## SETTING UP A NATIONAL SCALE INTEROPERABLE ELECTRONIC TOLL SYSTEM

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## **ABSTRACT**

Electronic toll systems allow more efficient payment transactions on highways. Their success lies in the advantages offered to both operators (lower operating costs, better flow passing through toll plazas, ...) and for the users, in terms of comfort, access to discount programs, ....

In an environment where several toll road coexist, sharing a significant number of users (urban or metropolitan areas), interoperability of electronic toll systems is a necessary in order to maximize the number of users of this method of payment and offer a high quality service to drivers. Even in toll infrastructures which are far away from each other, but located within the boundaries of a national or regional level, the benefits of an interoperable system are obvious.

However, setting up a system whose service in shared by multiple operators is highly complex: the standardization of technology is just one of the stages to cover in the process. Contractual and organizational aspects affecting all the actors involved must also be addressed.

This paper discusses the requirements for the implementation of an interoperable electronic toll collection system at the national level. Looking through different experiences, we will focus on the implication and possible side effects on the infrastructure financing model.

Analysing the steps of several successful references in the implementation of interoperable electronic toll systems and initiatives such as the European Electronic Toll Service, we will extract useful lessons for the countries where this goal has not yet been addressed.

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