Smart Parking Demonstrator Brochure
Where will it take place?

The demonstration will take place at the parking of the ETSII-UPM building in Madrid during the first week of July 2015.

Address: José Gutiérrez Abascal 2, 28006 Madrid SPAIN
Phone: +34 913 36 30 60
Coordinates: [40.440296, -3.689625]
Demonstrator overview

Parking Support Server

Commissioning Server

Web Service

Parking Management Database

Intelligent Outdoor Parking

ETSII Parking Mobile App

WSN-based Smart Parking

In-field Commissioning

Gateway WSN-MW Services

DPCM Toolset

Smart Parking Demonstrator

WSN-DPCM Project
Demonstrator features

In order to validate the developed WSN-DPCM integrated toolset, an intelligent parking service has been implemented as part of the project demonstrator scenarios. It involves the implementation and deployment of a Wireless Sensor Network by using the DPCM toolset platform and middleware technology.

The deployed sensor nodes will detect the occupation of a parking lot and will be able to wirelessly send their related measurements to the smart parking support server by using the DPCM commissioning capabilities. This information will provide parking users with real-time data via the ETSII Parking App.

This app, designed for Android mobile devices, serves as an interface to show at a glance the availability of the parking spaces on a satellite map. Furthermore, it also provides a parking space Booking Service that allows any registered user to reserve a parking slot for a limited time during the following 48 hours.
Technologies involved

DPCM Toolset for implementing the WSN-based smart application following the whole system functional flow.

Inetsis Mote platform with Middleware Support Services and commanding. Integration of proximity sensing capabilities for car detection.
ETSII Parking App

- User-friendly interface
- Account creation and edition
- Customization options

- Real-time parking status (based on sensor measurements)
- Availability info
- Satellite maps

- Parking slot booking service
- Free space search feature
- Irregularity reports system

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WSN-DPCM Project