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European ASSURED project testing starts in Barcelona

Over the next few weeks, two electric buses will verify the interoperability of different fast charger models under real operating conditions

Today saw the presentation, at a virtual event, of the start of testing in Barcelona as part of the ASSURED project, which promotes electrification of urban commercial vehicles through innovative fast charging solutions that allow progress towards the standardisation and interoperability of electric fleets. It is an initiative co-financed by the European Commission, coordinated by the Free University of Brussels and led in the area of electric buses by the International Union of Public Transport (UITP).

Local operator TMB took part in the event, represented by chair, Rosa Alarcon, and CEO, Gerardo Lertxundi; with Maurizio Maggiore, DG Research and Innovation, for the European Commission; and for the UITP, its president, Pere Calvet. Furthermore, ASSURED partners VDL Bus & Coach, Irizar, Jema, Heliox and ABB presented their buses and chargers which are fully integrated into TMB's operation.

The ASSURED (an acronym extracted from fast and smart charging solutions for full size urban heavy duty applications) will be rolled out until March 2022 and has a budget of 23.64 million euros, 18.65 million of which are provided by the EU. Launched in October 2017, the testing phase involves the participation of public transport buses, trucks with automatic fast charging and a light commercial vehicle with wireless charging. The first city to undertake testing was Gothenburg (Sweden) in October 2020.
In the tests that are beginning now in Barcelona, full interoperability between electric buses and chargers from different manufacturers will be verified under real operating conditions. Previously, the engineering services of Applus Idiada carried out preparatory work to define, verify and validate charging parameters and processes.

The electric buses participating in the demonstration are an 18-metre long articulated Irizar, belonging to the TMB fleet and usually assigned to the H16 line, and a standard 12-metre VDL Citea temporarily ceded to Barcelona by the Dutch manufacturer. Both will carry out test runs on different regular lines in the TMB network such as H16, 33, 55 or others. For their normal operation, they will charge their batteries, using the pantograph located on the top of the vehicle, at the high-power chargers installed by Jema, Heliox and ABB inside the Triangle garage and on Calle Cisell, in the Sants-Montjuïc district, next to an H16 terminus stop.

The test rides of these two buses will take place over the next 5-6 weeks. At the same time, other experimental sessions will take place in the cities of Osnabrück (Germany) and Eindhoven (Netherlands). All the results will be compiled and shared among the partners of the project, which is expected to be completed within a year.