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EXPRESS-CAR-HIRE – A NEW CONCEPT FOR ELECTRIC VEHICLE HIRING WITHIN AIRPORT TERMINALS

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Abstract

While trying to reduce the air pollution caused by traditional traffic means like planes and conventional cars, new concepts of car sharing (either conventional or electric) emerged. Although many such concepts are daring and innovative, they're not implemented on a large enough scale; to help reducing air pollution, the acceptance (and hence implementation) of these concepts needs to systematically increase. This paper introduces a design methodology for such a *concept* - based on competitive engineering tools - which, besides considering environment protection requirements, aims to determine a *better acceptance of the concept* and to be an effective starting point for developing a business plan, a feasibility study, for starting a joint venture etc. This is envisaged through identifying the added value incorporated by each functionality and component of the concept; afterwards, when implementing it, adequate effort can be directed towards the distinctive features it will provide. The methodology is then applied to build an environment-friendly transport concept - *EXPRESS-CAR-HIRE* - which is designed to suit airport terminals, which have particular constraints regarding space and efficiency.

Key words: car sharing concept, competitive design, electric vehicles

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