Title: Mobi_System: A Personal Travel Assistance for Electrical Vehicles in Smart Cities

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Abstract: In this work it is proposed the design of a mobile system to assist car drivers in a smart city environment oriented to the upcoming reality of Electric Vehicles (EV). Taking into account the new reality of smart cites, EV introduction, Smart Grids (SG), Electrical Markets (EM), with deregulation of electricity production and use, drivers will need more information for decision and mobility purposes. A mobile application to recommend useful related information will help drivers to deal with this new reality, giving guidance towards traffic, batteries charging process, and city mobility infrastructures (e. g. public transportation information, parking places availability and car & bike sharing systems). Since this is an upcoming reality with possible process changes, development must be based on agile process approaches (Web services).

Author Keywords: Mobile Application; Web Services; Simulation; Electric Vehicle; Energy Market; Smart Grids; Vehicle-to-Grid; Mobile Device

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