

Technological Challenges of the Highway Concessions in the USA

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Electronic Toll Collection (I)

- **Technical issues: Lack of “federal” standardization**
 - Creates islands that impede interoperability
 - It does not benefit the user nor the Concessionaire
 - Migration to 5.9 Ghz should be the best opportunity to resolve this problem and achieve a minimal standard
- **Business issues:**
 - Enforcement: How are the State's attributions transferred to the private operator? (can be?)
 - What about enforcement beyond the State line?

Electronic Toll Collection (II)

- **Interoperability**
 - Clearing house vs. Bilateral agreements
 - Should the Clearing House be a public organism?
 - Roles of the Clearing House:
 - Authority to impose / retire:
 - Interoperability status to operators
 - Interoperability status to transponder issuers
 - Watchdog of technical and business rules
 - Tag issuer?
 - Enforcement?

Conventional Toll Systems

- **Payment means:**
 - Different incidence of traditional ones
 - Appearance of new ones: touch and go cards
- **Optimization of costs and revenues:**
 - Automatization of ramps with low traffic levels
 - The role of the Back Office: auditing and reporting

Intelligent Transportation Systems

- The private concessionaire is as interested as the public sector in the deployment of ITS and should play a relevant role in the standardization and planning processes.
- Some technological differences with Europe, but previous experience is mainly valid.
- A key factor in the United States is the interconnection and data interchange with surrounding regional centers.
- An excellent departure point: US National ITS Architecture