WP7: SOLUTIONS REPORT

DiPSA UNIROMATRE-ITALY

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Part 1:
Introduction and Summary

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PROMPT WP7: Solutions

Report

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Table of Contents

All these files can be downloadead from the internet page of PROMPT: www.vtt.fi/virtual/prompt/

Introduction

How is it possible to improve the streetscape for making the city be, and clearly convey to be, for the people who walk within it?

If walking is the transport mode for the short distances, the street environment must make people enjoy in performing such main activity, and must offer the possibility of carrying out, in a free and casual way, also the other related backing activities that make it more appealing.

To make this happen, it becomes fundamental to identify which are the barriers and the problems, to find out how they can be removed or solved, and how the solutions can be implemented.

PROMPT, aiming at improving the quality of cities and of the living conditions for pedestrians, worked in this direction; on the one hand by identifying best practices and tools for problem spotting, for problem solving and for implementation; on the other hand by devising generic solutions and disseminating them among various end users, to promote walking in cities.

Methods and tools that take to understand which are the actual problems, from rigorous scientific criteria to subjective assessment, have been defined and validated by their application in selected case studies in the six European countries participating to the research.

Users' and experts' opinions have been considered and confronted to put into evidence reality as experienced and convictions, true and false problems, expectations and wishes.

Many of the set up tools can support decision makers in their choices, suggesting the priority order, the typology, the importance, the location and the ways of the possible needed actions.

The various aspects of the urban environment, that foster or hinder people when walking, have been analysed: accessibility and safety, comfort and attractiveness, offer of intermodality and possibilities of measures' implementation. From such assessment, many problems have come out; too many and too punctual to be handled singularly. They have been then evaluated, integrated and grouped in 6 big "Clusters of Problems", that are interrelated among themselves because they share some indicators.

For each one of them, solutions have been proposed and then evaluated by four parameters: Importance, Pertinence, Novelty and Feasibility, with the aim to identify the most suitable ones.

These have been grouped in 13 "Families of Solutions", interrelated among themselves, that foreshadow different scenarios, in which specific steps of the process are faced, from the political and strategical choice, to the design idea and the measure implementation.

Each "Cluster of Problems" can be worked out by one or more "Families of Solutions", adoptable depending on the detected problems and on the particular places, singularly, in common or integrated with other Families proposed to solve other clusters of problems.

For each scenario, technical and non technical measures are proposed; some are representative of the international best practice; others are improvement of the current measures, that are not congruous with the expressed requirements or consistent with the characteristic of the urban environment; finally, others are ideas, that need further study and validation before being considered innovative proposals.

This Report is formed by more parts, to let the readers go deeper and deeper in the subject, as they wish to.

The first part interrelates the families of solutions with the clusters of problems to give a first idea of their articulation and of their various mutual facets; moreover it lists the most interesting tools used in PROMPT to spot the problems.

The second part traces a broad outline of the "Families of Solutions" describing their main issues and their articulation (logical sequence, relations, dependencies etc. of the solutions); three main components are briefly listed, describing some measures to achieve them by recommendations and best practice.

The third part goes in depth in the Families of Solutions making clear their conceptual meaning, classifying them, on the base of a check list, by "where" and "how" they can be implemented, and "who" are the actors involved. The alternative and integrable measures, apt to carry out each component, are listed in a Synoptic Table, just to maintain an overview and to let grasp quickly their relations inside the family; some of the most interesting ones are developed in boxes.

The relation among all the proposed measures and the addressed problems is checked.

The fourth part describes the theoretical and operational process that has taken to the results described in the first three parts.
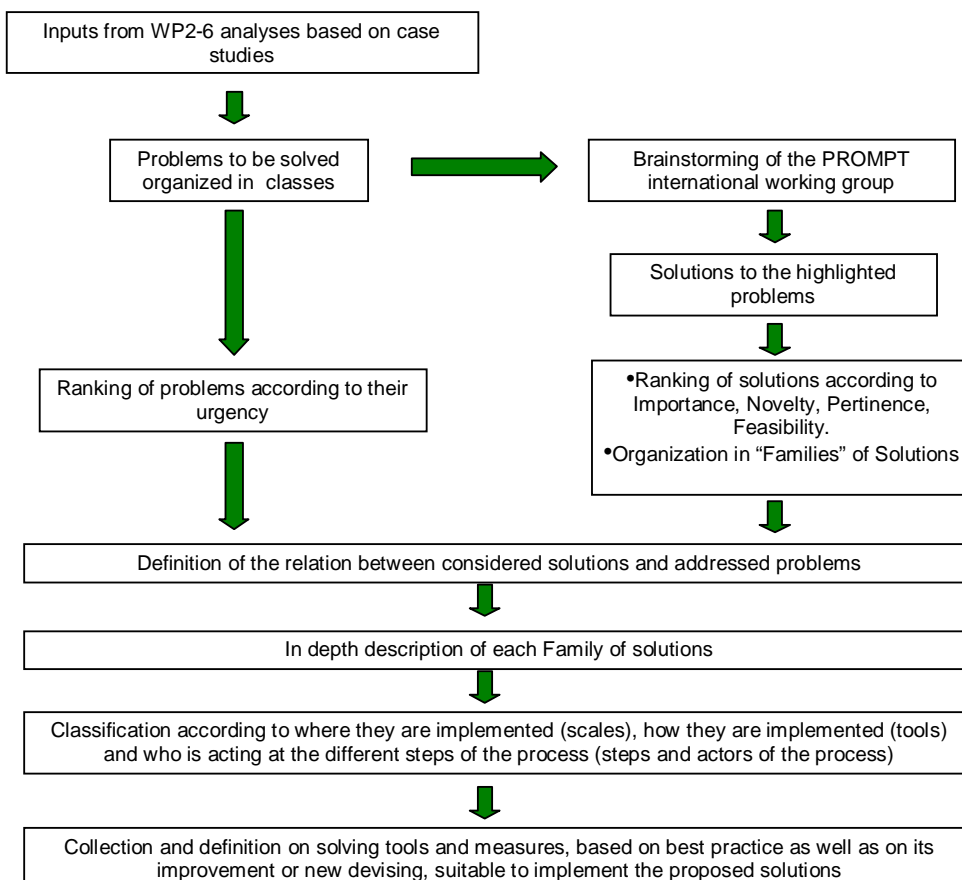
The Annex contains all the documents that render explicit the choices and evaluations made throughout the process.

Finally more information on the best tools used in PROMPT, their in depth description and application are to be found in the various work packages public reports, published on the internet: www.vtt.fi/vitual/prompt/index.htm

The devised solutions, apt to solve in a holistic way the detected lacks, underline the multiplicity of actions that can be taken to achieve the scope, the complementarity and synergy among them, the need for a systematic approach.

They can support the stake holders and in particular the municipal administrations, which wish to face an urban upgrading process aimed at improving the use conditions of the city for the diversified pedestrians.

Wp7-Solutions: Methodology

Inputs from WP2-6 analyses based on case studies

Problems to be solved organized in classes → Brainstorming of the PROMPT international working group

Solutions to the highlighted problems

Ranking of problems according to their urgency

- Ranking of solutions according to Importance, Novelty, Pertinence, Feasibility.
- Organization in "Families" of Solutions

Definition of the relation between considered solutions and addressed problems

In depth description of each Family of solutions

Classification according to where they are implemented (scales), how they are implemented (tools) and who is acting at the different steps of the process (steps and actors of the process)

Collection and definition on solving tools and measures, based on best practice as well as on its improvement or new devising, suitable to implement the proposed solutions

Flow chart extracted from part four.

Problems and Solutions

• *Cluster of problems:*

● A. Lack of or scarce physical and social space offer

- Shortage of pedestrian spaces physically and socially appropriate;

- Low maintenance and management of open spaces;

- Poor infrastructure for the most vulnerable pedestrians: hindrances and barriers.

• *Families of solutions:*

● A.1. Give priority to pedestrians in transport planning

- 50% of public space for pedestrians
- A continuous and dense network for pedestrians
- Architectural design of the space

● A.2. Each Municipality should have a pedestrian policy

- Training, education, exchanges for and between technicians
- Better knowledge of users' needs
- More city investments in public spaces

● A.3. Living streets day and night

- Mixed uses in districts
- Continuity between private and public realm
- Loose borders between buildings and streets

• *Cluster of problems:*

● B. Lack of equipment and services for outdoor spaces

- Lack and unaptness of lighting
- Lack, deficiency or distance of everyday services, facilities and commercial activities
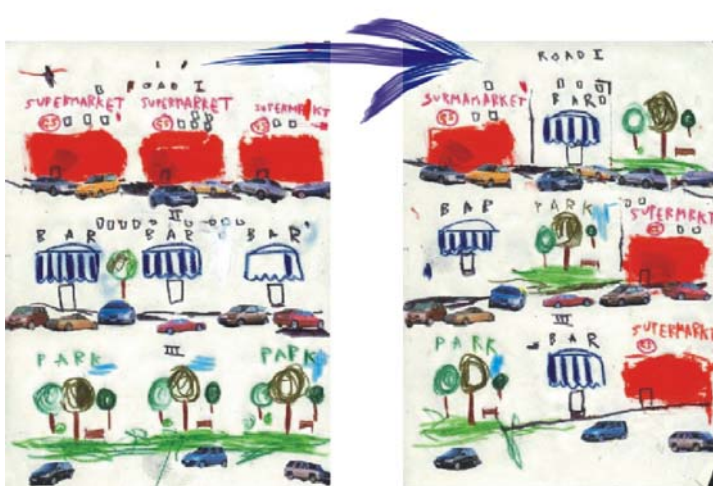- Lack and inappropriateness of urban furniture and equipment

• *Families of solutions:*

● B.1. The public space as a living room

- Pavements for pedestrians: free of obstacles and of high quality design
- Differentiated and appropriate lighting
- Good design and maintenance of urban furniture

● B.2. Implementation of policy regarding localization of facilities

- Location of facilities at close range
- Set up promotion of daily and weekly shops and services
- Prevent out of town supply competition

• *Cluster of problems:*

● C. Interference with motor vehicles

- Cars invading the pedestrian space

- Lack of pedestrian network: discontinuity of path and inappropriate crossing offer

- Physical, visual and psychological interference with vehicular mobility: speed and flow inconsistent with pedestrian pace

• *Families of solutions:*

● C.1. Consider in each development that you have to move as pedestrians and not only as car drivers

- Soft zones concept, between totally pedestrian precints and 30 km zones
- Control speed by design
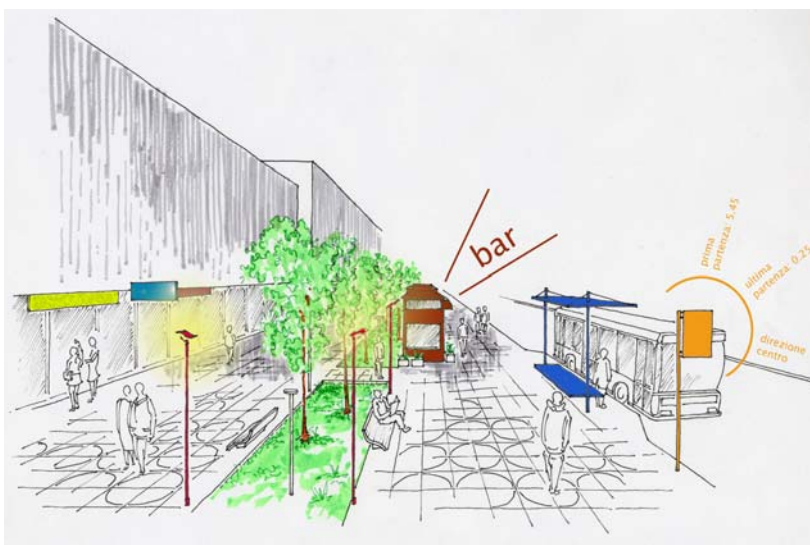- Give pedestrians general priority on traffic

• *Cluster of problems:*

● D. Poor support by and connection to other transport modes

- Poor offer of public transport: services, stops and buses inappropriate crossing offer

• *Families of solutions:*

● D.1. Public transport for all

- Sufficient supply of public transport and short distances to stops;

- Direct and easy access to public transport stops and vehicles for all users

- Sufficient, secure and comfortable bus stops spaces, day and night

• *Cluster of problems:*

E. Lack of natural, architectonical and psychological features of the environment

- Insufficiency or lack of features increasing the feeling of identity and orientation

- Inappropriateness or monotony of materials, details and finishing

- Lack or insufficiency of natural features

- Unfriendly and overwhelming built environment

• *Families of solutions:*

E.1. A green network in every city
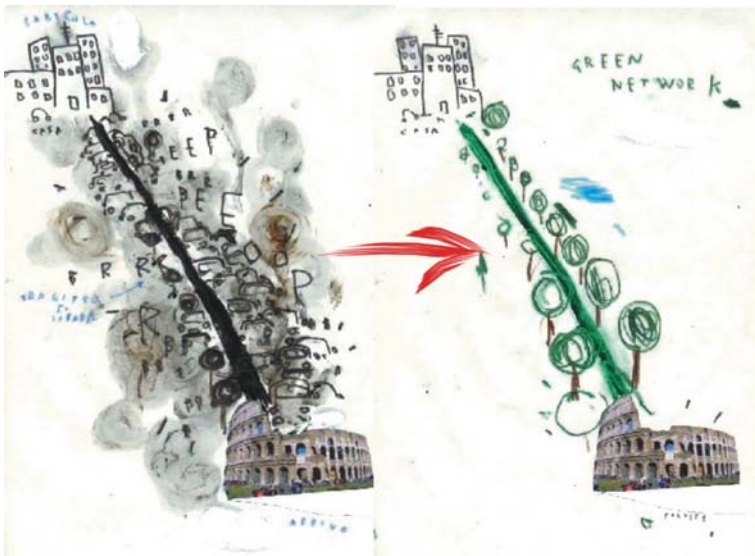
- Built spaces mixed with green nodes densely interconnected
- Connections between green nodes by comfortable pedestrian paths
- Blue and green structures with their seasonal variation, integrated in the design

E.2. Pedestrians have always to feel at home

- Varied sequence of images for pedestrian spaces
- Enhancement of local identity by a design of urban space appropriate to the character of the town environment
- Natural and artificial lighting for creating different atmospheres

- *Cluster of problems:*

F. Poor environmental performance

- Poor environmental performance

- Security

- *Families of solutions:*

F.1. Integrate the pedestrian scale in city design

- Friendly looking architecture design
- Disguise negative visual impact by positive elements
- Signs for alternative pedestrians routes

F.2. Standards for acoustic limits outdoor

- Urban planning and strategic measures
- Regulations and education to control sound level
- Creative design and landscape studies disguise negative sounds by positive elements

F.3. A clean and healthy outdoor space

- Education of dog holders and provision of dog facilities
- Provision of appropriate disposal for garbage collection
- Maintenance programs and strategies
- Standards and strategies for controlling air pollution

The best tools used in PROMPT

Among the various methods and tools used for the data collection, analyses and assessments, it is worth to underline some that have proved very useful and have given interesting indications for the decision process and for the first approach to the project

- How to individuate the most used path and to assess its level of accessibility, for acting in the right place: a method
- How to identify the crossing demand, its level of safety and its most appropriate location: a method

  Both methods help to understand where it is needed to act and which is the weight of the action necessary to satisfy people expectations

- How to identify what people miss and what satisfies them, and above all what they think more important for their comfort in walking: an articulated interview on the spot combined with mapping.

  This approach makes possible to define on which aspects of the urban environment is more urgent to act and consequently to allocate the resources at disposal where they are more needed.

- How to identify if what experts think attractive is really such for people in walking: an interactive workshop and a commented walk

  These tools, making use at the best of the local knowledge of the place by mental maps, by the description of details, by the upspringing of ideas in common can help practitioners to design streets having people wishes and behaviours in mind.

- How to define the characteristics of the intermodality offer and to understand the level of service of the bus stop, for finding out which are the actual problems to be solved: a brief interviews on the spot matched to expert observations
- How to find out why the known solutions and measures are not implemented in a widespread way: a questionnaire and round table.
- Round tables involving experts were used more than once and proved to be very helpful.

These tools seem to be very useful for identifying problems but they work also as user's satisfaction index.