

EasyWay



Annual Forum 2010



Shortcut to the future.

Lisbon • November 16th-18th



EasyWay



Annual Forum 2010

Shortcut to the future.
Lisbon • November 16th-18th

Remote Freight Information

Christian Udin

Cooperative Mobility

“EasyWay takes the first step of wide-scale deployment of Cooperative Systems in Europe especially for the freight area”





Content

1. Viability Study Remote Freight Information
2. Work Process of the study
3. Priority Services for freight transports
4. Stakeholder Analysis
5. Continued work



Viability Study – Remote Freight Information (1)

- One of the identified services during EasyWay phase I that are not ready for the deployment but relevant for EasyWay
- Remote Freight Information is a supporting service for freight vehicles making use of harmonised information exchange between the vehicle and road side
- A two way vehicle to infrastructure (V2I) interface for freight transport vehicles
- Will create the possibility of using harmonised information exchange between vehicles and infrastructure



Viability Study – Remote Freight Information (2)

- Will create the possibility for services to make use of harmonised functions for communication
- Will use different techniques for information exchange according with the principle for cooperative systems, e.g.;
 - RFID; GPRS; DSRC; Wi-Fi; etc.
- The study builds on results from projects in the area as
 - EURODICE, CVIS, COOPERS, SMART FREIGHT, eSafety, PRE-DRIVE C2X, etc.

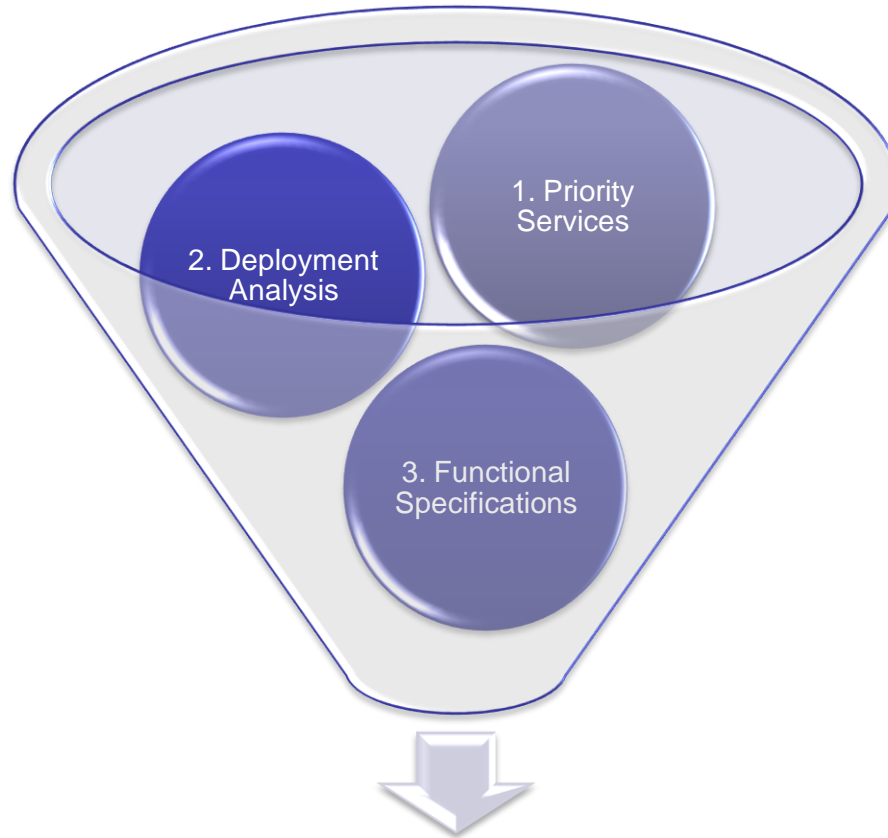


Viability Study – Remote Freight Information (3)

- Focusing how EasyWay can be part of deployment of services making use V2I communication and platform for V2I communication
- EasyWay sees that freight transport has the potential to exploit and be the forefront V2I communication



Work Process



How EasyWay can be part of deployment of Remote Freight Information...



Selection of services (1)

- Work follows in line with and in cooperation with the work done in the EasyWay Task Force for Cooperative Systems
- The aim of this work is to identify the end user services and systems with sufficient maturity for preparing, piloting, trials and evaluation in EasyWay
- However, in the work with remote freight this evaluation is done in two steps:



Selection of services (2)

- Firstly, services fulfilling the following criteria are screened out:
 - Freight vehicles can act as a stepping stone into a full market penetration of the service
 - Road Authorities play an important role in the deployment if the service
 - Focus for deployment of the service should be on the TEN-T road network
- After the first screening process;
 - an analysis of deployment analysis and hinders for deployment will be conducted and applied to the services chosen
 - an analysis of functional aspects for V2I communication and functional schemes for the services to identify the role of road authorities (Stakeholder analysis)



Priority Services for Freight

Based on analysis and the given criteria five services have been selected as being First Priority Services for **Freight** in EasyWay

- Route Planning
- Weather Information
- Access Control (from CoSy TF)
- Parking Management (from CoSy TF)
- Monitoring of Goods

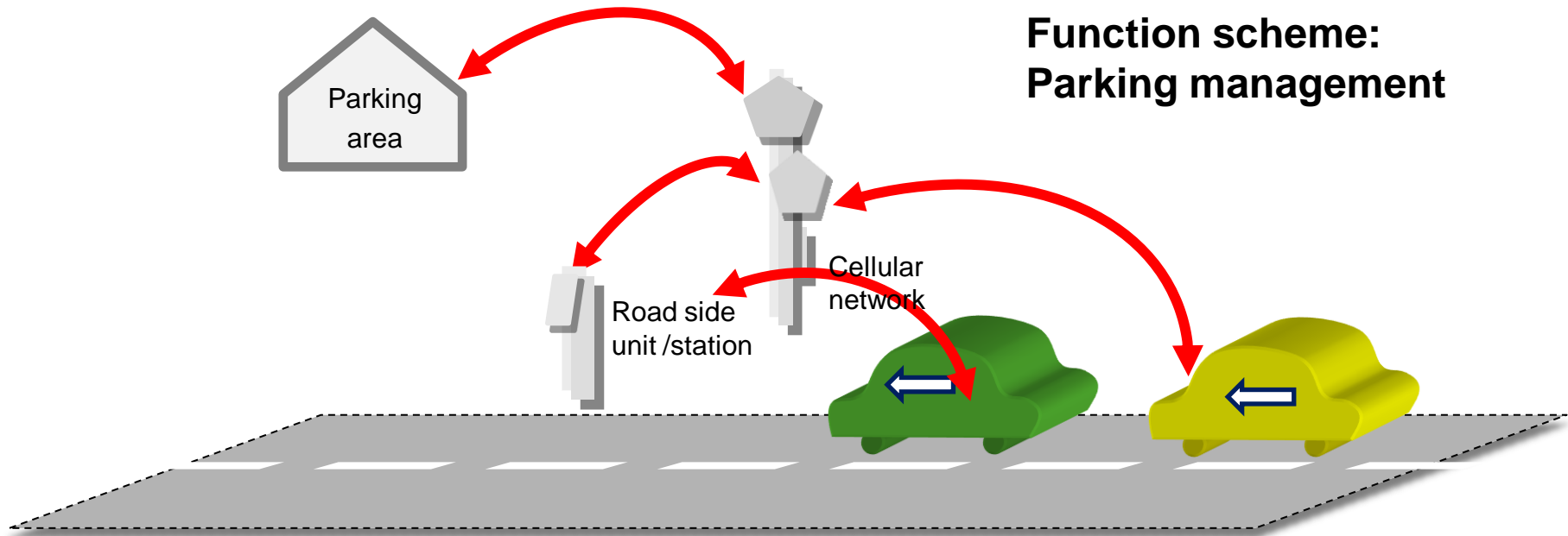




Stakeholder analysis (1)

- The selected services is analysed based on the possible responsibilities of the Road Authorities
- Different functional schemes created to analyses the road authorities responsibilities

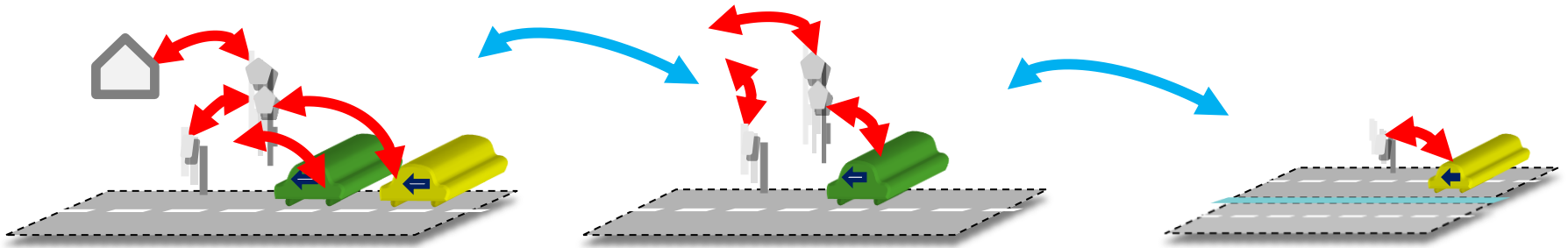
Stakeholder analysis (2)



Description:

- Parking area wants to inform about facilities, booking possibilities
- Parking area/Back Office initiate message, etc.
- Communication with vehicles via V2I using cellular communication (e.g. GPRS, UMTS) or short range

Stakeholder analysis (3)



Parking Management, scenarios based on function schemes

The vehicles asking for information about parkings, facilities, etc. the back office/Parking manager transfer information (Scheme 2).

The vehicle wants to book parking. Booking approved by back office. (Scheme 3, b2).

The vehicle arrive to parking area and confirm the access and booking information via communication with road side (Scheme 1)



Continued work

- Platform for V2I – how to make the open platform available and how can the Road Authority contribute
- Based on results from earlier projects and make use of e-FRAME and ARKTRANS to create a architecture of the systems to identified road authorites roll
- Further analysis of the selected services for deployment analysis



THANKS FOR LISTENING

Christian Udin, Sweco

Christian.udin@sweco.se