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SMART CITIES & MOBILITY AS A SERVICE

EVALUATING THE USE OF ICT TOOLS TO THE MOBILITY MANAGEMENT OF UNIVERSITY CAMPUSES

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Outline

Background

Objective

- Methodology
 - Interview
 - Questionnaire
- Results
- Campuses inside urban areas
 Campuses outside urban areas
 Conclusions





Background

- Sustainable Urban Mobility Plans (SUMPs) define a set of interrelated measures designed to satisfy the mobility needs of people
- A University Campus is similar to an urban model and it could be used as a test area for mobility policies and tools
- Information and communications technology (ICT) tools concern a collection of useful ICT applications, services and tools for mobility areas





Objective

- To analyze University Campuses in order to obtain a defined state of art of data, policies and ICT tools concerning mobility from/to and inside Campus
 - To estimate the gap between desired and current mobility situation for universities located inside/outside urban areas
 - To evaluate the use of specific ICT tools
- A survey has been developed and implemented within the framework of CAMP-sUmp (CAMPus sustainable University mobility plans in MED areas) project





Project co-financed by the European Regional Development Fund



Methodology



- A survey has been developed consisting of a questionnaire and an interview
- The following Universities participated
 - Magna Graecia Foundation Catanzaro University
 - National Technical University of Athens
 - University of Malta
 - University of Valencia
 - University of Split
 - University of Cyprus
 - University of Bologna





Questionnaire

Questionnaire topics:

- Current mobility to present current mobility of the participants both regarding mobility from/to and inside the Campus
- Desired Mobility to present the desired mobility of the participants both regarding mobility from/to and inside the Campus
- Mobility problems to identify the mobility problems both regarding mobility from/to and inside the Campus.
- Proposed measures/policies/tools to evaluate specific measures, policies and tools that are already implemented regarding the mobility from/to and inside the campus



Participant information



Expert's interview

The interview aimed to collect qualitative data (experts' views) of each University regarding the following **thematic areas**

- Soft modes Infrastructure
- Public transport
- Car related issues
- Road infrastructure
- Environment and energy
- Mobility management
- Freight Infrastructure and Management
- Information and communications technology (ICT) tools
- Sustainable Urban Mobility Plans (SUMPs)





Survey results

	University	Location	Area (m²)	Students	Personnel	Questionnaires	Interviews
1	University of Catanzaro	Outside	260,000	11,000	500	104	9
2	National Technical University of Athens	Outside	1.000.000	13,500	3,400	124	8
3	University of Malta	Inside	194,452	11,500	600	250	2
4	University of Valencia (1 campus)	Outside	1,000,000	10,000	2,000	227	3
5	University of Valencia (2 campuses)	Inside	400,000	35,000	5,000	100	3
6	University of Split	Inside	245,000	24,000	1,500	100	6
7	University of Cyprus	Outside	1,200,000	7,000	1,100	85	5
8	University of Bologna	Outside	6,570,023	85,000	3,000	100	9

- > 5 campuses were located outside the city centre 3 are located inside the city
- 1.078 Questionnaires and 36 expert's interviews were collected



Mobility status for universities inside urban areas



- Regarding mobility from/to the campus, public transport, road infrastructure and ICT tools achieved the highest scores
- Regarding mobility inside the campus, **road** and **soft modes infrastructure** achieved the highest scores



Mobility status for universities outside urban areas



- **Road infrastructure**, any infrastructure related to road transport infrastructure, is the best performing area
- > The lowest score in both types of mobility is occurring in the thematic area of **Sustainable Urban Mobi**lity



ICT tools for campuses located inside the city



> The most important type of measures is **"ICT tools to improve information to passengers"**

► The lowest importance occurs in an ICT platform for car-pooling



ICT tools for campuses located outside the city



> The most important type of measures is "ICT tools to improve information to passengers"

The lowest importance refers to "electronic monitoring of parking spaces"



Conclusions

- ICT tools apply in almost all thematic areas and play a crucial role for every campus sustainable mobility plan
- Campuses have different mobility gaps/needs based on their location (inside/outside the city)
- The tools that provide information to passengers were found to be the most important based on the questionnaire
- The lowest importance in campuses located inside urban areas occurs in car-pooling services
- The lowest importance in campuses located outside the city refers to smart monitoring of parking spaces







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