Involving Freelance Truck Drivers and very small transport operators in the logistics information flow

ECITL, Dortmund, 7 November 2014
ENIDE is a SME based in Barcelona specialized in creating and combining innovative ICT solutions and technologies for logistics and mobility.
Background

- SME are European logistics backbone / 80% sector
- Often Logistics SMEs have low IT maturity levels
- Due to culture & financials, they often use manual processes for information exchange
- Cost of collection and retyping of data from received hard copy documents amounts to 5-15 euros per container (RSM)
FP7 LogiCon

• Logicon aims to deliver methods for **data exchange** for SMEs, connecting and sharing data securely and efficiently

• Logicon aims to take actions to ensure these methods will be **adopted by SMEs**
Conditions for LogiCon

- LogiCon solutions..
  - do not replace other initiatives, but expands these to SMEs
  - are not monolithic, but flexible and simple
  - are based on existing technologies
  - cooperates with existing legacy systems
  - are specific and event-driven processes tailored to certain needs
  - use open-data concepts
  - support different (open) standards
  - focus on P2P communication, with a low level of data centralization

Easy to use  Reliable  Affordable  Easy to adopt
Core components of the ambition

- Easy to use
- Affordable
- Easy to connect
- Stimulate adoption
- Reliable
- Convincing message
- Proven
- Viable business models
- Communication
- Living Labs

Lean Secure and Reliable Logistic Connectivity for SMEs

Solutions & Architecture
4 LogiCon Living Labs

Dutch Living Lab
- CTT - INTERODAAL TRANSPORT
- TNO
- NexusZ

Polish Living Lab
- ULMAR
- Instytut Logistyki i Magazynowania

Spanish Living Lab
- ita
- carreras
- enide

Italian Living Lab
- Bluegreen
- Consorzio IB Innovation
Spanish Living Lab: Initial situation

For a large transport operator as Carreras:
- working with almost 6,000 SME road carriers
- 100,000 manual operations (yearly).
- Average of 25’ for operation and at least 2 phone calls.
- 55’ in case of an incident, which is about 5%

Nearly 1M€ every year
Spanish Living Lab: Ambition

Lean Secure and Reliable Logistic Connectivity for SMEs
Pragmatic use of existing tools and technologies to deliver connectivity and interoperability

- Proposing a roadmap for building the connectivity tools and additional user applications (Reference Architecture)
- Supporting new concepts for logistics operations (as open data)
- Proposing existing technologies for the implementation of the RA (prioritizing open source options)
- Both the RA and the implementations will be based on standards at several levels (as GS1 EDIFACT and others)
- LogiCon is not intended to substitute existing technologies but complement them for the SMEs, cooperating with existing legacy systems

Technology is driven by business
The Reference Architecture is being proposed to be used as roadmap for the implementation of connectivity solutions among logistics operators and third parties working in logistics services networks. It should support to event-driven processes, peer-to-peer communication and open-data concepts.
Reference Architecture
Reference Architecture: Implementation

- **LSP with own IT**
- **LSP with no IT**
- **LSP using std TMS**

**Connectivity Layer**

- **PCS**
- **Platforms**
- **Access Points**

**SaaS, Apps**
Solution: Tools

CARRERAS
ERP, FMS, TMS

JOVITRANS
INVOICING

CRIADO
ERP, FMS, TMS

TOOLS for very SME road transport operators

TOOLS for freelance truck drivers

Connectivity Layer
App for truck drivers
Currently, big players are deploying their own Apps to the freelance truck drivers.
What is the innovation?

Lean Secure and Reliable Logistic Connectivity for SMEs

LSP

carreras

LogiCon
What is the innovation?

The specific solution has several drawbacks

• For the freelance truck driver and small transport operator
  • It has to deal with several Apps, hardware and procedures, if he works for several players.
  • It could mean that they have to be totally dependent of a single contractor
  • Cost of the hardware, others

• For the transport operator
  • It has to develop, implement, buy, maintenance, etc the App.
  • Cost of the hardware, others
  • Not all transport operators could afford it
What is the innovation?

- Focus on **Universal** access and use
  - Lower costs barriers: pay per use, focused on the contractor.
  - Lower technological barriers: based on standards: GS1
  - Lower cultural barriers: one App gathers the information from all the contractors
- Focus on **SME**:
  - Smartphone App for Freelance truck drivers (1-5 trucks)
  - Web App for Very small transport operators (5-15 trucks)
  - Other tools for SME with (limited) IT infrastructure
- Focus on **business model**
  - For the big players
  - For the SME, including Freelance truck drivers
  - For the IT providers
Conclusions

• SME transport operators are a fundamental part of the information exchange in transport (and logistics!) operations.

• Technology is available, but barriers are not just technological.

• Their specific situation requests specific approach.
Thank You!

www.logicon-project.eu

David Quesada
Technical Director
david.quesada@enide.eu
www.enide.eu