DATA EXCHANGE BETWEEN REGIONAL TRAFFIC INFORMATION CENTRE, TRAFFIC MANAGEMENT SYSTEMS, URBAN TRAFFIC CENTRE

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ABSTRACT

The Intelligent Traffic Systems are base on increasingly advanced and complex information systems. They require a rigorous design approach. Moreover, It is necessary to ensure the perenniality and the evolutionarity of these systems. In addition, the actors of various transport means have to work together. So, it is necessary to ensure the inter operability of these systems.

The synergies of this projects are one of the raison why the local authority **LMCU**, the District-level Offices for Infrastructure (**DDE**, now the Inter-district Highways Offices, **DIR**) and the regional traffic information centre (**CRICR**) have collaborated more effectively by exchanging information.

These three traffic managers are:

- The regional traffic information centre (Northern CRICR) which has for main missions: the coordination of traffic management and road information.
- **L**ille **M**etropolis **U**rban **C**ommunity is the local authority which manages signal-controlled junctions connected to the management system CARROSSE.
- ALLEGRO (Agglomeration - Lille - Exploitation - Management of the Road) project relates to the realization of a Traffic Management System over the urban expressways and motorways of the agglomeration, managed by the DDE (District-level Offices for Infrastructure in charge of transport policy and planning activities in the North District). This road network covers 130 km (80 miles) in urban and suburban zones. It is a meshed network, inter-connected with the urban network including the principal structuring axes of the agglomeration, without motorway characteristics.

To be ensured of the good course of the operation, the approach ACTIF and the use of the tool OSCAR as catalyst were implemented.

1. PRESENTATION

The presentation contains:
A summary of the context
Structure of the approach ACTIF

The method which have to be applied to the project of data exchanges
1. Method
   - Preparation
   - Identification of the involved stakeholders
   - Analyse and goal determination
   - Implementation according to ACTIF
   - Use of OSCAR
   - Further information
2. Identifications of the internal entities
3. Identifications of the external entities
4. Diagrams and flows of data exchanges
   - Definition
   - Design
   - Diagrams used in the project of data exchange
   - Exchanges suitable for an entity
   - Exchanges between entities

Generated documents
Feedback
1. Report of the European Commission
2. Assets of ACTIF
   - Advantages
   - Interests of the approach
   - Seamless method
   - Useful function
   - Easy use of OSCAR

2. CONCLUSION

For the first exchanges between the local authority **LMCU**, the District-level Offices for Infrastructure (**DDE**, now the Inter-district Highways Offices, **DIR**), the regional traffic information centre (**CRICR**) and the CETE, we had to cope with the following difficulties :
   - Identification of the common interfaces
   - Apprehension of the implementation of such a system
   - Lack of formalism on the way to exchange data.

The approach ACTIF has given a concrete response to these difficulties. It has also facilitated the comprehension of this project, in particularly, how data could be exchanged.

The use of ACTIF was beneficial for all the stakeholders. Using ACTIF is an added value in project of data exchange and interoperability.

Thanks to the feedback of this mission, we have defined new evolution of ACTIF and OSCAR.

Lastly, one will remind this relevant remark from the local authority **LMCU**: "Using OSCAR application highlights the constraints of data exchanges and brings complements as for the model and the uses of the tool".

REFERENCES
Patrick MALLEJACQ. 11th world congress on ITS, Nagoya, Toward Interoperability in France : Progress in the ACTIF National Architecture.