Intelligent Transport Systems

Project Name: Master Plan for mobility management in the City of Bilbao (2005-2010)

Client's Name: Bilbao Council

Country and Dates: Spain, 2004 – 2010

Project Description

IDOM developed the 2005-2010 Master Plan for Mobility Management, which defined the actions to be carried out in order to establish a suitable mobility management plan for the City of Bilbao.

The obsolescence of certain existing elements, the emergence of new technologies, and the clear need to improve mobility within the city were the main reasons to develop the Master Plan. IDOM not only participated in drafting the Master Plan, but also carried out the project management for its implementation.

Disciplines
- ITS Systems
- Architecture
- Electronic Systems
- Telecoms
- Consultancy services

The main actions carried out included the deployment of a Gigabit Ethernet multiservice communications network with the capacity to integrate all ITS systems; the technological renewal of the Traffic Control Room, improving performance and operations; the deployment of ITS equipment; and the renovation of the software platform for mobility information management.

In terms of the ITS Systems, the scope of work of Idom included the integrated design of the Traffic Control Centre (ergonomics, general facilities, hardware and software), communications network, centralized traffic-light crossroads, Variable Message Signals (VMS), Red Light Enforcement system, Traffic Signal Priority, Camera system, Non-intrusive vehicle count system and Traffic Management System.

One of the outcomes of this project has been the identification of the importance of managing municipal information sources, optimizing resources to provide the services required for improved mobility, while ensuring the quality and consistency of the information.

Key Challenge
The main challenge we faced was the technological renewal of the traffic management systems. All the Systems are controlled and integrated in the new Traffic Control Centre. Using the information obtained from the equipment installed at street level, the Traffic Control Centre knows the status, and can evaluate and take decisions in real-time. A channel to inform the citizen of relevant information has also been created.

Added Valued

The Traffic Management System has been designed for the control and management of all ITS systems using a new GigaEthernet multiservice communications optical fibre network.

Learning / Innovation

The efficient use of existing TICs (fibre optical network and municipal DPC) and the coordination with other municipal bodies have resulted savings of up to 37% of the estimated budget for the implementation of the actions defined in the Master Plan.

Intelligent Transport Systems

Project Name: Master Plan for mobility management in the City of Bilbao (2011-2015)

Client's Name: Bilbao Council

Country and Dates: Spain, 2009 – 2015

Project Description

IDOM has developed the Master Plan for Mobility Management (2011-2015). While the actions of the previous Master Plan have been applied to traffic management, this new Master Plan focuses on mobility management, not just in terms of traffic, but also public transport and parking.

The main actions that have been carried out to date include:

Disciplines
- ITS Systems
- Electronic Systems
- Telecoms
- Consultancy services

- Development of new value-added applications for the existing equipment
- Implementation of new ITS systems that cover the technological deficit of existing equipment
- Updating of the Bus Operation Assistance System (OAS)
- Enhancing the Traffic Signal Priority
- Renewal of the Geographical Information System
- Freilot project: European funded pilot project for real-time loading/unloading space booking
- Implementation of an open data platform for mobility information
- Co-Cities project: European pilot project to introduce and validate cooperative mobility services in cities and urban areas
- Definition of the procedures for coordination with others Traffic Control Centres
- Definition and implementation of the Operation Manual

Key Challenge

The City Council has concluded the definition of a framework aligned with European policies that focus on information sharing, prioritizing the quality of the information and by letting the private sector to develop custom value-added services.

Added Valued

The development of a mobility information municipal platform has resulted in an increase in the quality of information and data being generated. This platform has in turn become an input for the development of value-added services generated by the private sector.

Learning / Innovation

To achieve greater success in the implementation of the open data platform, the City Council has participated in relevant European projects involved in the definition of a European ITS policy framework. These projects or initiatives include Freilot, Co-Cities and Co-Gistics.