Roadmap for radical innovations in European transport services

Dr. Pirkko Saarikivi
Foreca Consulting Ltd

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Why do we need innovations in transport services?

Because there are small and more serious transport problems just waiting to be solved.
Problem 1: Traffic may kill you!

- More than 40,000 killed every year in the European Union in traffic accidents
- More than 1,200,000 EU citizens injured
- Weather plays a significant role in most accidents
Problem 2: It’s getting hot!

- 20% of greenhouse gas emissions are generated by transport
- But efficient and safe transport is vital for the society and economy
Problem 3: Winter weather surprises

• Parking in Helsinki today may be challenging,
• but solution for this problem is simple.
• Use your muscles and snow shovel!
Innovating is necessary!

« Innovating as activity is important, whether leading to concrete results or not »

« Do not miss the opportunity of any crises, as best innovations are produced during those »

« Ideas may not make you rich, but will always make your life richer »

Liisa Välikangas, Professor on Innovation management
ROADIDEA in brief

- **Budget**: 4.9 M€  **FP7/INFSO funding**: 3.3 M€
- **Duration**: 34 months 2007-2010
- **Coordinator**: Foreca Consulting Ltd / Dr. Pirkko Saarikivi
- **14 Partners from Finland**: Foreca Consulting Ltd, VTT, Finnish Meteorological Institute, Destia, Logica Suomi,
  **Sweden**: Klimator AB, Semcon Caran AB, **The Netherlands**: Demis BV, **Germany**: DLR, Pöyry Infra Traffic GmbH, **Italy**: ARPAV, **Hungary**: Road Safety Engineering Bureau, **Croatia**: Meteo-Info d.o.o., **Slovenia**: Amanova d.o.o.
Overall objectives

• Thorough analysis of the potential of the European transport service sector for new innovations
• Opportunities and barriers?
• Can Europe produce radical innovations?
• We claim that…
Our hypothesis

• Effective **accessibility** to all kinds of useful **information**,  
• combined with **advanced data fusion** methods,  
• applied on technological **information platforms**,  
• with high level of **standardisation**;  
• These are the prerequisites for the creation of **innovative mobility services**!
Technical platform and data flow

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Two innovation cycles

1. Brainstorm
   - Access to information?
   - Select the champions
   - Develop methods and models

2. Develop
   - Barriers?
   - Problems to solve
   - Transport and weather expertise

3. Reality-Check
   - Is it valid business?
   - Client interviews
   - Internal feedback

4. Evaluate Validate
   - Bottle-necks?
   - Pilots
   - Market research

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Some ideas created and evaluated

• More than 100 ideas created in brainstorming sessions

• Best ideas shortlisted and developed further

• Innovation is often combining existing information in a new way
From snow showel to more advanced ideas

- "Pulp Friction" slipperiness warning system
- Fog warning system in Italy
- Combining weather and traffic models in Gothenburg Sweden
- Managing traffic chaos in Hamburg port with advanced models
- Stay home!
First ROADIDEA conclusions

• Technology or delivery is no problem any more
• More data and more complex data systems are emerging and need development
• Access to data is the barrier for new European-wide services
• Recommendation for a minimum data set that would be available in all EU countries with reasonable conditions
Clarus initiative has similar vision!

Nationwide Data Management System for Surface Transportation Environmental & Pavement Condition Observations

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Comparing ROADIDEA concept and results in the EU, the USA and Canada

Partner projects: Clarus initiative of the FHWA and ITS Canada, road services of Environment Canada

Visits in three phases:
1. Introductory and planning during TRB2010 in Washington and SIRWEC/PIARC in Québec
2. Fact finding missions, and organising Innovation seminars with partners and stake holders in the USA and Canada
3. Final seminars: June 10-11 after TRA2010 in Brussels, July in Washington and Québec

Final Report (out in July 2010) contains analyses of existing data policies, availability and content of road information, methods and models, and provision and innovation of mobility services

Partners: Foreca Consulting Ltd, DLR, Amanova. EC funding 99 k€. Start date 1. Jan 2010, duration 7 months. Contacts: Pirkko.Saarikivi@foreca.com, Rene.Kelpin@dlr.de, Igor.Grabec@amanova.si
www.roadidea.eu

• Plenty of public documents available on data, models, services, innovations...

• You can send us your own ideas, too

• All ideas are welcome, whether silly or not!
Thank you!
Now Q & A

Contact:
Pirkko.Saarikivi@foreca.com

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