Botanical Garden of the
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Conclusions:

Main lines for a guide of advices and best practices"

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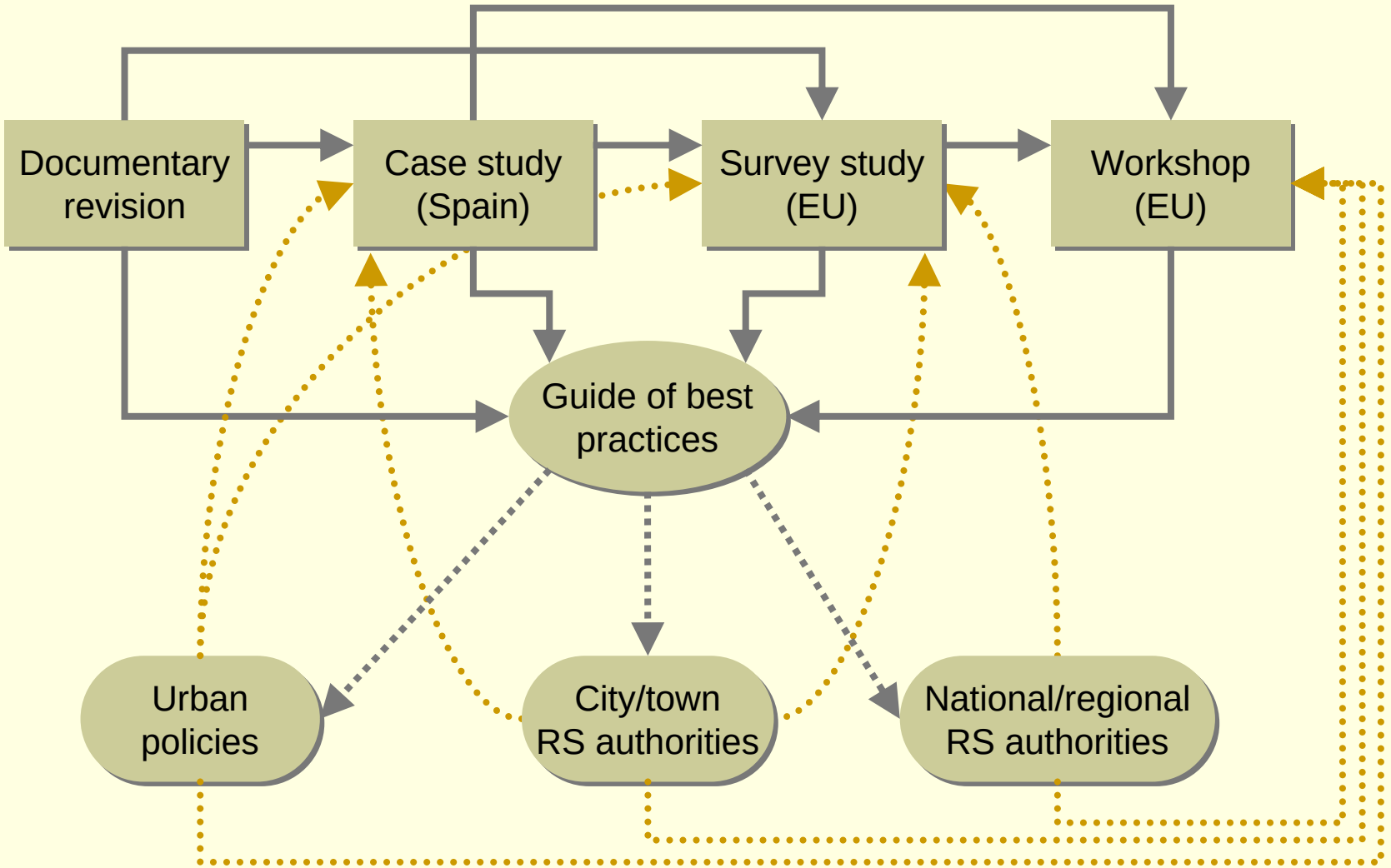
Structure of the project



DB systems to manage the TA

- The DB systems should incorporate optimized procedures for data entry and automatic filter systems that allow controlling the most usual errors and that would improve the quality of the collected information.
- This would allow:
  - Increasing the coherence and the homogeneity
  - Reducing missing data
  - The possibility of using the same data for different procedures: accident report, reports...
  - Reducing the time needed to fill in the information.
- If these DB systems integrate the TA data colleciton together with other administrative-legal procedures, then the procedure efficiency and quality would be optimized.
- The immediacy of the information supplied by the interaction with a remote DB (at the place of the accident) helps to better understand what happened in an accident, and also to supply a completely updated information to allow agile actions.
- The national/regional authorities should supply DB tools to manage the TA to the medium-size/small towns in order to be able to process and use their own data with a sufficient level of detail to be able to carry out a detailed and useful analysis at the local level.

The national/European standardization

- The topic of the European standardization cannot be separated from the topic of the quality of the information collected and codified by the police.
- Not only the content and the codification have to be standardized, but also the procedures with which this information is obtained and its homogeneous understanding has to be guaranteed.
- A European manual for the police should be developed. It would define the minimum information and how to collect and codify it.
- There should be a guideline on how to train the police to improve the quality and the homogenisation that allow an appropriate European harmonisation.

Polices

- The accident data collection and management procedure carried out by the police is framed in a wider procedure of investigation, reconstruction and legal-administrative management that has to be synchronized with statistical aims with the objective of not losing efficiency and quality.
- The TA information has to be considered as an accident rate investigation tool at the local and national/regional level and not only as a legal-administrative procedure.
- The polices require an appropriate training and motivation, not only to investigate the accident, but also to report it and codify it properly.
- If the same police/patrol specialized in accidents is the one that attends it and follows the whole procedure of information collection, many problems of data quality are avoided because he has a global idea of what happened and of how it is reflected in the DB.

Data quality

- Quality control:
  - Automatization and detection of errors in DB
  - Reliability vs. completeness, more quality than quantity
  - We may deal with the lack of information. It is more difficult with the errors
  - Audits and data quality analysis
- The subject of data quality and reliability, as well as the lack of information or missing data would need a triple strategy
  - Carry out studies on quality in the EU countries to detect what are the sources and the determinants.
  - Reconsider which information is affordable and with which level of accuracy aiming to review the database contents.
  - Define standard monitoring and quality control mechanisms
- Diagnosis and quality control procedures should be developed at the local level, procedures that have to guarantee the operation of the procedures as well of the results of the collected data.
- The periodic statistical analyses focussed on the missing data are a necessary quality control tool, that allow diagnosing the sources of the problems to be able to make corrections.

Urban accident rate analysis

- Compare the cities is being particularly difficult, especially between big cities because of their singularity.
  - The exchange of experiences between the policed of different municipalities has been considered as a particularly useful action.
  - The possibilities to compare municipalities grouped by size in connection with mobility should be considered.
- We miss urban accident rate studies where patterns related to the size or the particular mobility characteristics are studied. This would help to better define action guidelines and mechanisms of experience exchange.
- Other mechanisms of analysis of the accident rate patterns have to be considered for when there are not exposure data, in order to allow comparisons.
- The macro analysis at the urban level is quite different from the motorway one. It requires another treatment of the place and space, in two dimensions clearly, like the ones supplied by the GIS
  - For example, the road analysis should be explored instead of the streets or it could be important to define how to analyze the junctions and other types of areas linked with mobility patterns.
- The municipalities must have tools to be able to analyze their own accident rate with such a detailed level than to direct road safety plans adjusted to their characteristics.

The structure of the information

- Among the different TA research levels (marco/medium/micro) and from the point of view of the urban needs, we miss the medium level.

- The DB accidents, it should consider the differentiation in the detail of the contents, by taking into account:
  - The characteristics of the road infrastructures and the differences between motorways and cities
  - Depending on if the accident is fatal/serious or slight/no fatality.
  - The types of traffic unit involved
  - The complexity and sequence of the accident events

- The accident information coding and management systems should be able to progress and adapt according to the priority changes and to incorporate new decisive elements of the accident rate.

Tools

- More accurate and efficient tools:
  - Digitalized cartography + GPS
  - PDA y laptops + remote connections
  - Black box in the vehicle
- The GIS systems have shown a great utility to diagnose the accident rate in the cities. The analysis of junctions and accident concentration in the cities should be completed with a spatial analysis focussed on the areas, where many other elements in connection with mobility step in and that are not easily detectable with simple approximations.
- The use of the GIS systems needs an appropriate cartography that can be integrated with the accident data management software and databases. The progress of the mapping systems through Internet may favour a fast progress in this sense.

Training

- The development of manuals where not only the right meaning of each section of the information is described, but also the procedure to obtain the information is a fundamental topic not only for the quality but also for the local, national/regional and European information standardization. The creation of a European manual for the basic data that will be shared in Europe is a necessary piece for a proper standardization.

For the future

- The underreporting issue does not have an easy solution, it is a topic that is dealt with in SafetyNet
- Interesting to replicate the case study in other countries, from the SAU experience.

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