

# RITS-Net

## Final Conference

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Speakers name: Attila Király

BIOKOM Nonprofit Ltd., Hungary



European Union

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# The South-Transdanubian Region of Hungary

- Center: Pécs
- Counties: Somogy, Tolna, Baranya
- Area: 14,169 km<sup>2</sup>
- Highest point: 680 m (Zengő)
- Population: 952.000 (10%)
- Population density: 67 pers/ km<sup>2</sup>
- Largest rivers: Danube, Drava



# Transport challenges

The main transport challenge is to maintain a sustainable and liveable city adapted to the terrain and to the present city structure. Therefore:

- Restricted areas: proper inner town access control is essential to preserve the tourist-friendly nature of the city;
- Parking & automatic payment: service should be upgraded and new solutions should be developed to help spread mobility solutions like P+R, B+R, P+W;
- User information systems: provide proper and integrated user information for public transport passengers, car drivers, tourists and citizens;

# Transport challenges 2

- Public transportation: improve the service quality with comfortable payment and better user information solutions. Encourage the interoperability between the service providers;
- Fleet management for more effective service (road maintenance, waste management, public transport providers)
- Traffic controlling and monitoring: establishment of a monitoring center;

# Main ITS applications in Use

- GPS based ITS solution for fleet- and traffic management: deployed at the local public transport provider „Tüke Busz Zrt” and at the waste management and city maintenance company, BLOKOM Nonprofit Ltd.
- User information system: 3 independent solutions at the public transport providers: Pannon Volán Ltd., Tüke Busz Zrt. and MÁV Start Zrt.; Mobile- and web applications;
- Other solutions like traffic monitoring and traffic controlling system, or emergency management system and several automatic payment solutions (for parking and public transport services) are available, but their operation requires review and possible development;

# ITS for future implementation

- The implementation of the measures proposed in our Action Plan contributes to the achievement of the overall objective of the transport development strategy of Pécs on one hand - which is “the improvement of liveability and competitiveness of Pécs and its region” –,
- On the other hand, it is an effective solution for handling the challenges identified within the RITS-Net project and it also promotes the development of those areas that were evaluated as “high priority areas”. The development of local ITS may serve as a role model for those cities in the Region of South Transdanubia that aim to organise and manage their transport as sustainable and smart cities.



# ITS for future implementation

- The Action Plan presents the 5 priority areas that are necessary to achieve the two operational objectives; furthermore it presents the 14 interventional proposals that relate to the priority areas. The Action Plan describes the intervention proposals'
  - justification and aim;
  - content and measures;
  - the measures' schedule and stakeholders;
  - expectable outcome and benefits of the development measures;
  - and the estimated cost elements of the measures that have high priority.

# ITS for future implementation

## Operational objective 1

Supporting environment-friendly transport systems

- *Priority area 1:* Development of local and interurban public transport system, and improving their service quality
  - Development of user information
  - Development of public transport management
  - Broadening of automatic payment possibilities for public transport
  - Development of the public transport stations' infrastructure



# ITS for future implementation

## Operational objective 1

Supporting environment-friendly transport systems

- *Priority area 2:* Improving the conditions of the non-motorized transport modes
  - Improving the conditions of bicycle transport
  - Improving the conditions of pedestrian transport

# ITS for future implementation

## Operational objective 2

Developing the efficiency of the road transport system and reducing the effects it has on the environment

- *Priority area 3: Improvement of parking services*
  - Modification of the parking regulations;
  - Deployment of ITS instruments in the parking system;

# ITS for future implementation

## Operational objective 2

Developing the efficiency of the road transport system and reducing the effects it has on the environment

- *Priority area 4: Improvement of traffic control*
  - Development of the traffic control centre;
  - Development of the intersections that have deficient capacities;
  - Improvement of road safety;

# ITS for future implementation

## Operational objective 2

Developing the efficiency of the road transport system and reducing the effects it has on the environment

- *Priority area 5:* Traffic calming according to the territorial functions
  - Reducing the traffic problems of the city centre;
  - Traffic calming in the residential areas;
  - Control of freight transport;

# Feasibility Study

The possibilities of the local adaptation of the Intelligent Transport Solutions (ITS) applications in connection with the parking system of Pécs

- The study is smoothly in line with the targets set by the Development Concept of Pécs for 2014-2030<sup>1</sup> and by the Integrated Settlement Development Strategy of Pécs<sup>2</sup>, and it also fits in with the Smart Cities approach which shaped the Settlement Development Strategy.
- The study aims to present a situation report of parking in Pécs and it reveals the solutions that the city can utilise in the field of reducing traffic load and mitigating parking problems.

# Feasibility Study

## Problems that need to be solved

- The supervision of the restricted area is not appropriate;
- The traffic load in the historic city centre is high, there are many cars that park there by breaking the rules, it is difficult to find a parking place;
- The rotation period of parking is long in many car parks;
- The parking meters are outdated;
- The city has no operating informatory system that would provide guidance in parking;



# Feasibility Study

## ITS Suggestions

- Setting up a modern informatory system which provides guidance in finding a parking place (ITS)
- Identifying those vehicles that are staying in the restricted area by breaking the rules with increased, efficient control with the application of a camera system (ITS)
- Putting modern parking meters into use (ITS)
- Setting up P+R, B+R and P+W parking places (ITS)

# Feasibility Study

## Conclusion

- Changes can be made by altering the regulations, and on the other hand, developments can be achieved by applying modern ITS applications.
- The ITS tools that are suggested by the Study will become part of that complex monitoring system that will be set up within the framework of the Smart City project in the future.

# Lessons Learnt

- The present expectation is not to develop separate systems, but to create cooperative solutions based on common standards;
- Therefore common standards and a common vision should be defined, clarified and introduced to all the decision makers;
- The first step to interoperable solutions is the communication between the stakeholders on both national and international level;

In our Action Plan we present 3 good practices from three RITS-Net participants, that can serve as exemplary practices for Pécs in order to achieve its goals relating to transport development.



# Thank You for Your attention

