

# coopers – Co-operative Systems for Intelligent Road Safety



## COOPERS

Project Presentation

SEVECOM Workshop

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AustriaTech

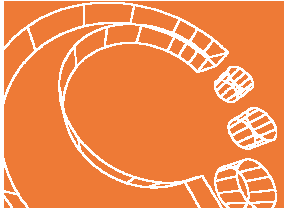


European Commission  
Information Society and Media

Co-funded by the EC, FP6 IST-Programme

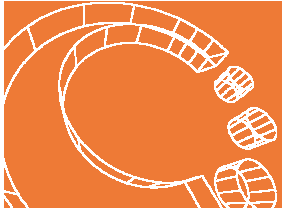


Information Society  
Technologies



# Topics

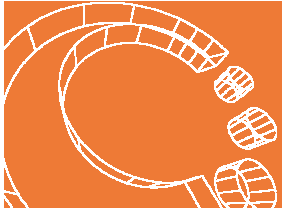
- Vision
- Setting of COOPERS
- Work program
- Areas of work in Coopers
  - Roadside data acquisition
  - Traffic control center – TCC applications
  - Road side transmitter
  - On board unit
  - Information services
- Test and demonstration sites
- Partners
- Information services - communication chain
- FRAME statement, functional viewpoint
- Contact information



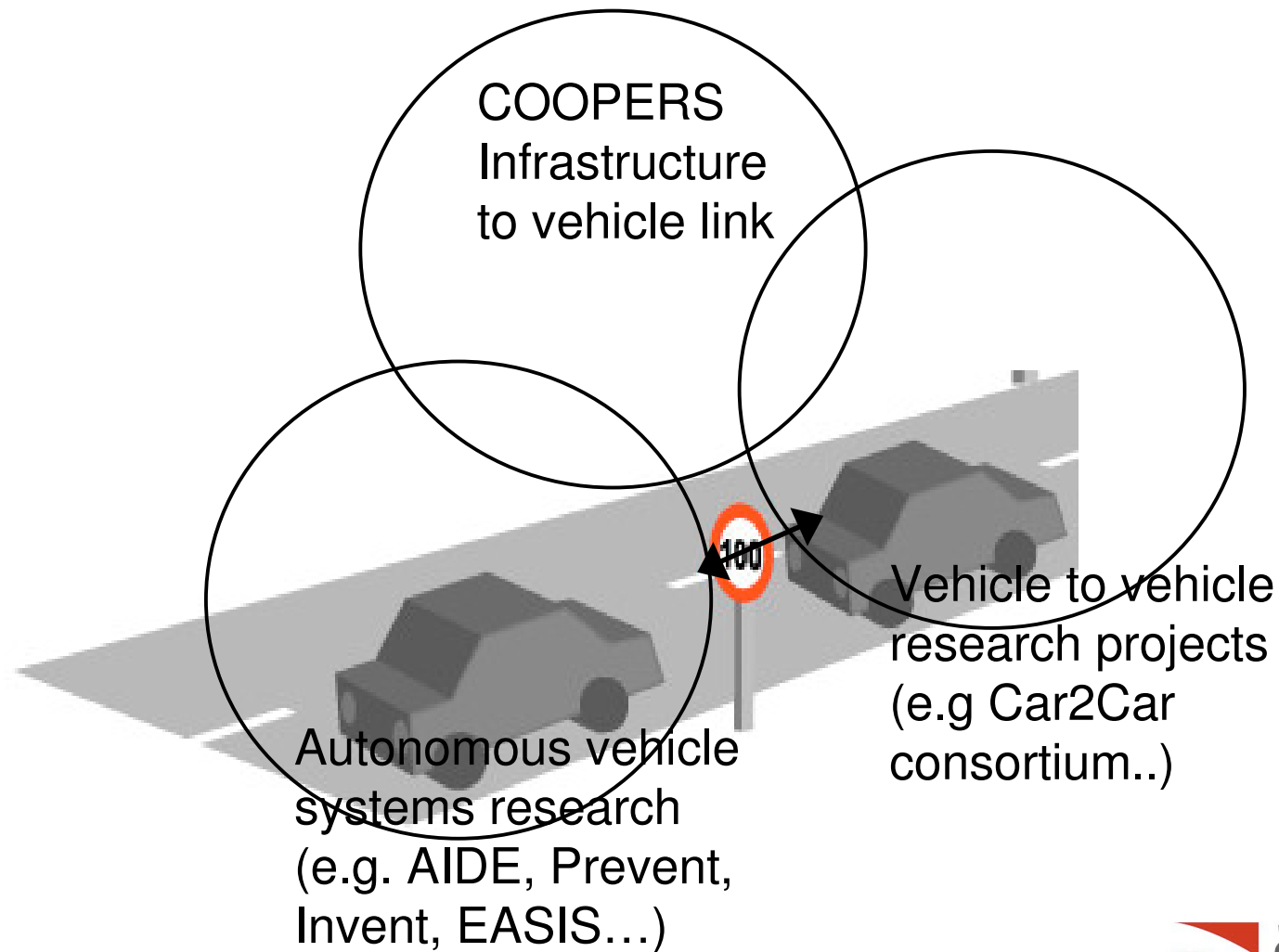
# Coopers

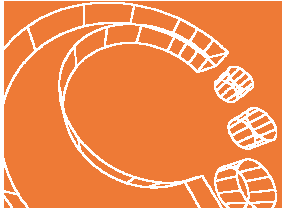
## ***VISION***

***Vehicles are connected via continuous wireless communication with the road infrastructure on motorways, exchange data and information relevant for the specific road segment to increase overall road safety and enable co-operative traffic management.***



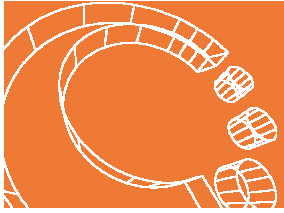
# Why is the infrastructure-vehicle communication link important?





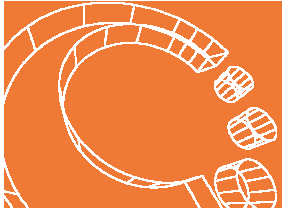
# Why do we need infrastructure-vehicle communication?

- Faster exchange of safety related information from the infrastructure to the driver
- Road safety: precise and situation related real time advice/information improves safety of driving
- Related to traffic, weather and road infrastructure status (e.g. road surface, but also network saturation!)
- Identification of violations



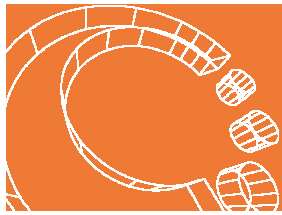
# Areas of work in COOPERS

- Roadside data acquisition
- Traffic control center – TCC applications
- Road side transmitter
- On board unit
- Information services  
and the related communication chain



# Test and Demonstration sites in COOPERS





# COOPERS Partner list

Applus<sup>®</sup>



ascom

ASFiNAG



NAVTEQ

Bayarisches Staatsministerium  
des Innern



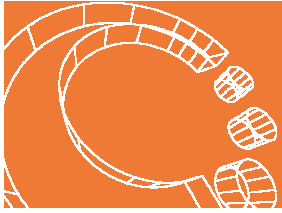
PHILIPS



VEGA

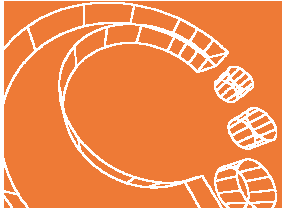






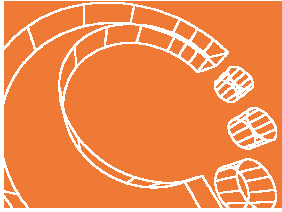
# Information services - 01

- Accident/incident warning to inform drivers, emergency service providers for efficient service
- Weather condition warning
- Roadwork/surface status/route closure information to inform drivers
- Lane utilisation information on lane keeping, lane restriction and accessibility to auxiliary lanes
- Variable speed limits

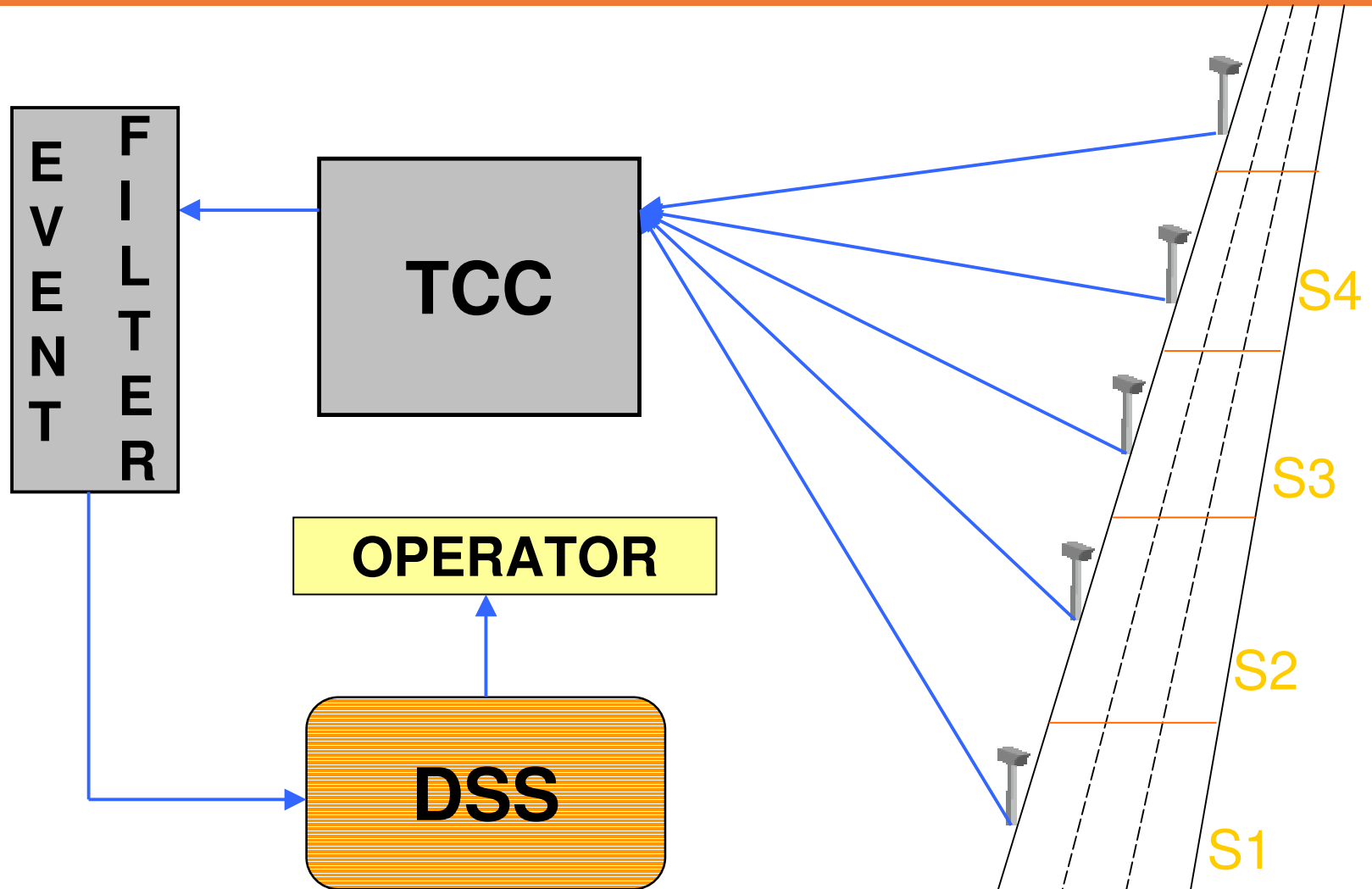


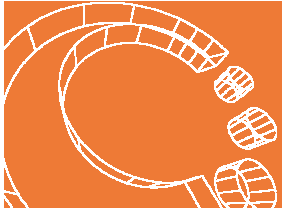
## Information services - 02

- Estimated Journey Time to final destination
- Recommended Next Link at next junction
- Map Information Check to inform of current update for digital maps
- ISA with Variable speed limits
- International service handover
- Road charging

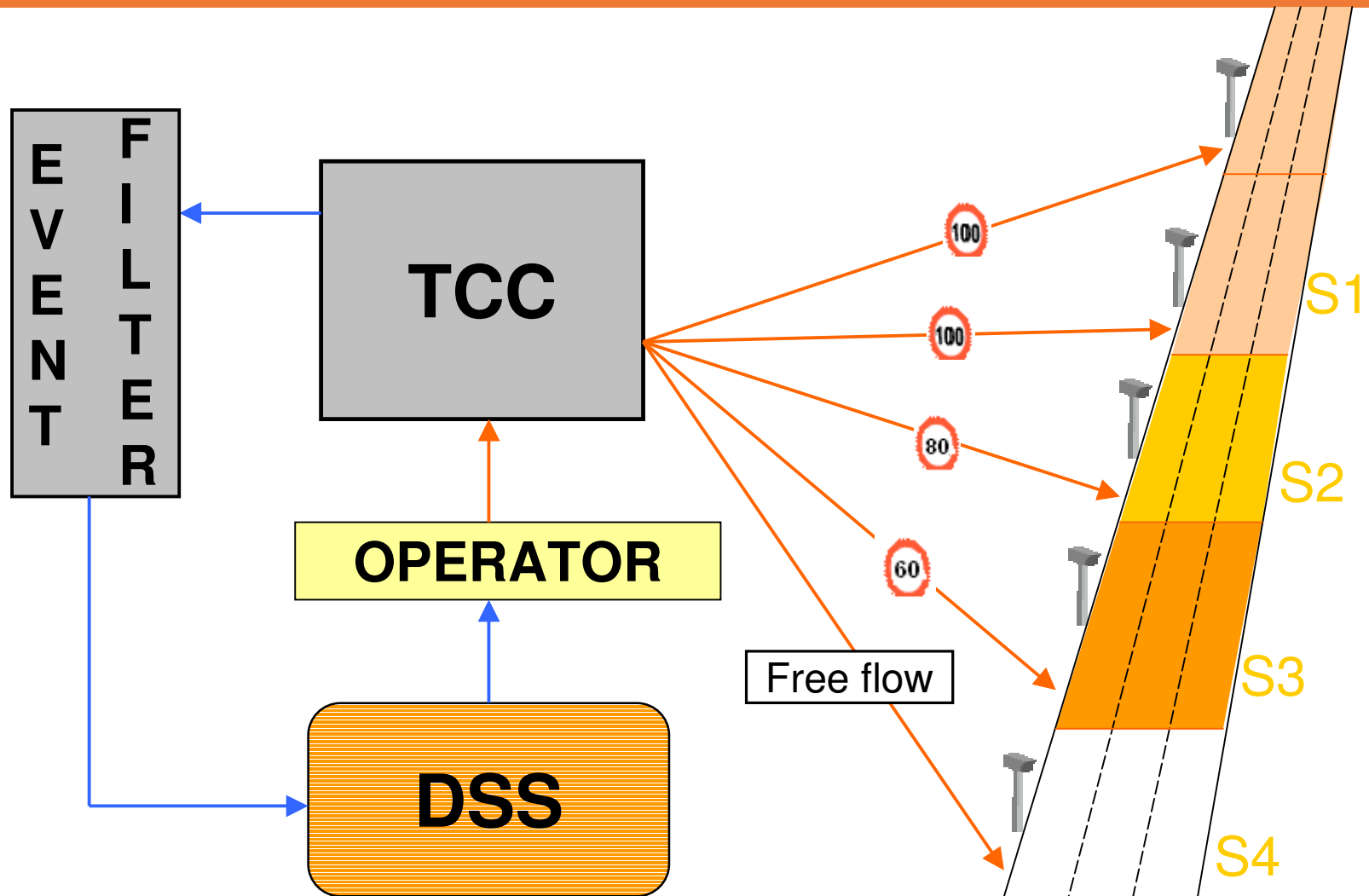


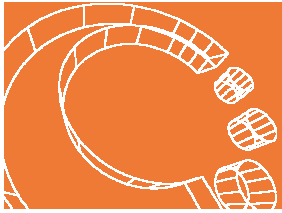
# Communication Chain 01



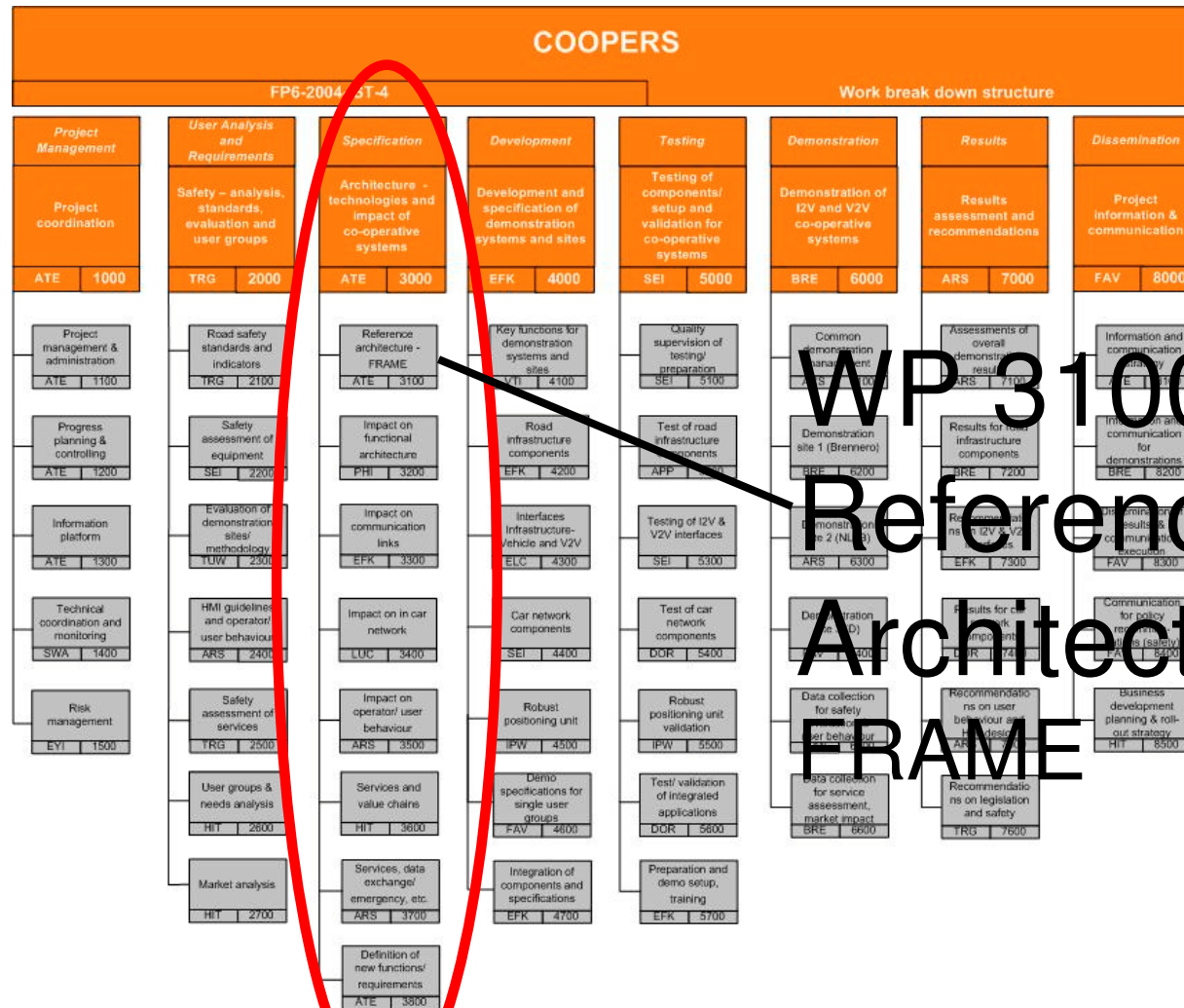


# Communication Chain 02

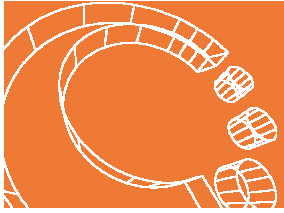




# WP 3000

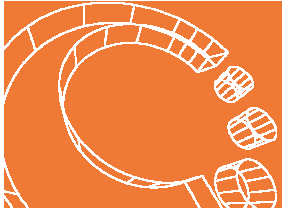


WP 3100  
Reference  
Architecture  
FRAME



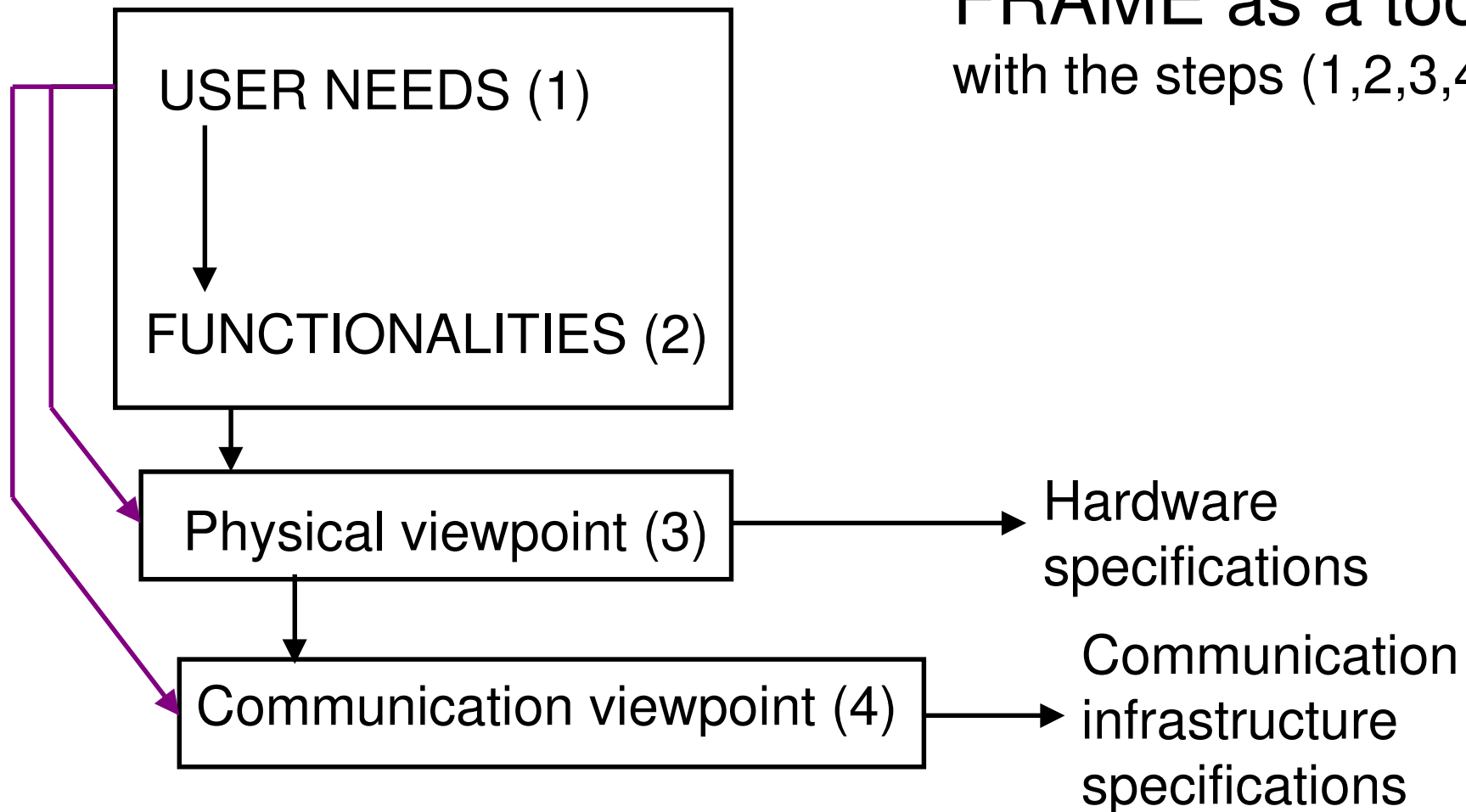
## WP 3000 – SWP Leaders

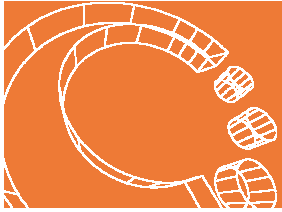
- **AustriaTech** – development of the reference architecture, definition of new functions/requirements
- **Philips** – Impact on functional architecture
- **Efkon** – Impact on communication links
- **Lucent** – Impact on In-Car Network
- **ARS T&TT** – Impact on operator/user behaviour, data exchange/emergency services
- **HiTec Marketing** – value chain of the services



# WP 3000 FRAME method

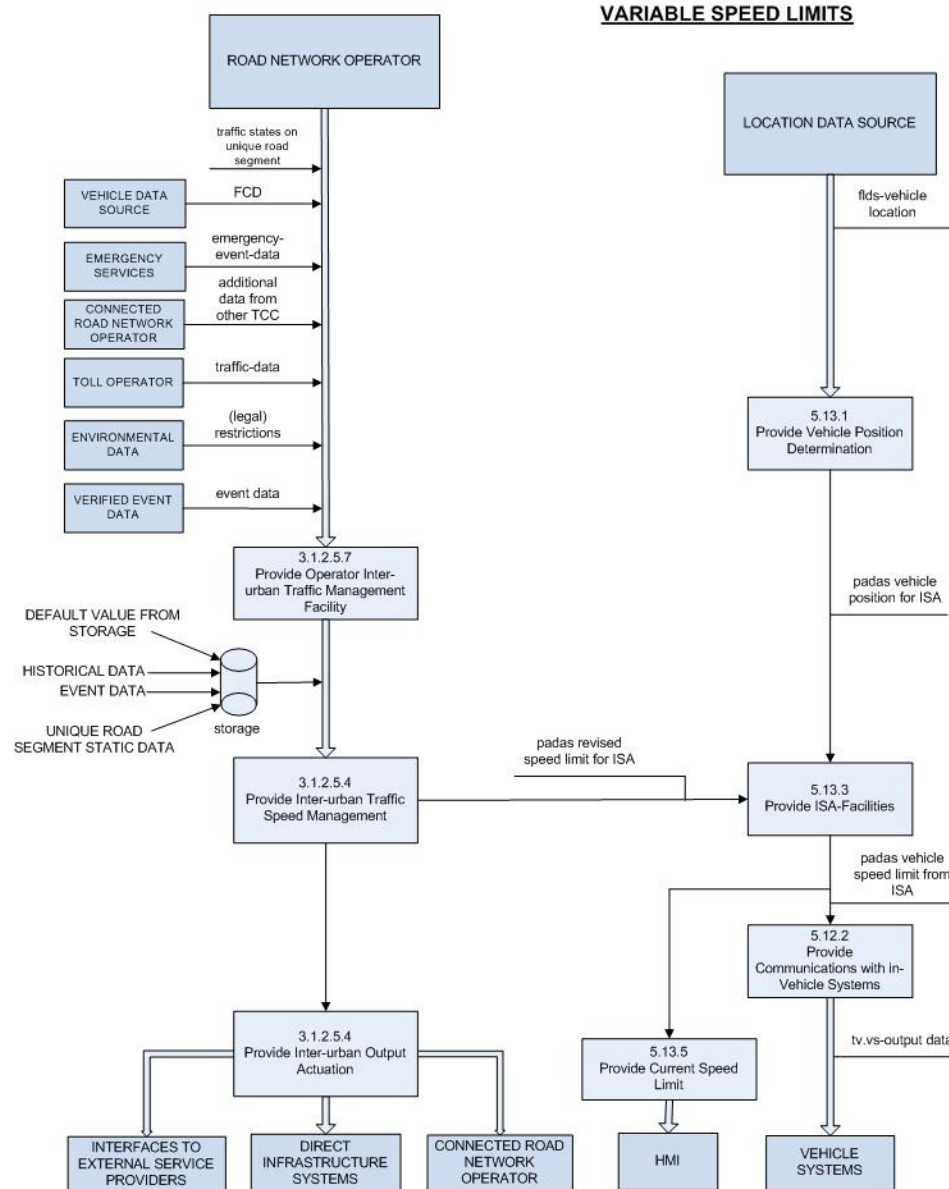
FRAME as a tool  
with the steps (1,2,3,4, ..)



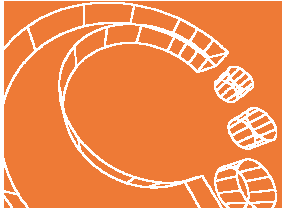


# WP 3000 – functions

Functional  
viewpoint  
e.g.  
Variable  
Speed  
Limits







# Contact Information:

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