



RUC Technology

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Interoperability between Toll Operators

| Toll Operator | Final User |
|---|--|
| <ul style="list-style-type: none"> • Be concentrated on the fundamentals of its business • Share client relationship management (subscribers and occasional users) • Share cost : OBU, fraud treatment, payment, ... • Wider range of potential suppliers | <ul style="list-style-type: none"> • One contract to travel everywhere based on defined and clear rules • One unique invoice • Have a new nationwide mobility service (in the future) attached to the person and not to the vehicle |

- **Key factor of success of interoperability**
 - Common willingness, vision and understandings
 - Positive cost benefit analysis
 - Joint contractual and technical framework
 - Joint type approval entity to test and certify the equipment
- **Potential emergence of a layer of mobility service providers**

RUC Technology and Project Specifications

- RUC technology are now mature but ...
- Choosing the adapted technology for a project is still challenging
 - Define : clear objectives, general scheme, interoperability, scalability to what and when, CBA, ... and then make a choice
 - Define requirements to run the future project not to please technology experts
 - Define KPIs that are reachable (limit overcost due to risk coverage) and anticipate how you measure them
- Automated systems still require human resources to be involved in its operation

Enforcement Technology

- Major technologies are available to proceed to automated control (ANPR, Infrared, laser, road sensors, etc) depending what toll operator targets to measure
- Overall enforcement objectives ? Then define enforcement targets (OBU activation, number axles, classification for trucks, account if prepaid customers, etc). All elements will have an impact on cost of the solution (Capex and Opex)
- Fundamental questions are :
 - What volume of data is the system generate daily ?
 - What is the activation rate of the enforcement system ? Even if the value chain is automated - human resources are requested to validate the fine and treat claims (real impact on Opex)
 - Then, performance of each component of the enforcement value chain is not so crucial