Changing scope and role of cooperative traffic management

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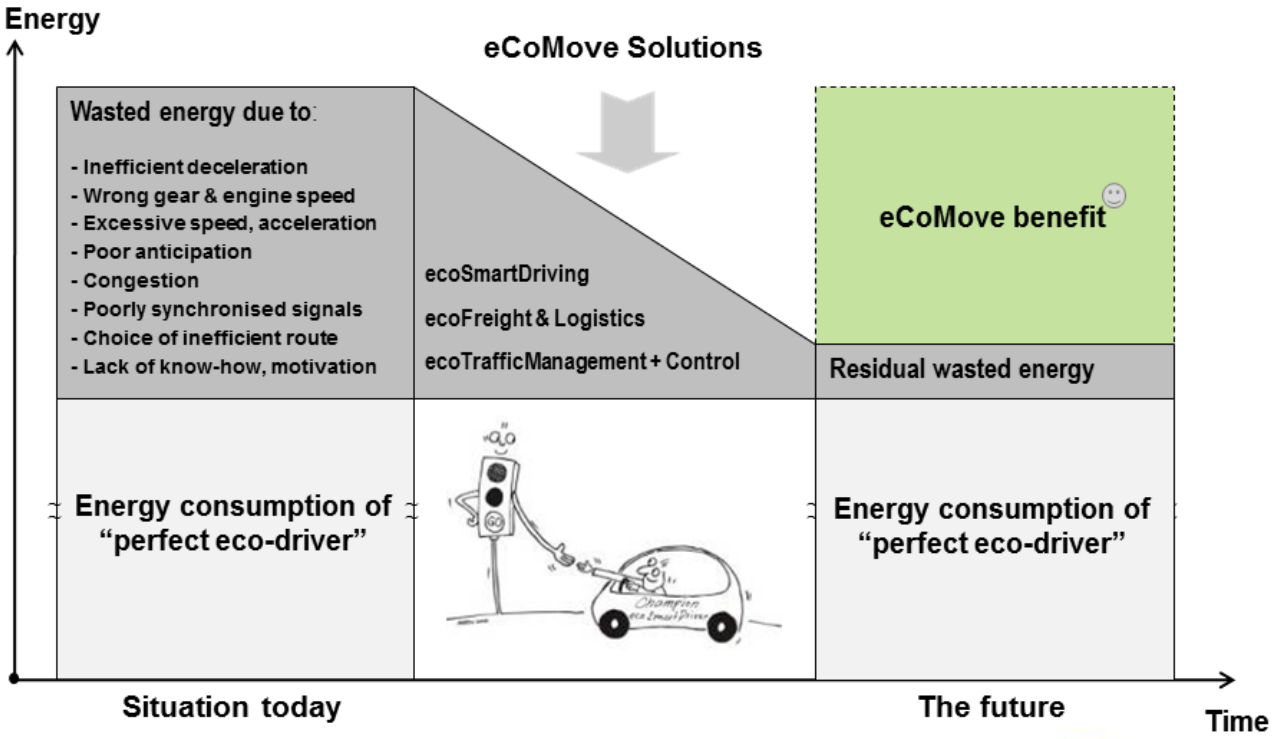
Combinations of V2V and V2I systems and tools



Target is to reduce by 20% fuel consumption and therefore CO_2 emission

WHAT THIS TALK IS NOT…

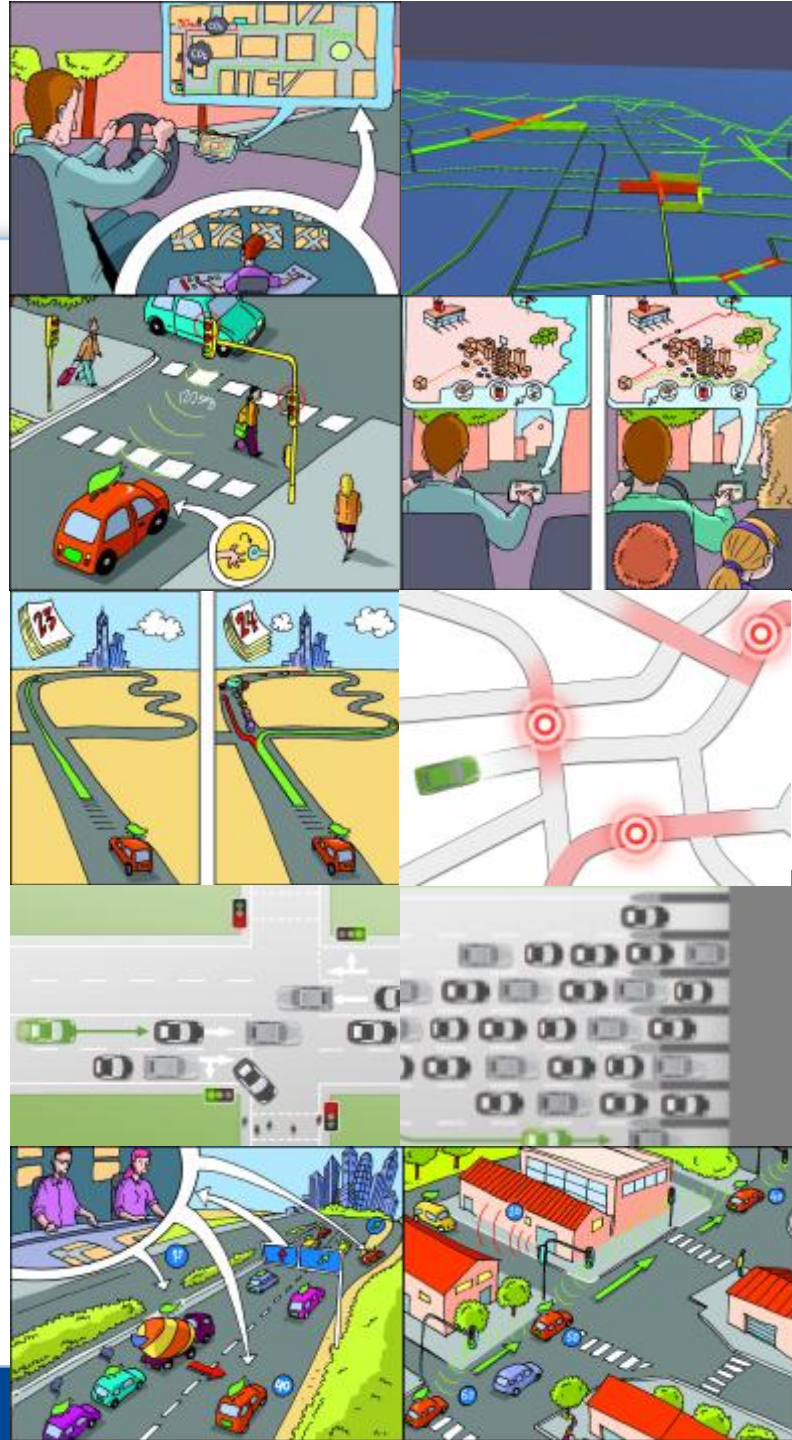
Many applications…

Surely:

- Advanced
- Adaptive
- Balanced
- Enhanced
- Harmonized
- Innovative
- Intelligent
- Interoperable
- Optimized
- Standardized
- …

Dealing with:

- Routing
- Detours
- Parking
- Green Wave
- Vehicle Priority
- Traffic Signals
- Speed Advice
- Lane Advice
- Modelling
- Strategies
- …



…with lots of benefits

- Routing/Parking: -4% CO2, -10% Travel Time
- Green Waves: -5% CO2
- Green Waves + Platoons: -9% CO2, -12% Travel Time
- Speed and Lane advice: -7% CO2
- Stop-and-go reduction: -14% CO2
- Driver assistance: -15% CO2
- Trip Planning: -2% CO2

- Subject to when, where and who!

WHAT I HOPE YOU REMEMBER AT THE END OF THE DAY…

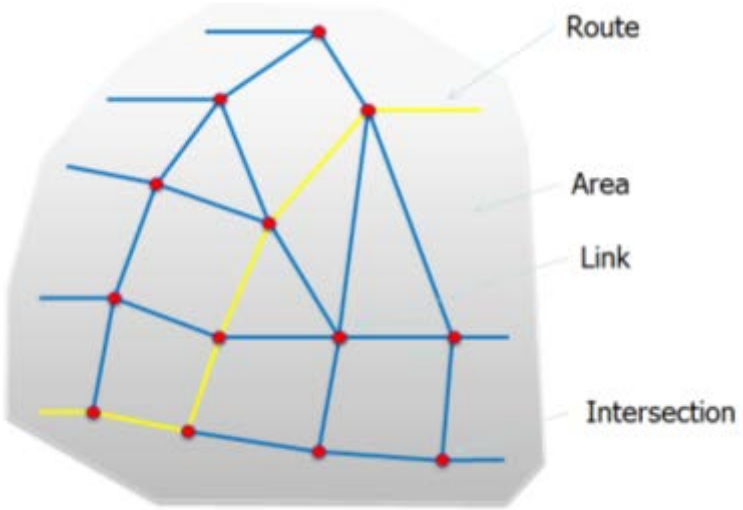
Cooperative Traffic Management

1. Network Approach
   - ➢ *Making trade-offs*
2. Integrated Strategies
   - ➢ *Creating synergies*
3. Service Provisioning
   - ➢ *Finding partnerships*

1. Network Approach

- Network performance vs. Individual preferences
- Vehicle-oriented vs. Traveller oriented
- Minimum delay vs. Policy objectives

➢ Making trade-offs



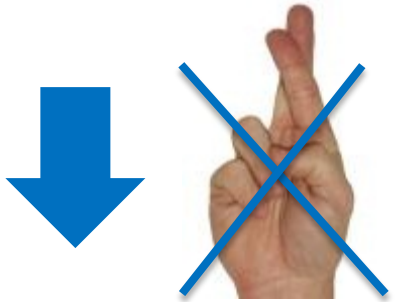
2. Integrated Strategies

- Single vs. Multiple objectives
- Centralized vs. Distributed
- Coordinated vs. Isolated

➢ Creating synergies

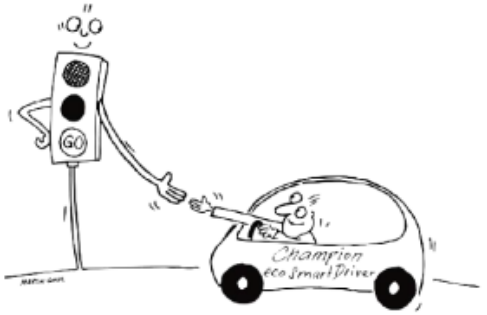
3. Service Provisioning

- More (detailed) information to drivers
- Support of freight and logistics



- Pro-active with push and pull
- Unite ADAS and DTM for actual cooperation

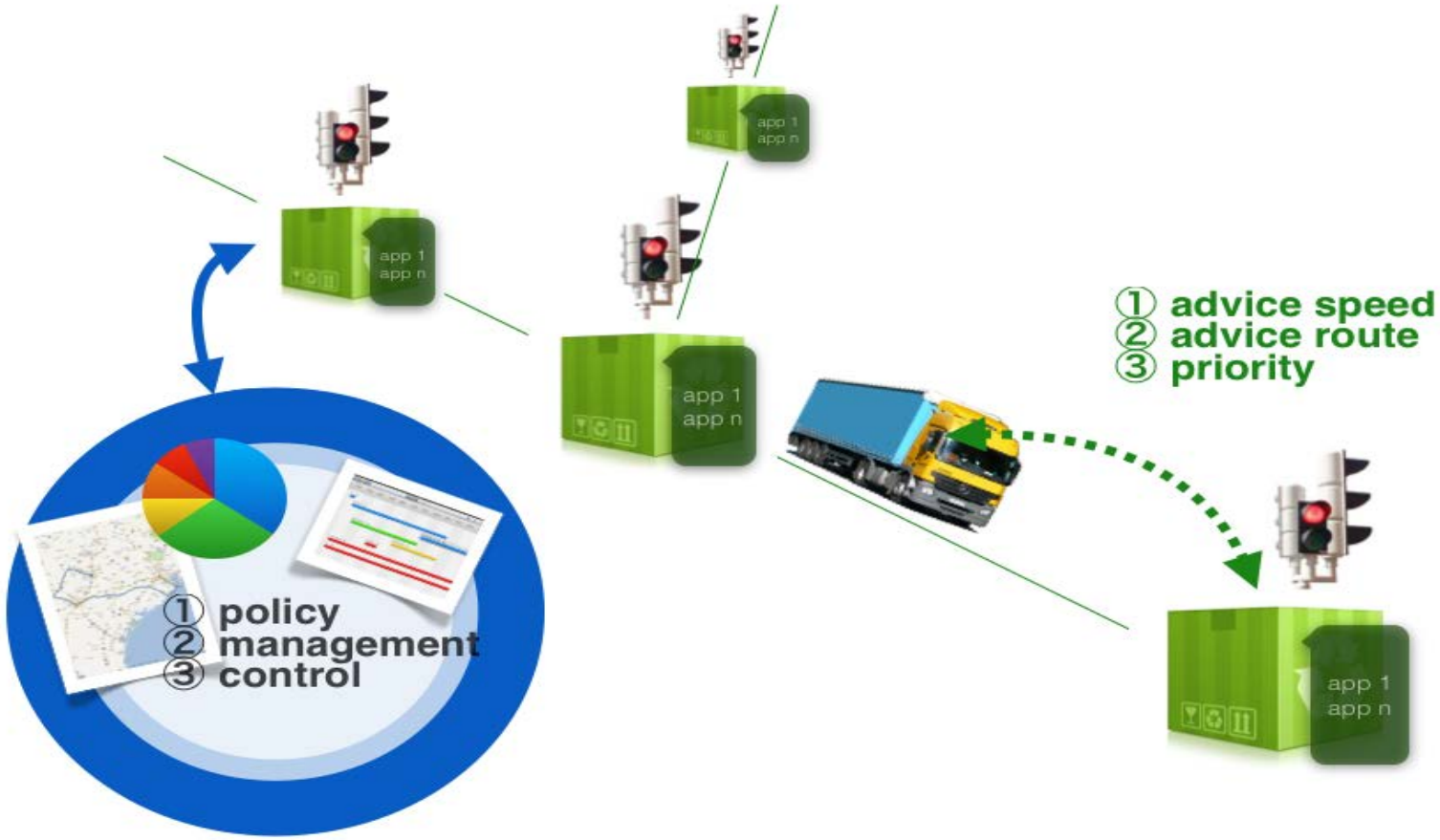
➢ Finding partnerships



Summary

1. Network Approach
   - Making trade-offs
2. Integrated Strategies
   - Creating synergies
3. Service Provisioning
   - Finding partnerships

Our solution – cooperative end to end

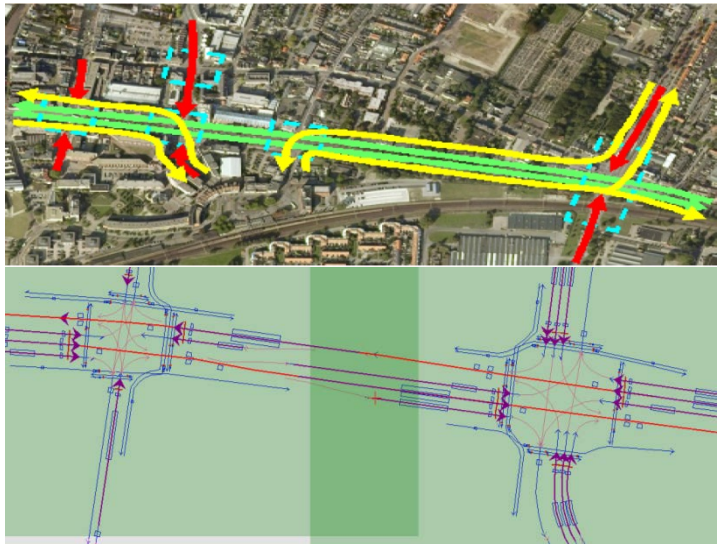


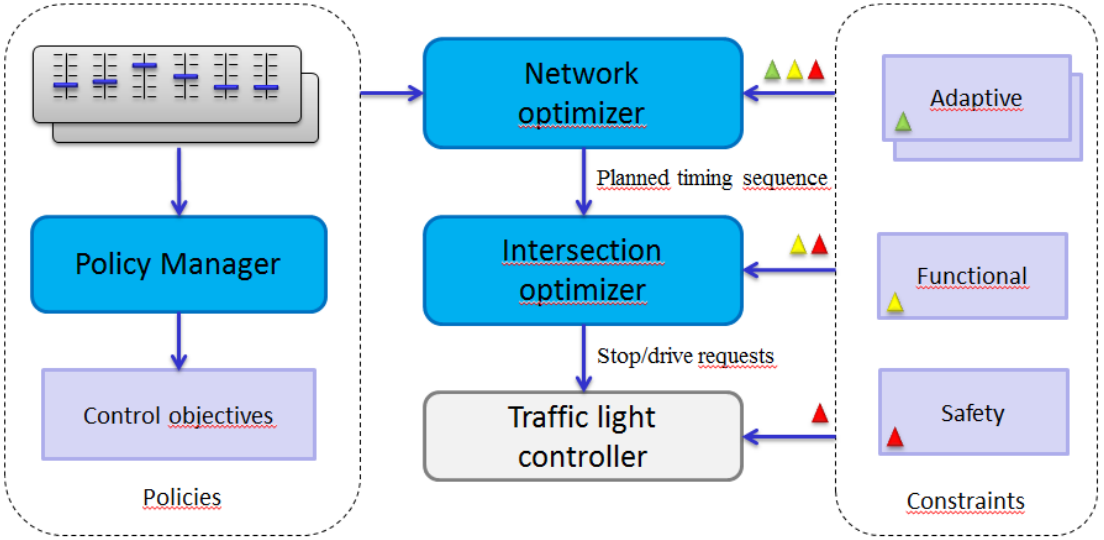
ImFlow – Real-time adaptive traffic light control

- Mision: Get the best performance out of the infrastructure within the user defined policies and constraints

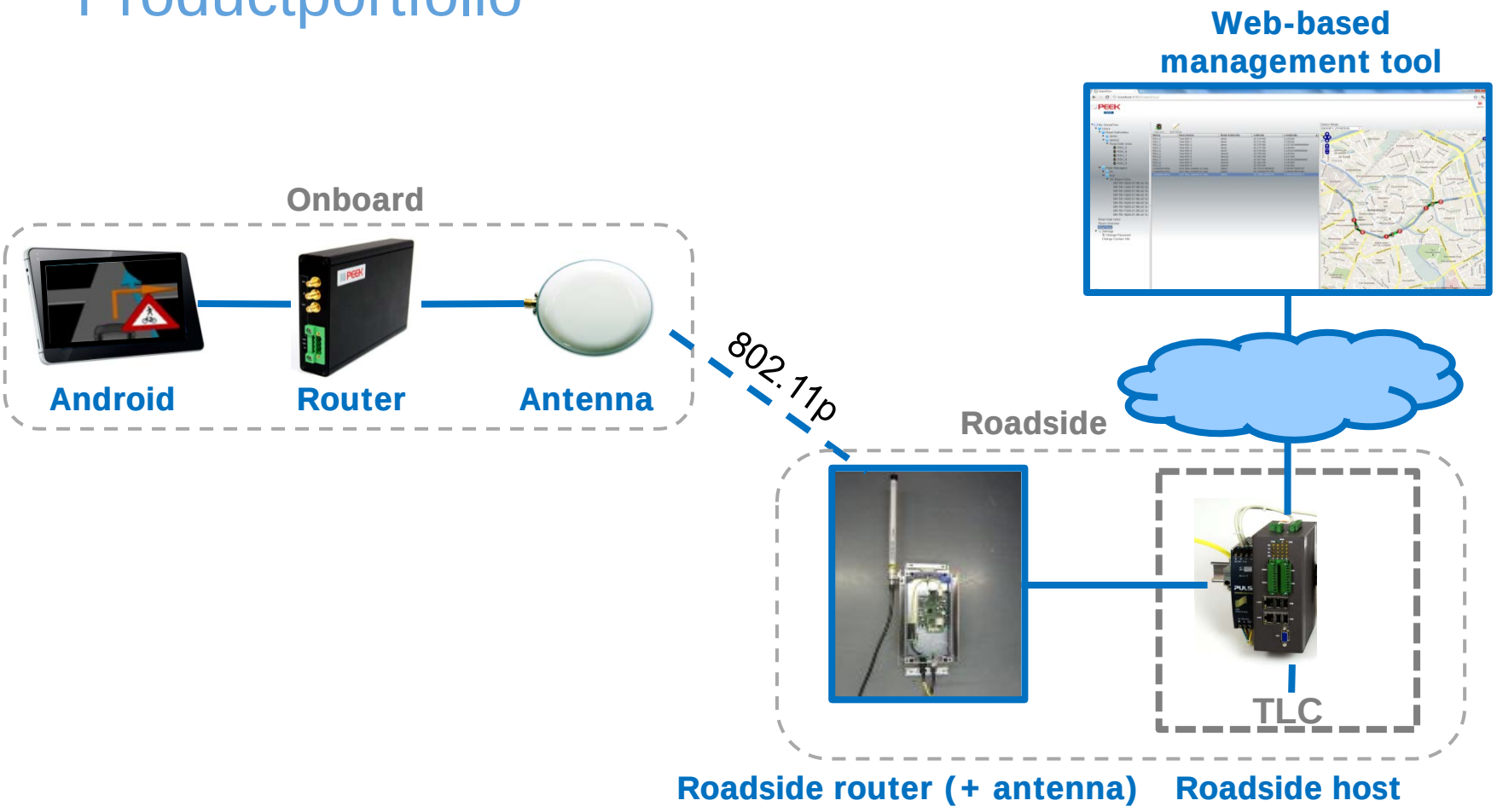
ImFlow – Optimalization

- Control strategies for multiple levels and objectives:
  - Area, route and intersection
  - e.g. Delay, stops, queues, PT and VRU

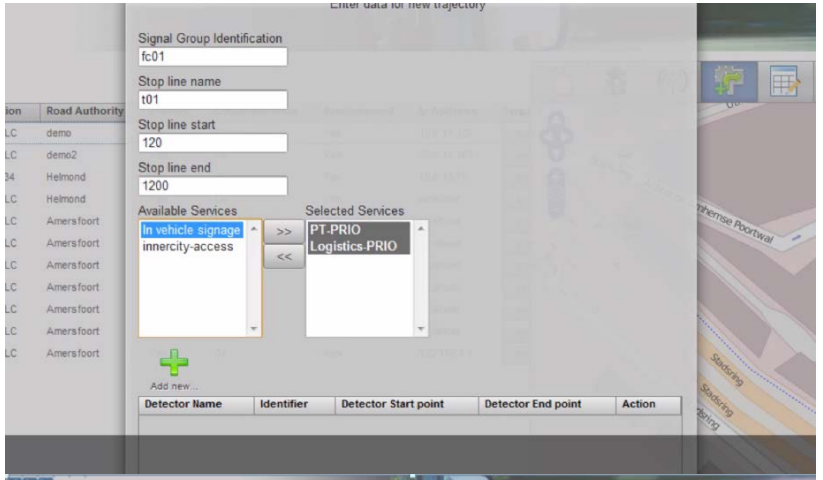


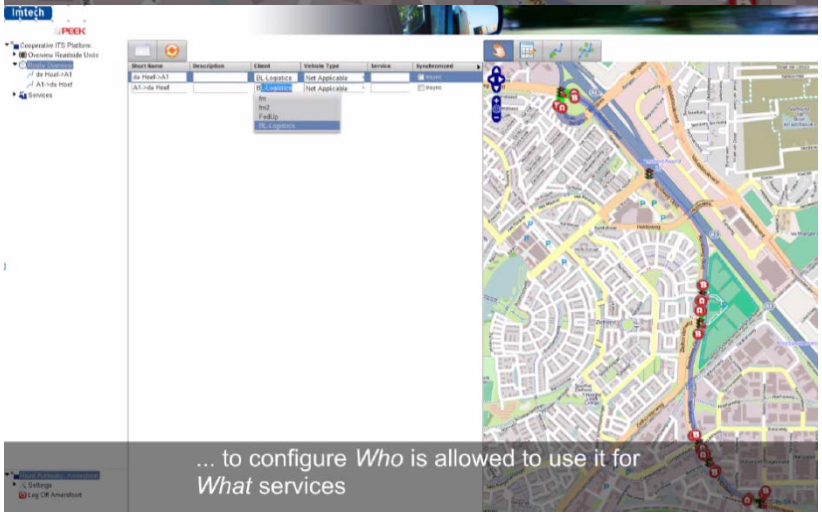


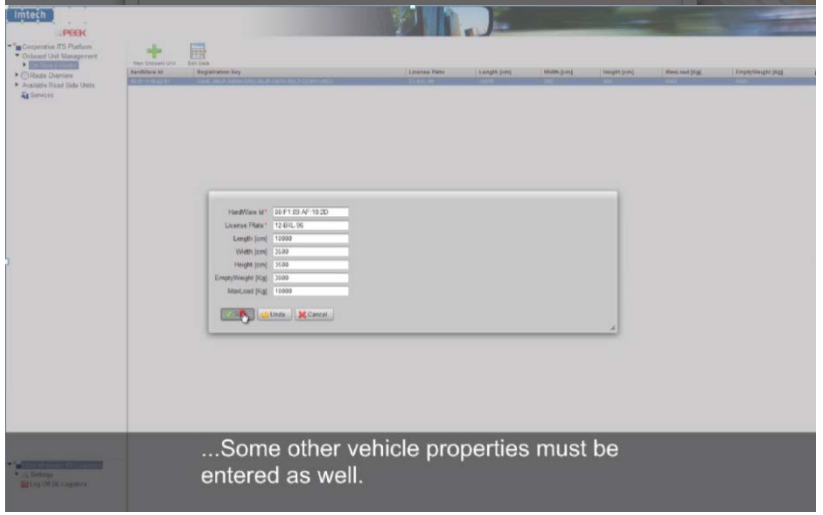
Productportfolio



Web-based management tool







Changing scope and role of cooperative TM

1. Network Approach
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- Enabling soluations exist

Thank you for listening!

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KEEP IT SIMPLE, TO FIND FAIR, EASY AND REALISTIC WINS IN SHORT TIME

"Where demand and supply meet, a market arises"