23 January marked the kickoff of the Zero Emission Urban Bus System (ZeEUS) project, an initiative that aims to demonstrate the economic, environmental and social viability of electric urban buses.

The 22.2-million-euro, three-and-a-half-year project is part of the EU’s Seventh Framework Programme (FP7) for Research and Technological Development. The International Association of Public Transport (UITP) is coordinating 40 partners representing all categories of mobility stakeholders in an innovative project to extend the fully electric solution to a wider part of Europe’s urban bus networks.

As part of the 42-month demonstration project, different innovative technological solutions for electric buses will be demonstrated in eight cities: Barcelona, Bonn, Glasgow, London, Münster, Plzen, Stockholm and one city in Italy, still to be determined. ZeEUS analyses will be used to develop guidelines and tools to help stakeholders introduce electrified bus systems in other European cities.

The ZeEUS consortium includes companies and institutions such as Eurelectric, Vattenfall, Volvo and Skoda. Spanish partners include Endesa, Transportes Metropolitanos de Barcelona (TMB), Universidad Politécnica de Catalunya, Ibeda, Irizar, GMV and Enide.

The Barcelona demonstration plan, with GMV participation, will involve pilot schemes of 2 electric buses and 2 plug-in hybrid buses. GMV will see to the installation and setting-up of the onboard equipment of the pilot-scheme buses, enabling them to record information and send it on to a control center. The recorded information will concern the main maintenance parameters of a bus of this type (e.g., state of batteries, power consumption, etc.) plus other necessary information for TMB’s ongoing public transport operation. On the basis of all this recorded data, an analysis will then be made of certain indicators to help make decisions about the use of this public-transport propulsion technology.

GMV will also be processing the recorded information and developing specific tools for subsequent analyses, as well as providing all necessary support during the operation campaign and data recovery in the control center.

The ZeEUS project is set to run for 42 months. After the initial demonstration-plan definition and implementation phase, the demonstration plan will then be run during the second and third year of the project, assessing the data collected after reaching a critical mass for analysis, mainly during the third year of the project.