

GOOD PRACTICES – PUBLIC TRANSPORT INTERCHANGES

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TRAFFIC MONITORING AND MANAGEMENT, FLOATING CAR DATA (FCD) AS TRAFFIC SENSORS. RESULT OF S.I.MO.NE PROJECT

General information

Description

The use of FCD as sensors in monitoring traffic in real time required the study and development of:

- A new scalable architecture able to link several FCD providers with local mobility control centre;
- New protocol able to deal with all data related the mobility management;
- New functions able to aggregate and normalize different FCD format coming from different providers;
- New algorithms to integrate FCD data in already available traffic models;
- New functions to publish data coming from local mobility control centre.

The design and the implementation of all these stuffs had been made in order to be used in three different towns (Torino, Genova and Bologna) and in two Provinces (Cagliari and Florence).

All the component developed are in day by day use in all the sites involved in the project.

Background and Context

All the partners of the SIMONE Project were already operating a traffic control centre before of the start of the project. Simone provided the change to renew and improve these centres and to better integrate with other ITS system already in place in the area (UTC, Parking management, LTZ, PT facilities, VMS).

Policy design details

Policy Design Steps and Timing

Turin as project leader provided the architecture and the main components (building blocks), other partners developed their local systems following the SIMONE architecture and their specific goals.

Duration: 4 years.

Actors Involved

Turin Municipality -- Legal and Administrative responsible.

5T Ltd (appointed by Turin Municipality) - www.5t.torino.it - Technical coordination of project development .

5T is responsible of all ITS system development, operation and management in the Turin area.

Decision Making Process

Turin (5T) as project leader was asked to defined a set of possible solutions and the rest of the consortium validated them. The project was conducted by a sort of steering committee led by Turin partners. (Piedmont area)

Implementation details

Implementation Steps and Timing

Turin (5T)

- defined the functional specifications of each building block of SIMONE architecture;
- launched tenders in order to select a providers able to implement /provide each building block;
- assigned tenders and followed developments;
- tested the full chain constituting the SIMONE architecture;
- coordinated the implementation and deployment of building block in each site.

Other partners:

- Defined functional specification of their traffic control centre;
- Launched tenders and them assigned them in order to grant the development and deployment of their components.

Integrated their “specific” components with the build block provide by Turin (5T).

ICT/Infrastructures needed

Simone Protocol:

protocol to transfer every kind of data related to traffic management and covering also FCD issues.

Responsible 5T s.r.l.

Cost: 100.000 €

Aggregation module:

It is able to aggregate and make available to the traffic control centre supervisor, all kind of FCD data coming from different provider with different network definition and data collection policies.

Publication module.

Sw able to publish all data elaborated by traffic control centre, to all actors involved

Responsible 5T s.r.l.

Total cost: 60.000 €

Human Resources

Turin Municipality + 5T :

Staff : 14 for Turin Municipality and 65 for 5T company Man Months

External resources (only for Turin and Piedmont area):

- Consultants: 30 Man Months
- Development and Deployment: 30 Man Months

Supporting Mechanism

Partnerships/Key Supporting Stakeholders

- Turin Municipality: political and financial support.
- Piedmont region: political and financial support.
- Regional Affairs Dept.: political and financial support.

Results

Expected vs Actual Benefits

Report the main benefits of the PT policy was expected to delivery during the planning stage and describe how the actual benefits compare. Not a PT policy.

Quantitative Results Achieved

SIMONE project allowed to extend the monitored area from the Turin metropolitan area to the Piedmont region area.

(only for Turin and Piedmont area)

Qualitative Results Achieved

Creation of a new market for FCD data; creation of new opportunities for monitoring large area with low cost of infrastructure.

Renew of already working traffic control centers.

Key Considerations

Primary Obstacles

Bureaucratic procedures in managing public tenders for external provisions;

Lack of commitment in public administration.

Critical Success Factors

Strong technical and administrative coordination and support from all partners (public and private).

Transferability Considerations

All building blocks of the project have been designed and implement to be portable and scalable; these are already used in 5 different traffic control centres.

Up-scaling Considerations

All the delivers of the project have been designed and implement to be portable and scalable.

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