL.
- Produce the forms of TOOLS 1, 3 and 4 defined above, as far as the work is completed and submit these forms to SAL on time for technical review.
- Review (if it is the case) and improve the forms according to SAL and WPL suggestions (if it is the case) and resubmit them once corrected.

Sub Area Leaders (SAL):
- Quality control of the received information from LPM’s in formal way (forms completed and readable) as well as in the content (relevance of the information and integrability). Feedback to LPM’s and WPL concerning the modifications and improvements to be done. Criteria are the homogeneity and the relevance of the data received with the objective of comparison and integration to extract common results.
- Producing integrated version of the TOOLS 1, 3 and 4 and a technical report on commonalities, differences, relevant facts and integrated approach for each subarea

Work Package Leader (WPL):
- Giving support about evaluation and integration criteria as well as guidelines for survey task, following this document
- Producing high level integration of results (whole project) from SAL input of subarea level analysis
- Writing WP2 deliverables
- Preparing integrated WP2 presentations (in co-operation with SAL)

2.2 Time schedule
- Progress reports each month (from December to March) prepared by LPM and sent to WPL
- First technical report on data consistency and recommendations (End of January), prepared by SAL’s, reviewed by WPL and sent to all LPM’s
- Inputs from LPM, i.e. the forms duly filled delivered to SAL (dead line end of March)
- Final technical report from SAL’s integrating results (end of April), prepared by SAL’s
- Review and deliverable –like report and WS presentation for WP2 (end of May)
Summary of the reporting procedure

<table>
<thead>
<tr>
<th>Report</th>
<th>Dead line</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Progress report</td>
<td>End December</td>
<td>LPM’s</td>
</tr>
<tr>
<td>2nd Progress report</td>
<td>End January</td>
<td>LPM’s</td>
</tr>
<tr>
<td>1st Data consistency report</td>
<td>End January</td>
<td>SAL’s</td>
</tr>
<tr>
<td>3rd Progress report</td>
<td>End of February</td>
<td>LPM’s</td>
</tr>
<tr>
<td>4th Progress report</td>
<td>End of March</td>
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<tr>
<td>Inputs (TOOLS 1, 3 &amp; 4)</td>
<td>End of March</td>
<td>LPM’s</td>
</tr>
<tr>
<td>Subarea integration report</td>
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<tr>
<td>Deliverable draft and presentations</td>
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<td>WPL</td>
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</tbody>
</table>

Reminder: LPM’s are the representatives of each country. SAL’s were nominated in Madrid meeting. Please see meeting minutes and check your personal position and responsibilities.

2.3 Control sheets
For work progress control and supervision we will use the following forms:

Monthly Progress Reports: LPM will use the TOOL 1 putting the number of documents analysed in each significant cell of the matrix.

Report on data consistency is free format from SAL’s.

Inputs from LPM are the TOOLS 1, 3 and 4 as described above.

Technical report from SAL’s has been described above, format to be defined later in coordination with WPL.
### Annex 2 - Final users questionnaire format

#### Final users questionnaire

<table>
<thead>
<tr>
<th>General information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please indicate your age</td>
</tr>
<tr>
<td>14-18 years</td>
</tr>
<tr>
<td>19-35 years</td>
</tr>
<tr>
<td>36-60 years</td>
</tr>
<tr>
<td>more than 60 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are you a road driver?</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
</tr>
<tr>
<td>no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you usually travel by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>car</td>
</tr>
<tr>
<td>public transport</td>
</tr>
<tr>
<td>motorcycle</td>
</tr>
<tr>
<td>foot</td>
</tr>
<tr>
<td>bicycle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Road safety perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>How sure do you feel with these modes?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>nothing</td>
</tr>
<tr>
<td>car</td>
</tr>
<tr>
<td>public transport</td>
</tr>
<tr>
<td>motorcycle</td>
</tr>
<tr>
<td>foot</td>
</tr>
<tr>
<td>bicycle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>for those who answered &quot;sufficiently or very&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your perception of safety for travels with car is mostly due to confidence with</td>
</tr>
<tr>
<td>human driving capacities</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How sure do you feel when travelling on:</th>
</tr>
</thead>
<tbody>
<tr>
<td>few</td>
</tr>
<tr>
<td>urban roads</td>
</tr>
<tr>
<td>extra-urban roads</td>
</tr>
</tbody>
</table>
Concrete scenarios

Evaluation of different risk factors

<table>
<thead>
<tr>
<th>How do you evaluate the effectiveness of the following tools aiming at increasing road safety?</th>
<th>Not effective</th>
<th>a little effective</th>
<th>sufficiently effective</th>
<th>very effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>presence of traffic lights</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>horizontal signing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vertical signing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>road illumination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clearness and timeliness of information on traffic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>presence of policemen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>road surface conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>presence of bays (for extra-urban roads)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>presence of help devices (for extra-urban roads)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please, give a judgement on the impact on life quality of the following:

<table>
<thead>
<tr>
<th></th>
<th>not important</th>
<th>a little effective</th>
<th>sufficiently important</th>
<th>very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmospheric pollution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acoustic pollution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road accidents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Accidents

Did you have, during the last year, a road accident due to low road safety or to traffic? yes not

If yes, where did it happen?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>urban road</td>
<td>extra-urban road</td>
</tr>
</tbody>
</table>

In your opinion, traffic conditions are more sure on:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>urban road</td>
<td>extra-urban road</td>
</tr>
</tbody>
</table>

Information systems

<table>
<thead>
<tr>
<th>What is, in your opinion, the level of quality of road information systems</th>
<th>very low</th>
<th>low</th>
<th>sufficient</th>
<th>high</th>
</tr>
</thead>
</table>

What is the impact of the current information systems on driving safety?

<table>
<thead>
<tr>
<th></th>
<th>very low</th>
<th>low</th>
<th>sufficient</th>
<th>high</th>
</tr>
</thead>
</table>

Sort by importance (development priority) the following systems

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic traffic lights</td>
<td></td>
</tr>
<tr>
<td>Driving aid systems (e.g. automatic cruise control)</td>
<td></td>
</tr>
<tr>
<td>Variable message signs (for accident awareness)</td>
<td></td>
</tr>
<tr>
<td>Vehicle-vehicle communication systems</td>
<td></td>
</tr>
<tr>
<td>Vehicle-infrastructure communication systems</td>
<td></td>
</tr>
<tr>
<td>Real-time information at stops (bus arrival)</td>
<td></td>
</tr>
<tr>
<td>PT fleet monitoring</td>
<td></td>
</tr>
<tr>
<td>Systems for bicycles recognition</td>
<td></td>
</tr>
<tr>
<td>Systems for pedestrians recognition</td>
<td></td>
</tr>
<tr>
<td>Systems giving priority to pedestrians</td>
<td></td>
</tr>
</tbody>
</table>
Annex 3 – Final interviews content

Interview organization

Introduce the ESTEEM project and its aims. In particular introduce which are the subareas selected by the project team and the objective of the present survey.

A brief introduction to the questionnaire will be provided by the interviewer to explain the objective of the interview, the fact it is confidential and that the area of interest is the whole country.

For each sub-area some specific aspects have been defined, which interest both Maghreb and EU.

Before the questions, for each topic, the specific aspects will be briefly introduced by the interviewer.

Generally, the questionnaire is organised as follow:

- Introduction
- General information
- Subarea section
  - Data collection
  - Specific aspect n° 1
  - Specific aspect n° N
  - Generic question
- EU funding section

Please, in the general information section indicate the specific role of the interviewee within the organization.

Please, feel free to vary the format as you feel appropriate during the discussion.

It is not required to work through each section of this document. Begin a discussion on each topic, use the questions to introduce new ones and choose topics according to the flow of the discussion.

This should be as much like a conversation as possible

In a geographical scale all the thematic sections (subareas) include urban and extra-urban aspects.

Note

Not all the questions will be put to all the stakeholders. Some of them could not be interested with all the topics.

The answers might be synthetic. It will be necessary to stimulate the person interviewed to provide explanations on the answers.
The specific questions aim at underlining a problem and not a possible solution. The solution should be provided by the person interviewed during the discussion.

**Interview Schedule: Public Administrations**

**Section: Introduction**

This is an interview about opinions, not a knowledge test.

The purpose of this interview is to learn more about the current situation of transport safety in Europe and in the Maghrebian Countries (especially, Tunisia, Morocco and Algeria). These interviews are set in the framework of an European project, financed by the European Commission, aiming at defining the research topics that should be realised in the Maghreb to improve transport safety.

The questionnaire is divided in four sub-areas: “road safety management aspects”, “human factors in road safety”, “ITS for transport safety and security improvement” and “safety aspects in the infrastructure design”.

The interview will only focus on the topics about which you are competent.

We are interested in learning Your opinion about the current situation of such topics, at national level, and about the issues You think are the most important ones.

**Section: General Information**

1. Name
2. Organization
3. Position/Role

**Section: Road safety management aspects**

We are interested in learning your opinion on the aspects concerning the road safety management. In detail, we are interested with the issues concerning the “accident data collection” and the “road safety management process”.

a) Data collection:

1. Are you aware of the current road accident data collection process? How relevant is this aspect for road safety improvement, in your opinion?
2. What do you think are the more important issues about the accident data collection?
3. In your opinion, what actions should be undertaken to improve the accident data collection?

Specific issues (potential questions):
4. In your opinion, is the accident data collection process actually supported by adequate laws and/or guidelines?

5. In your opinion, is the accident data collection process actually performed in an homogeneous way by the charged authorities?

6. In your opinion, are the collected road accident data easily available? Are there limitations to the use of such data?

7. In your opinion, is the detail level of the collected road accident data adequate or are there any gaps?

8. What is, in your opinion, the level of efficiency / effectiveness of the road accident data collection process?

b) Road safety management process

9. Are you aware of the current road safety management process?

10. What are, in your opinion, the more important issues about the road safety management process?

11. In your opinion, what actions should be undertaken to improve the road safety management process?

Specific issues (potential questions):

12. In your opinion, do road safety management tools (e.g. guidelines, laws, etc.) exist? Do you think they are applicable?

13. In your opinion, does the way the road safety is effectively managed reflect what is stated by the laws in force?

14. In your opinion, what is the current level of coordination between the different stakeholders involved with the road safety aspects?

15. Is an evaluation of the interventions for the road safety improvement performed? Is this evaluation adequate?

16. In your opinion, are the strategies in favour of the road safety sufficiently financed?

c) Other

17. Are there other issues concerning road safety that you think should be tackled? Why?

Section: Human factors in road safety

The “human factors” represent, in the framework of this interview, the set of road users (e.g. drivers, pedestrians, etc.) behaviours. For this topic we are interested with knowing your opinion about the mutual influence between human factors and road safety.

In detail, we are interested with the issues concerning the “users education & training” and the “enforcement”.

The topic concerning users education & training aims at putting the stress on the road users behaviours and on their awareness level about road safety.

The enforcement refers to control and repression measures, influencing the road users behaviour, to improve road safety.

a) Education & training
1. What do you think about the current level of road users (professionals and not professionals) education & training?

2. What do you think are the more important issues of the road users education & training?

3. In your opinion, what actions should be undertaken to improve the road users education & training?

Specific issues (potential questions):

4. Do you think the licensed users (professionals or not) are sufficiently kept up to date and aware about possible road Code changes and about the risks connected with a not safe driving?

5. Do you think the not licensed users are sufficiently aware to face the risks of the roads?

6. Do you think the young people (not necessarily licensed) are aware about the current road safety status and the issues? [possible solution: road safety education campaigns in the schools]

7. What do you think about the current level of driving training (of professionals and not) and about the users behaviour verifications? [possible solution: reform of training and exams]

b) Enforcement

8. In your opinion, are the current enforcement measures sufficient?

9. What do you think are the more important issues about enforcement?

10. In your opinion, what actions should be undertaken to improve the enforcement?

Specific issues (potential questions):

11. In your opinion, is the current penalty system (e.g. costs of fines, loss of points associated to the license, etc.) in case of traffic offence a sufficient deterrent for the road users?

12. What do you think about the way the enforcement strategies are managed? Is this management effective?

13. Is the enforcement strategies effect adequately verified?

c) Other

14. Are there other issues concerning human factors in road safety that you think should be tackled? Why?

Section: ITS for transport safety and security improvement (Road and Maritime)

In this topic we are interested with knowing your opinion about the development status and about the issues of the ITS (Intelligent Transport Systems). ITS is the integration of information and communications technology with transport infrastructure, vehicles and users. Thus, ITS refers to any system or service that makes the movement of people or goods more efficient and economical, thus more "intelligent"
In detail, we are interested with the ITS effects on transport safety and security. For first we will pose you some questions about generic issues, common to all the ITS. Successively, the aspects concerning the ITS for the road safety & security improvement and for the ports operations safety & security will be faced.

a) ITS for transport safety & security
   1. What do you think about the current status of development and diffusion of the ITS oriented to road safety & security improvement?
   2. What do you think are the more important issues about this topic?
   3. In your opinion, what actions should be undertaken to improve the diffusion of such systems?

Specific issues (potential questions):
   4. In your opinion, are the current plans and/or guidelines aimed at the implementation of ITS oriented to transport safety & security improvement adequate?
   5. In your opinion, what is the current status of homogeneity of the ITS oriented to transport safety & security improvement?
   6. In your opinion, are the ITS sufficiently used to improve the transport systems security conditions?
   7. Do you think that the knowledge of the existing ITS oriented to transport safety & security solutions should be improved?

b) ITS for road safety & security
   8. Do you think the ITS implementation can contribute at improving significantly the road safety and security conditions? How?
   9. Do you think the ITS oriented to the road safety and security improvement are sufficiently diffused and in an homogeneous way?

c) ITS for port operations
   10. What are the main issues of the ports safety & security?
   11. Do you think the ITS implementation can contribute at improving the ports operations safety & security? How?
   12. Do you think the ITS oriented to port safety & security improvement are sufficiently diffused?

d) Other
   13. Are there other issues concerning ITS that you think would be tackled? Why?

Section: Safety aspects in the infrastructure design (Road and Rail)

This interview concerns the safety aspects of the transport infrastructure, both road and rail, design.
In detail, we are interested with the issues concerning the “infrastructure safety verification procedures”, the “rail crossings safety”, the “infrastructure maintenance” and the “vulnerable users safety”.

The **infrastructure safety verification procedures** refers to the application of methods like safety audit and safety inspection. The first one is performed after the design phase, before the infrastructure realisation. It aims at guarantying adequate road safety level. The second method is a verification of the safety conditions of an existing infrastructure. It aims at providing design indications to improve the safety conditions. The vulnerable users are the road users, like pedestrians and cyclists, relatively few protected from the traffic. The users belonging to this category are usually the old people, the young people and the disabled.

a) Safety audits & inspections

1. What do you think about the current status of development / use of methods for the infrastructure safety verification (audit & inspection)?
2. What do you think are the more important issues about the infrastructure safety verification?
3. In your opinion, what actions should be undertaken to improve the infrastructure safety conditions verification?
Specific issues (potential questions):
4. In your opinion, are the current laws and/or guidelines for the infrastructure safety conditions verification adequate?
5. Is, in your opinion, the infrastructure safety conditions verification sufficiently diffused and applied?

b) Rail crossing safety

6. What do you think about the current status of rail crossing safety?
7. What do you think are the more important issues about the rail crossing safety?
8. In your opinion, what actions should be undertaken to improve the rail crossing safety?
Specific issues (potential questions):
9. In your opinion, are the current laws and/or guidelines for the rail crossing safety adequate?

c) Maintenance

10. What do you think about the current status of infrastructure maintenance?
11. What do you think are the more important issues about the infrastructure maintenance?
12. In your opinion, what actions should be undertaken to improve the infrastructure maintenance?
Specific issues (potential questions):
13. In your opinion, are the current laws and/or guidelines for the infrastructure maintenance adequate?
14. Do you think the current infrastructure maintenance management system is adequate? [possible solution: different priorities for the
maintenance of different type of roads – main roads vs secondary ones]

15. Do you think the fund for the roads maintenance are adequate?

16. Do you think the scheduled infrastructure maintenance (instead of the one performed when necessary) is sufficiently diffused? Is it adequate?

d) Vulnerable users

17. What do you think about the current status of vulnerable users safety?

18. What do you think are the more important issues about the vulnerable users safety?

19. In your opinion, what actions should be undertaken to improve the vulnerable users safety?

Specific issues (potential questions):

20. In your opinion, what are the main risks factors for the vulnerable users? (e.g., vehicles speed, pedestrian crossings)

21. Do you think the vehicles speed in the urban areas is sufficiently controlled and regulated?

22. Do you think the adopted measures in favour of the vulnerable users are sufficiently diffused in the urban areas? Are they adequate?

23. Do you think the tools (e.g., laws, guidelines) for the vulnerable users protection are adequate?

24. Do you think there is a lack or lowness of data about the vulnerable users precluding to evaluate adequately this issue?

25. Do you think the economic resources, that can be used for improving the vulnerable users safety, are sufficient?

e) Other

26. Are there other issues concerning the infrastructure safety that you think would be tackled? Why?

Section: EU funding

1. Did you apply for or obtain any EU financing to implement solutions in safety and security transport system?

2. In particular, did you know about the VIIth Framework Programme? Did you apply for any call? If not, why?
Annex 4 – Guidelines for interviews submission

Introduce the ESTEEM project and its aims. In particular introduce which are the subareas selected by the project team and the objective of the present survey.

ESTEEM is an European project financed by the Directorate-General for Research of European Commission. The project consortium includes partners from Algeria, Tunisia, Morocco, Italy, France and Spain. The project full title is “Enhancing Safety and security aspects in Transport rEsarch in the EuroMediterranean region”. The general objective of ESTEEM is to enhance and strengthen the links between the Maghreb and EU transport related research systems, focusing on the specific theme of transport safety and security.

The four specific sub-areas to be investigated were selected by the project team and they are the following:

- Road safety management aspects;
- Human factor in road safety;
- ITS to improve transport safety and security;
- Safety aspects for infrastructure design

The objective of the survey action is to identify strategic priorities for the research on safety and security in transport system. More in particular, the survey action aims at collecting information on best practices, data, tools and existing strategies in order to identify related specific needs, viable technical solutions and priority research actions on safety and security in each sub-area of MPC’s transport system.

The experts’ opinions are necessary for the survey to know what is the current status of development of the topics, what are the more urgent problems and to define what are the possible solutions to be undertaken in the next future (i.e. what is applicable in the Countries).

A brief introduction to the questionnaire will be provided to explain the structure of the interview.

For each sub-area some specific aspects have been defined, being interesting both for Maghreb and EU. Before the questions, for each sub-area, the specific aspects will be briefly introduced.

The questionnaire is organised as follow:

- Introduction
- General information
- Subarea section
  - Data collection
  - Specific aspect n° 1
  - Specific aspect n° N
  - Generic question
- EU funding section

Please, in the general information section indicate the specific role of the interviewee within the organization.
Please, feel free to vary the format as you feel appropriate during the discussion. It is not required to work through each section of this document. Begin a discussion on each topic, use the questions to introduce new ones and choose topics according to the flow of the discussion.

This should be as much like a conversation as possible.

In a geographical scale all the thematic sections (subareas) include urban and extra-urban aspects.

*Note*
Not all the questions will be put to all the stakeholders. Some of them could not be interested with all the topics.

The answers could be synthetic. It will be necessary to stimulate the person interviewed to provide explanations on the answers.

The specific questions aim at underlining a problem and not a possible solution. The solution would be provided by the person interviewed during the discussion.
Annex 5 - Guidelines to use quality control tools

0.- ACRONIMS

The following acronyms are used:

LPM: Local Project Manager, is the person responsible for all matters concerning one specific country (partner). In WP2 LPM is responsible for carry out the surveys (controlling the quality) and the desk analysis (including all the technical reports defined) as well as for reporting about this work progress and complete the forms to systematise the info carrying out the analysis at local level. Local Project Manager will be responsible to contribute to deliverable chapters under its responsibility according to work distribution and index proposed by Work Package Leader.

SAL: Subarea Leader, is the person responsible for the subarea technical work. SAL must co-ordinate all partners in the subarea, make the quality control of the inputs received and preparing reports concerning this issues and, in particular, to establish in co-ordination with the rest of SAL’s the criteria to harmonise the questionnaires answers in order to make possible a systematic integration. This is a key task in the project, under the co-ordination of Work Package Leader. Subarea Leader will be responsible to contribute to deliverable chapters under its responsibility according to work distribution and index proposed by Work Package Leader.

WPL: Work Package Leader, is the responsible for WP co-ordination, methodology, supervision of works and preparing deliverables structure, writing the common parts of such documents.

Nomination of positions

SAL’s:
- SA 1: UNIBATNA
- SA 2: IMED
- SA 3: INRIA
- SA 4: EMI

LPM’s:
- Algeria: Farès Boubakour
- France: Michel Parent
- Italy: Antonino Tripodi
- Morocco: Omar Drissi
- Spain: Jaime Salom

WPL2: Jaime Salom

All of them has been defined in previous communications and the nomination of people were agreed in project meetings.

1.- TECHNICAL APPROACH TO THE WOKS TO BE DONE
1.1 Objectives
The objectives of this part is to obtain key information to define “the state of the art” of the safety and security in the transport sector in the specific sub areas already selected. From the practical point of view (work execution) the objectives are:
- To systematise the information collection as far as possible in order to make the integration easier and relevant form the point of view of comparison as well as common approach and presentation. Furthermore, the results of this part must be integrated with the desk analysis in order to give a complete picture of the matter. It means to use the questionnaires as a tool to provide relevant information on each item.
- To make sure that information is complete, relevant and integrable (making them homogeneous) in all steps of the process and all of the participants (from LPM interview realisation and initial integration until SAL to verify the information quality and integration work)

1.2 Methodology
The work is organised in 4 phases:
- Survey
- Local analysis
- Integration
- Reporting

Survey. It is the execution of field work to prepare the interviews with all stakeholders defined in the lists and to complete the questionnaires in the right way, reaching the agreed number of interviews for each profile. (to be carried out by LPM)

Local analysis, including the work of reviewing, validate and integrate (per stakeholder category and subarea) the information from the questionnaires and extract the basic commonalities at subarea level and at stakeholder category level, reporting on it using the tools defined below. (to be carried out by LPM)

Integration, putting together all the information (coming from local analysis and questionnaires), evaluating the completeness of the data to perform the analysis of commonalities and the comparison among different variables obtained from the local analysis. Performing this integration and the comparative analysis at subarea level. Key work on this area is to systematise the answers from different questionnaires in different countries to harmonise the answers making possible an integration in systematic way (to be carried out by SAL).
Another work in the integration, (to be carried later by the LPM) is to integrate these results with the questionnaire results in order to provide a complete picture of the country situation including the local view and opinion of the LPM which is an important added value for the correct interpretation of local results. A specific tool is issued for such task

Reporting, reviewing all the information from tools and deliverable specific chapters (provided by LPM’a and SAL’­s), making high level integration and results exploitation and producing final conclusion reports and presentations. (to be carried out by WPL)

1.3 Tools
For the reporting task as well as for the results presentation of the “questionnaire” work, the following tools will be used. In the Annex an example will be provided to clarify the procedures, based on questionnaire test carried out in Rome.

It is important to note that some of the tools are not “close” since part of the information must be obtained from the data itself and it is not possible at this time to give, for instance, a classification grouping the answers to each item. This work is only possible with enough number of questionnaires and must be done by the SAL’s in a co-ordinate way (same criteria)

Previous definitions:

Stakeholders types: The stakeholders will be classified in the following hierarchy
(Please use this codes in all documents and tools):

1. Public Administration
   1.1 Central Administration
   1.2 Regional & local Administration

2. Universities and research centres
   2.1 Universities
   2.2 Independent research centres
      2.2.1 Public centres
      2.2.2 Private centres

3. Operators and users
   3.1 End users (internet individual questionnaires)
   3.2 Automobile clubs
   3.3 Professional associations of civil engineers
   3.4 Transport companies
      3.4.1 Private
      3.4.2 Public
   3.5 Transport operators (bus operators, etc…)
   3.6 Trade unions
   3.7 Insurance sector
      3.7.1 Private
      3.7.2 Public
   3.8 Logistics companies
      3.8.1 Private
      3.8.2 Public
   3.9 Port operators
   3.10 Port administrators
   3.11 Rail operators
   3.12 National communication companies

We keep the same approach in the countries and subareas codes definition:

Country:

A: Algeria
In general the tools are coded according to the above mentioned codes. All the information (except in Tool 2) is related with the questionnaires results and evaluation by LPM’s and just put the data in a format to allow to see it and treat later in the best way. Specific info is provided in each case.

To keep strictly the codes and formats and verify each table before delivery (error free check) is crucial to make possible analysis and integration work.

Finally note that TOOLS are just tools to help us to do the work, but other works of integration and reporting are included and defined in the text. Please read carefully for such crucial information and not forget them.

**Tool 1 “Questionnaire quality control”**, which will be used for making a first quality control procedure by the project manager and decide if the questionnaire is acceptable or not (not accepted MUST NOT APPEAR in this tool) and the level of quality or confidence. Each column is a single questionnaire results evaluation in terms of three categories (poor, good, excellent). Blank is for those questions not answered. In the header codes for stakeholder type and country must be filled according to the above code list. Name of the stakeholder according to those used in Tool 5 is free (the name of the institution or abbreviation – name of person is not confidential). Questionnaire type is referred to the 3 types provided for Public administration (PA), Universities (UN) and end users (EU).

Evaluation is carried out at different levels: The first two levels must be evaluated directly from the individual items to subsections in objective way. The second two levels (the complete section and complete questionnaire) are free. This means that the overall evaluation for the sections MUST NOT be necessarily the “sum” of the scores, the LPM has the freedom to give and overall evaluation under his/her own impression.

Before the use of Tool 1 a check list must be applied to evaluate if the questionnaire is valid or not. This must be evaluated at section level (it is possible the case that some sections are valid and some not). The valid ones must be used. The evaluation is at the discretion to LPM, but a simple list of basic criteria is provided:

- a) Consistency of the answers
- b) Completeness
- c) Precision and detail
- d) Relevance
Tool 1 must be filled by LPM on a monthly basis and reported to SAL and WPL. The document is cumulative.

Tool 2 “Integration by type of stakeholder & site”, providing a tool for the integration analysis of the answers. The key work to really use this tool in the right way is a previous agreement among the SAL’s to assign standard values to each item of the questionnaires grouping the answers in limited number of homogeneous answer groups. This is an interactive process that require to have a minimum volume of questionnaires and:

- To examine them by all SAL’s
- To propose the grouping criteria
- To agree in such groups
- To complete the form in this common way

An example could contribute a better comprehension: The simplest is question “a4” from “Data collection” subsection in “Road safety and management aspects” section in the questionnaire provided. The question is “In your opinion, is the accident data collection process actually supported by adequate laws or guidelines?”. The answer is “yes” or “not”, plus possible comments to be included in other tools (tool 3). Then the groups are clear.

But in other cases the variety of answers may make difficult to group the answers and the above described process is important and it is not possible to create the groups “a priori” and it is necessary to have the completed questionnaires to analyse them and propose the possible groups. An example, in the same part of the questionnaire, is “a2” question “What do you think are the most important issues about the accident data collection?”. The possible range of answers are extensive and a criteria to consider two equal or different and just decide on the most relevant is a matter of discussion and cannot be treated in this document. Later, an operational procedure would be decided in the Consortium to deal with this issue in order to make sure that the work is carried out in the right way. This aspect is crucial for the integration of results and obtain consistent quantitative & qualitative conclusions.

In the table, we propose only the structure and ideally suppose only 3 answers per item (A, B or C), just to construct the table and show both parts, the one to be completed by the SAL’s and the one for the exploitation –just to show how to exploit the results and provide integrated and added value information from the raw data - (indicated as “raw data” and “intended exploitation”) shadowed in red. The rest just show how to fill the table once the answers are classified in equivalent groups and each groups is identified as A, B or C (in the example).

Each column correspond to a questionnaire which is identified by country code and stakeholder code as well as its own order code within the stakeholder type. Each item is valuated A, B or C, and the yellow rows are just for comments. The blue cells are the possible exploitation (basic statistics and cross tabs) which are very helpful to extract conclusion just using the adequate presentation of data. From this basic information more sophisticated indicators could be defined and perform a complete analysis.
Tool 3 “Integrate questionnaire results with desk analysis”, to link both data at local level. The form includes the possibility to make the work at stakeholder level (differentiate) or just integrate for all stakeholders, if this level of de-aggregation seems not significant. The integration level is free depending on the local information, but a minimum level is established in the sub section. To systematise the info a basic table is provided with a place for basic ideas from questionnaires, from desk analysis and a comment to compare both. A summary at section level is required as part of the report.

This tool must be provided at the end of the interview work, but it is important to submit an intermediate draft (end of February) to analyse it and provide feedback to all LPM.

To clarify the tool use, the objective is to put both sources of info (questionnaires and desk analysis) in front each other in a table to see basically: (1) The lacks of info in each subsection – from questionnaires or desk analysis and (2) to see how both information complement each other. The excel table is just a sheet, but the info is provided just a word table with the three cells per each sub section with text comment as included in the example.

Tool 4 “Operational questionnaire execution statistics”, to make the follow up of the work progress in terms of successfully performed interviews. This form is cumulative and must be filled by LPM and send monthly to SAL and WPL. The information must be detailed at stakeholder type level with the breakdown indicated in the form and based on the initial list of the stakeholders provided. It is mandatory to provide such list with the first report in all cases. We remain that some partners has not been provided such list yet. This is crucial to control the “planned vs executed” work and, eventually, activate contingency plans. That is also critical for the quality of the integration work, since the information must be balanced. Planned interviews are the initial plan with names in the list provided as well as it classification by types; Number of real executed valid interviews means the interviews carried out successfully from the initial list; Number of failed interviews (no show, low quality, refused, etc...), means those from the original list that failed, i.e. it has been not possible to realise or the data is unuseless; Number of successfully replaced the initial failures, means those that has been initially failed and the stakeholder has been replaced for other similar (reported later in the list). These new interviews are added to the initial “Number of real executed valid interviews” to obtain the Number of total final valid interviews. The Number of Remaining failed interviews are those that cannot be replaced or failed again once has been replaced by new stakeholders. They are the residual failures, not able to eliminate.

Tool 5 “Progress report”, to evaluate the progress of the work according to time schedule that all partners must provide (work programme), just indicating the schedule of the interviews as planned using the list of the stakeholders. The example provides is self explained. The period is according to time schedule, we recommend that each period is 15 days (half a month) in order to provide flexibility, since appointments are not easy and take time. This tool must be completed by LPM and send to WPL each month

Tools are provided in EXCEL/PPT format in attached documents.
See the Annex at the end of the document as example for the form completion guidelines.

2.1 Roles and responsibilities

Local Project Managers (LPM):
- Produce monthly progress reports and send them to SAL and WPL’s (tools 1, 4 & 5).
- Produce the forms of TOOL 3 at the end for desk analysis & questionnaire integration
- Deliver a draft of TOOL 3 at the end of February
- Send all the complete questionnaires in a monthly basis to SAL’s and WPL to make possible the first approach to TOOL 2 basic requirements completion
- Write contributions to Deliverables according to WPL guidelines in the concerned part

Sub Area Leaders (SAL):
- Quality control of the received information from LPM’s in formal way (forms completed and readable) as well as in the content (relevance of the information and integrability). Feedback to LPM’s and WPL concerning the modifications and improvements to be done. Criteria are the homogeneity and the relevance of the data received with the objective of comparison and integration to extract common results.
- Coordinating the grouping task of questionnaires answers to complete TOOL 2
- Realise the TOOL 2 completion and validation, once the grouping work has been completed
- Report in free format about the work progress to WPL in a written way
- Write contributions to Deliverables according to WPL guidelines in the concerned part

Work Package Leader (WPL):
- Giving support about evaluation and integration criteria as well as guidelines for survey task, following this document
- Producing high level integration of results (whole project) from SAL input of subarea level analysis
- Organising the work to produce the deliverables among the involved partners (LPM’s and SAL’s)
- Defining deliverables index and contents and writing the conclusions (highest level integration) and methodology chapters of WP2 deliverables
- Preparing integrated WP2 presentations (in co-operation with SAL’s)

2.2 Time schedule
- Progress reports each month (from January to April) prepared by LPM / SAL and sent to SAL/ WPL
- TOOL 3 delivery draft end of February
- Inputs from LPM, i.e. the forms duly filled delivered to SAL/WPL, continuously from end of February on a monthly basis
- TOOL 2 (end of April), prepared by SAL’s
Summary of the reporting procedure (see tools associated with each report)

<table>
<thead>
<tr>
<th>REPORTING PROCEDURE, SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Report</strong></td>
</tr>
<tr>
<td>1st Progress report</td>
</tr>
<tr>
<td>2nd Progress report</td>
</tr>
<tr>
<td>Draft TOOL 3</td>
</tr>
<tr>
<td>3rd Progress report</td>
</tr>
<tr>
<td>4th Progress report</td>
</tr>
<tr>
<td>Draft TOOL 2</td>
</tr>
<tr>
<td>Deliverable draft and presentations</td>
</tr>
</tbody>
</table>

Reminder: LPM’s are the representatives of each country. SAL’s were nominated in Madrid meeting. Please see meeting minutes and check your personal position and responsibilities.

### 2.3 Control sheets
For work progress control and supervision we will use the TOOLS described above. Monthly reports from SAL to WPL are free format.
Annex: Example of Rome

We offer an example to make easy the comprehension of the work to be done and the format for presentation.

The validation test performed in Rome refers to an interview to Prof. Ricci, Associate Professor at the “Sapienza” University of Rome. Especially, he is expert in the field of the rail transportation. He was then interviewed only about the rail crossing safety.

In the following examples, only the row or column referring to the rail crossing safety section is shown.

The overall evaluation in Tool 1 is obtained considering also the % of all the other sub-sections (in which the % blank is always 100%).

Tool 2 is not presented now (not enough questionnaires).

Tool 3 presents only the comparison for the sections “rail crossing safety” and “EU fundings”.

<table>
<thead>
<tr>
<th>TOOL 1 - QUESTIONNAIRE QUALITY CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill one column per questionnaire</td>
</tr>
<tr>
<td>COUNTRY</td>
</tr>
<tr>
<td>STAKEHOLDER TYPE</td>
</tr>
<tr>
<td>STAKEHOLDER NAME (CODE)</td>
</tr>
<tr>
<td>QUESTIONNAIRE TYPE</td>
</tr>
<tr>
<td>Overall questionnaire evaluation</td>
</tr>
<tr>
<td>Detailed questionnaire evaluation:</td>
</tr>
<tr>
<td>% blank (no answer)</td>
</tr>
<tr>
<td>% &quot;P&quot; (poor score)</td>
</tr>
<tr>
<td>% &quot;G&quot; (good score)</td>
</tr>
<tr>
<td>% &quot;E&quot; (excellent score)</td>
</tr>
<tr>
<td>SECTION (Safety aspects for infrastructure design -road&amp;railway-) Overall evaluation</td>
</tr>
<tr>
<td>Detailed section evaluation:</td>
</tr>
<tr>
<td>% blank (no answer)</td>
</tr>
<tr>
<td>% &quot;P&quot; (poor score)</td>
</tr>
<tr>
<td>% &quot;G&quot; (good score)</td>
</tr>
<tr>
<td>% &quot;E&quot; (excellent score)</td>
</tr>
<tr>
<td>Rail crossing safety: item b6</td>
</tr>
<tr>
<td>item b7</td>
</tr>
<tr>
<td>item b8</td>
</tr>
<tr>
<td>item b9</td>
</tr>
<tr>
<td>sub-section evaluation:</td>
</tr>
<tr>
<td>% blank (no answer)</td>
</tr>
<tr>
<td>% &quot;P&quot; (poor score)</td>
</tr>
<tr>
<td>% &quot;G&quot; (good score)</td>
</tr>
<tr>
<td>% &quot;E&quot; (excellent score)</td>
</tr>
<tr>
<td>SECTION (EU funding) Overall evaluation</td>
</tr>
<tr>
<td>Detailed section evaluation:</td>
</tr>
<tr>
<td>% blank (no answer)</td>
</tr>
<tr>
<td>% &quot;P&quot; (poor score)</td>
</tr>
<tr>
<td>% &quot;G&quot; (good score)</td>
</tr>
<tr>
<td>% &quot;E&quot; (excellent score)</td>
</tr>
<tr>
<td>EU-funding: item a1</td>
</tr>
<tr>
<td>item a2</td>
</tr>
</tbody>
</table>
### TOOL3 - INTEGRATE QUESTIONNAIRE RESULTS WITH DESK ANALYSIS

Fill in each column text and comments (to be done by LPM)

<table>
<thead>
<tr>
<th>Stakeholder group 2 - Research &amp; University</th>
<th>Questionnaires</th>
<th>Desk analysis</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECTION (Safety aspects for infrastructure design - road &amp; railway -).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail crossing safety: item b6</td>
<td>poor investments on technological systems</td>
<td>many investments on infrastructures</td>
<td>quite only infrastructural interventions</td>
</tr>
<tr>
<td>Item b7</td>
<td>effects of the rail crossings on traffic congestion (urban areas)</td>
<td>rail crossing elimination</td>
<td>difference in issues identified</td>
</tr>
<tr>
<td>Item b8</td>
<td>implementation of technological devices</td>
<td>no info</td>
<td>lack of info on this point</td>
</tr>
<tr>
<td>Item b9</td>
<td>need for guidelines or laws (don’t exist today)</td>
<td>only guidelines from service provider found at national level</td>
<td>strong need for legislation</td>
</tr>
</tbody>
</table>

**Sub-section evaluation:**

- **excellent**
- **good**
- **quite the same indication found**

<table>
<thead>
<tr>
<th>SECTION (EU funding).</th>
<th>Participation at SELCAT project</th>
<th>no info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item a1</td>
<td>Know fp7 - participated at fp6</td>
<td>no info</td>
</tr>
</tbody>
</table>
### TOOL4 - OPERATIONAL QUESTIONNAIRE EXECUTION STATISTICS

Fill in each column the values (to be done by LPM)

<table>
<thead>
<tr>
<th>Stakeholder group 1 - PA</th>
<th>Stakeholder group 2 - RU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>Regional / local</td>
</tr>
<tr>
<td>Number of Planned interviews</td>
<td>30</td>
</tr>
<tr>
<td>Number of real executed valid interviews</td>
<td>1</td>
</tr>
<tr>
<td>Number of failed interviews (no show, low quality, refused, etc…)</td>
<td>0</td>
</tr>
<tr>
<td>Number of successfully replaced the initial failures</td>
<td>0</td>
</tr>
<tr>
<td>Number of Remaining failed interviews</td>
<td>29</td>
</tr>
<tr>
<td>Number of total final valid interviews</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stakeholder group 3 - Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td>End users</td>
</tr>
<tr>
<td>Number of Planned interviews</td>
</tr>
<tr>
<td>Number of real executed valid interviews</td>
</tr>
<tr>
<td>Number of failed interviews (no show, low quality, refused, etc…)</td>
</tr>
<tr>
<td>Number of successfully replaced the initial failures</td>
</tr>
<tr>
<td>Number of Remaining failed interviews</td>
</tr>
<tr>
<td>Number of total final valid interviews</td>
</tr>
</tbody>
</table>

### TOOL 5

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Type</th>
<th>Sub Areas</th>
<th>Specific aspect</th>
<th>Planned time</th>
<th>Execution time</th>
<th>Evaluation</th>
<th>Comments - contingencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Stefano Ricci - Associate Professor of &quot;Sapienza&quot; University of Rome</td>
<td>University</td>
<td>SA-4</td>
<td>Rail crossing safety</td>
<td>1st period</td>
<td>1st period</td>
<td>Succeed</td>
<td>No comments</td>
</tr>
</tbody>
</table>