



DRIVE



Accelerate cooperative mobility

System Architecture – European Perspective

DRIVE C2X @ simTD

13th October 2011

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SP2 Leader

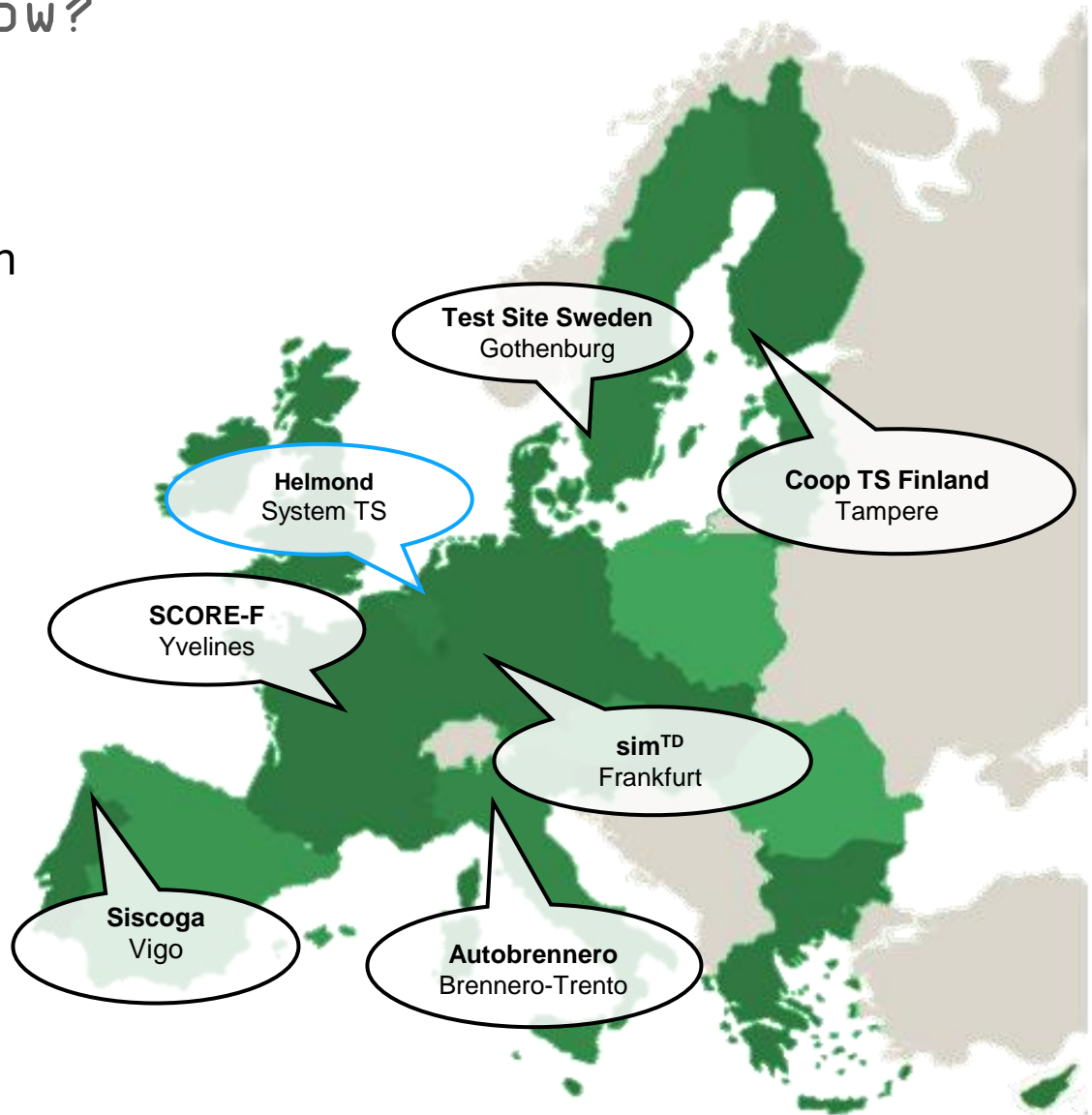
AUDI AG

Overview

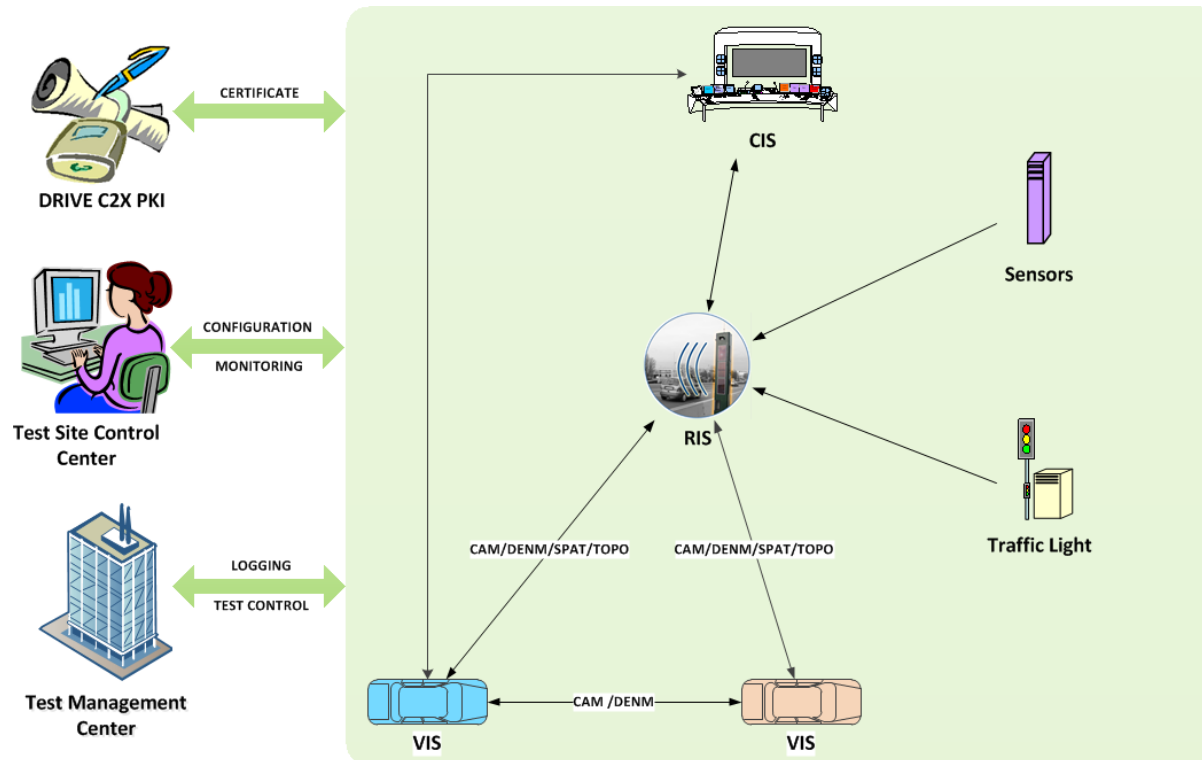
- What is needed now?
- DRIVE C2X System Architecture
 - Vehicle ITS Station (VIS)
 - Roadside ITS Station (RIS)
 - Central ITS Station (CIS)
- Functions in DRIVE C2X
- DRIVE C2X Testing Tools and Data Flow
- Outlook: Steps of development and rollout

What is needed now?

- Evaluation of the common European system in field trials across Europe
- Completion of standardization
- Commonly agreed implementation strategy and realistic business cases
- Common deployment decision of all involved stakeholders



DRIVE C2X System Architecture



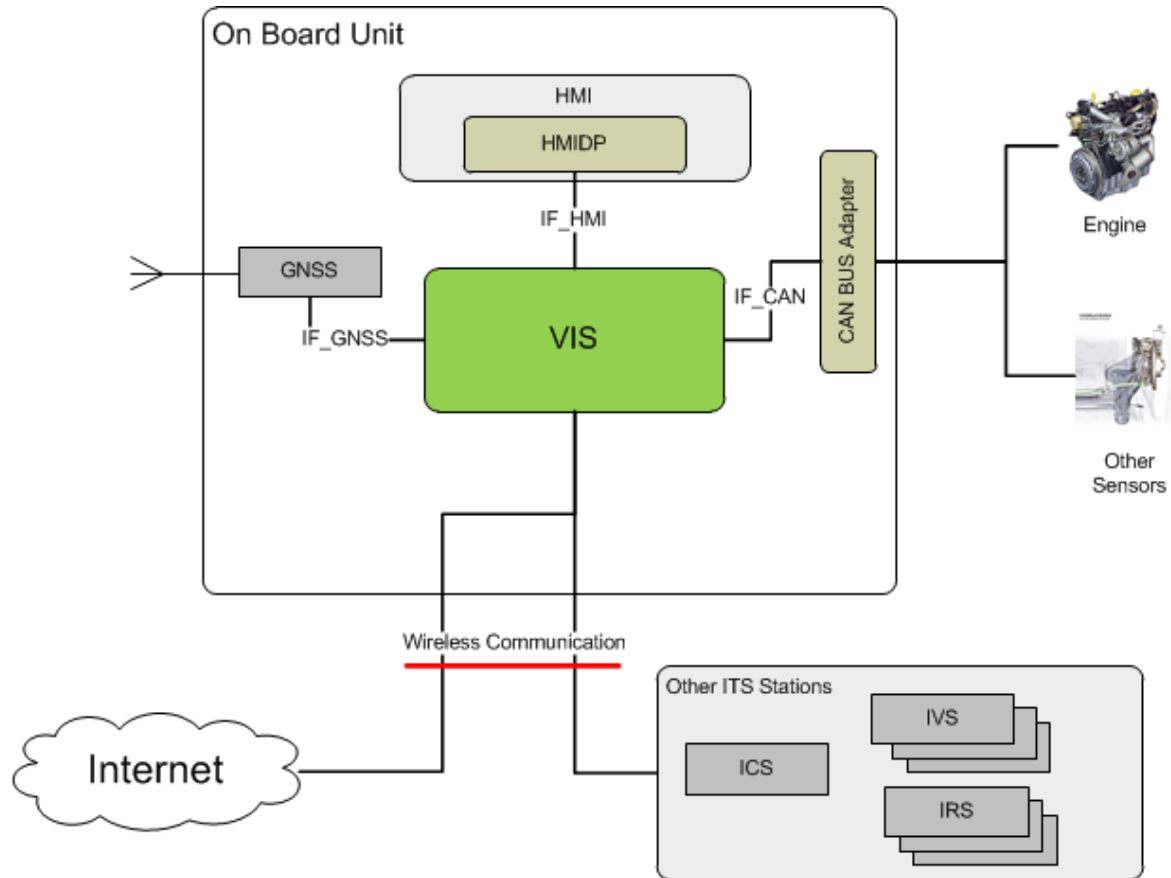
Legend:

VIS: Vehicle ITS Station

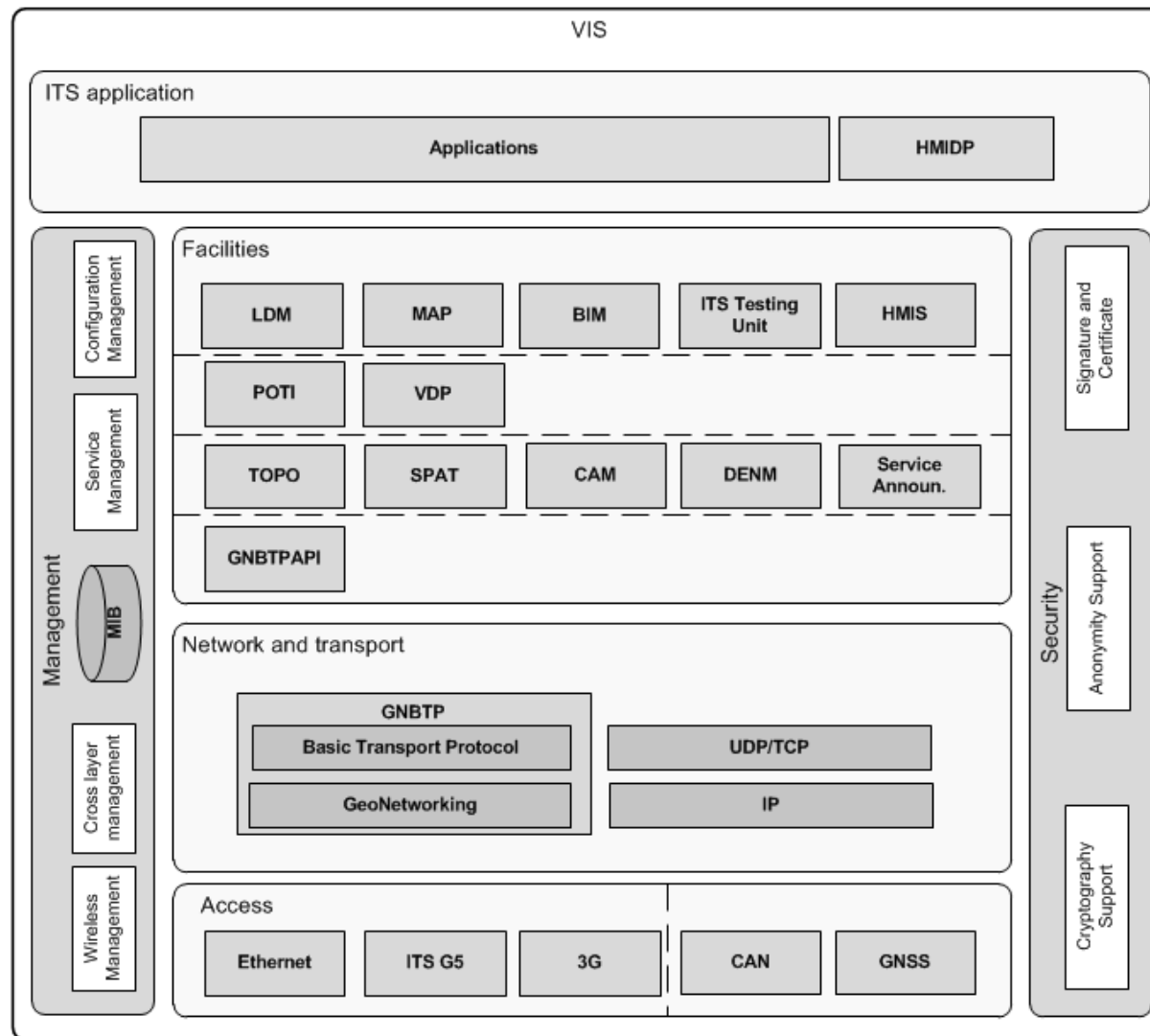
RIS: Roadside ITS Station

CIS: Central ITS Station

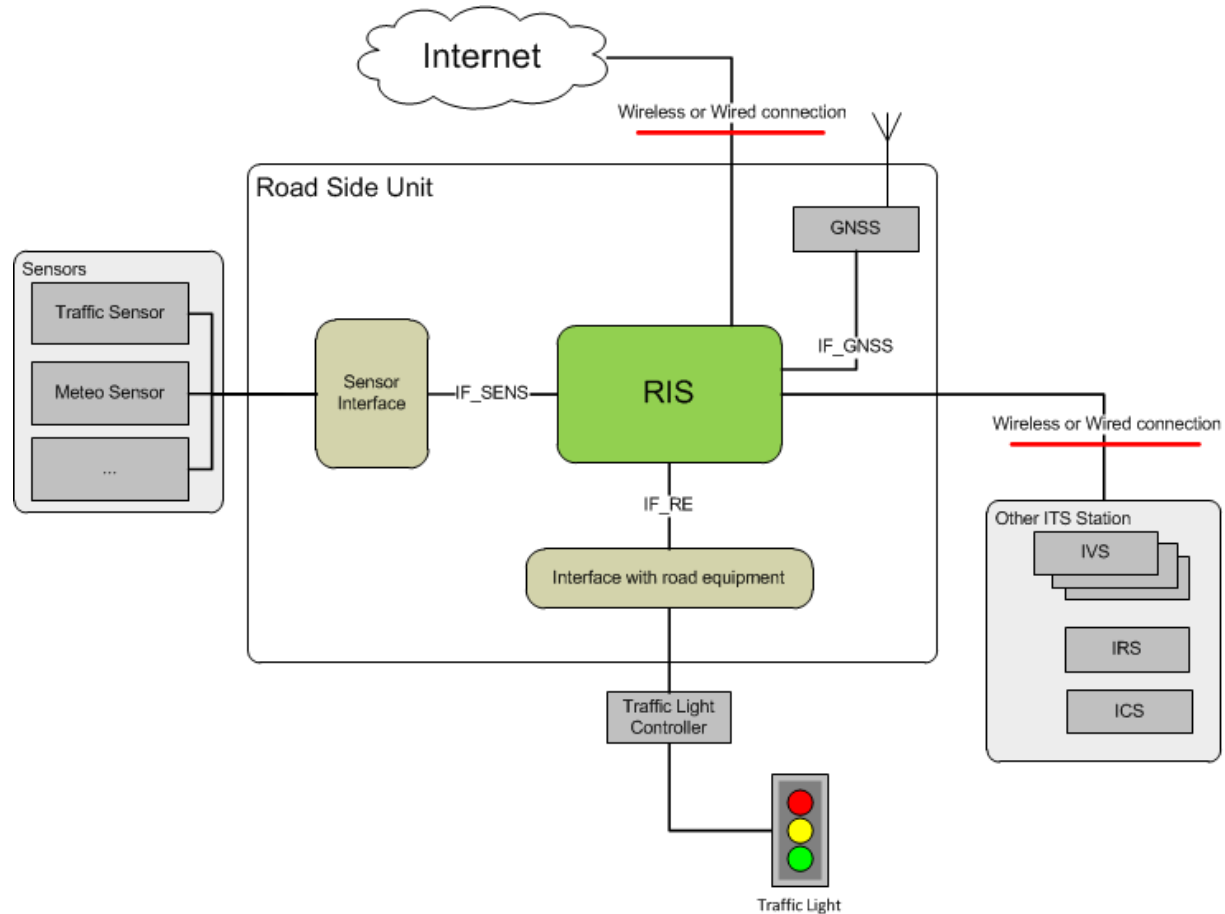
Vehicle ITS Station (VIS)



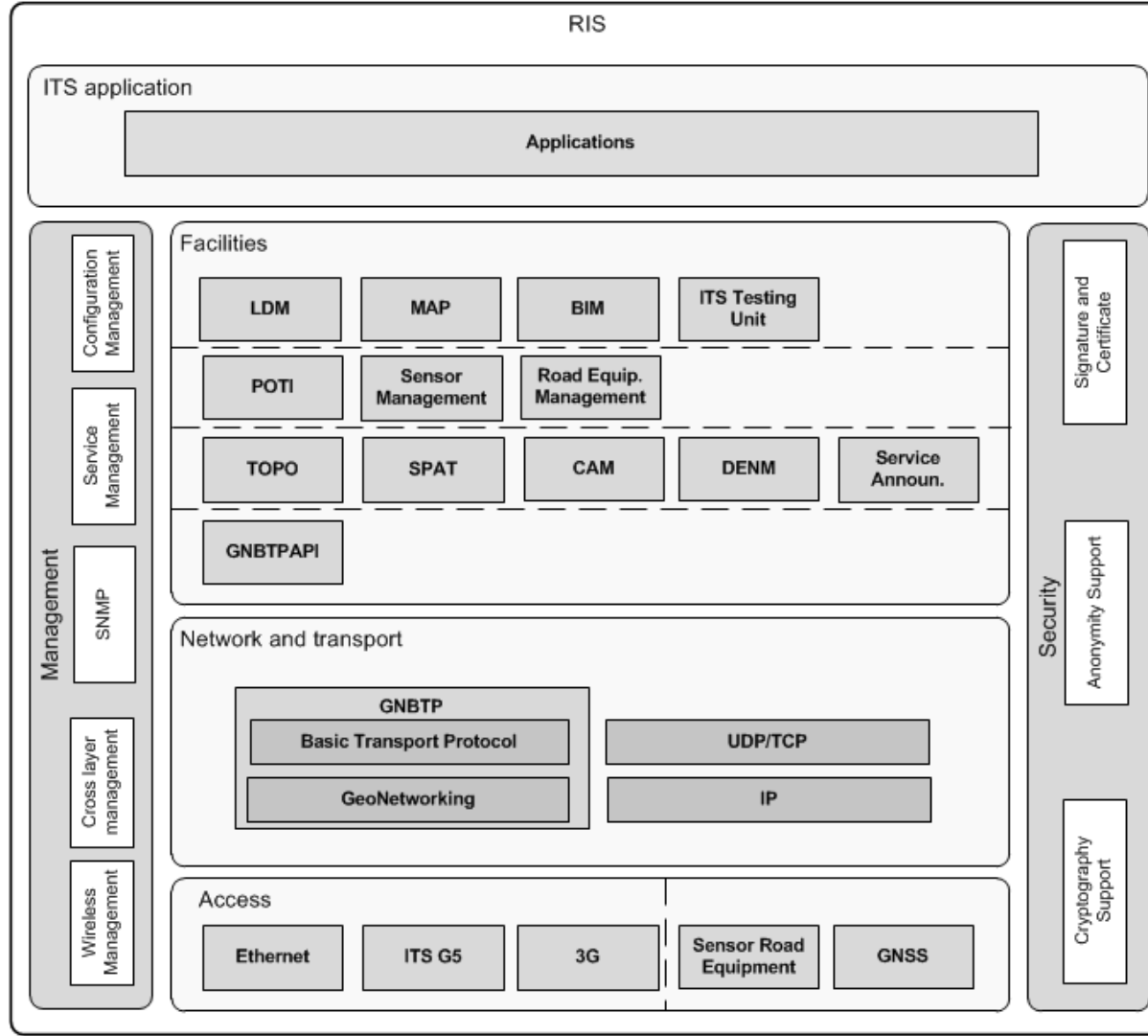
VIS Component Architecture



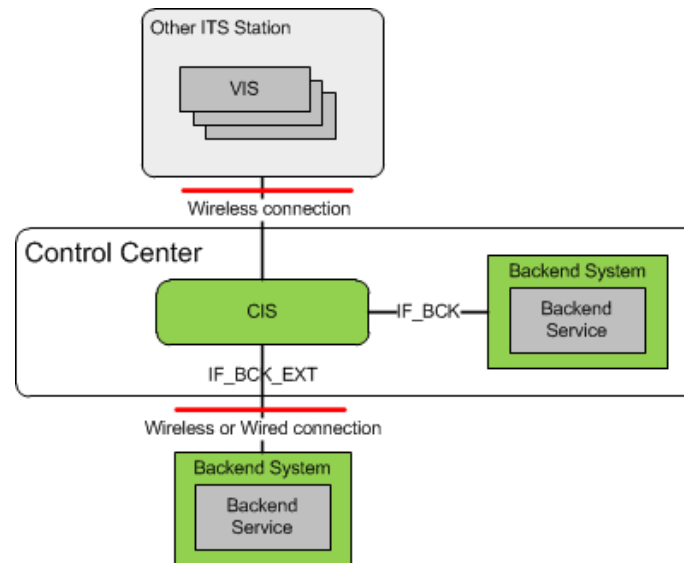
Roadside ITS Station (RIS)



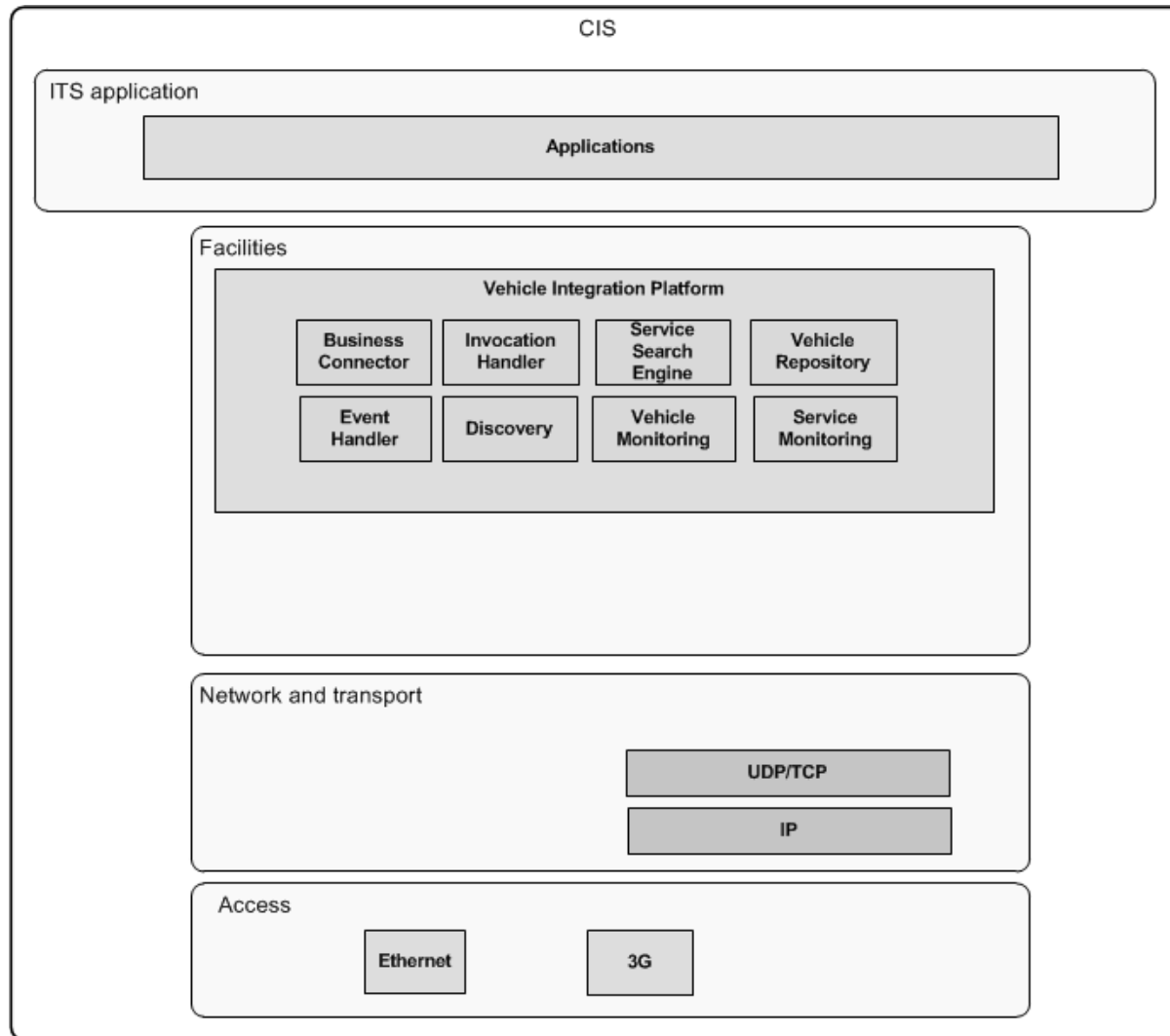
RIS Component Architecture



Central ITS Station (CIS)



CIS Component Architecture



Functions in DRIVE C2X

Safety

- Traffic jam ahead warning
- Roadworks warning
- Car breakdown warning
- Approaching emergency vehicle
- Weather warning
- Emergency electronic brake lights
- Slow vehicle warning
- Post-crash warning
- Obstacle warning
- Wrong way driving in gas stations
- Motorcycle warning

Traffic Efficiency

- Green light optimized speed advisory
- In vehicle signage

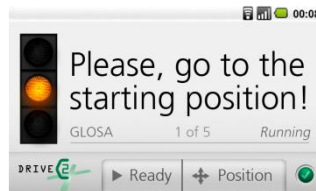
Infotainment and Business

- Insurance and financial services
- Dealer management
- Point of interest notification
- Fleet management
- Transparent leasing

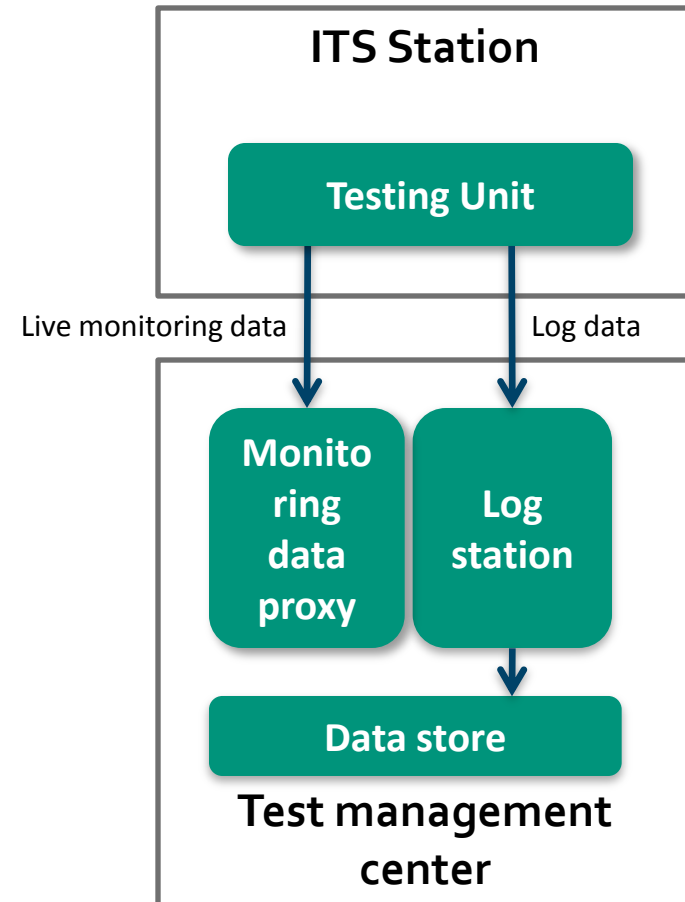
DRIVE C2X Testing Tools and Data Flow



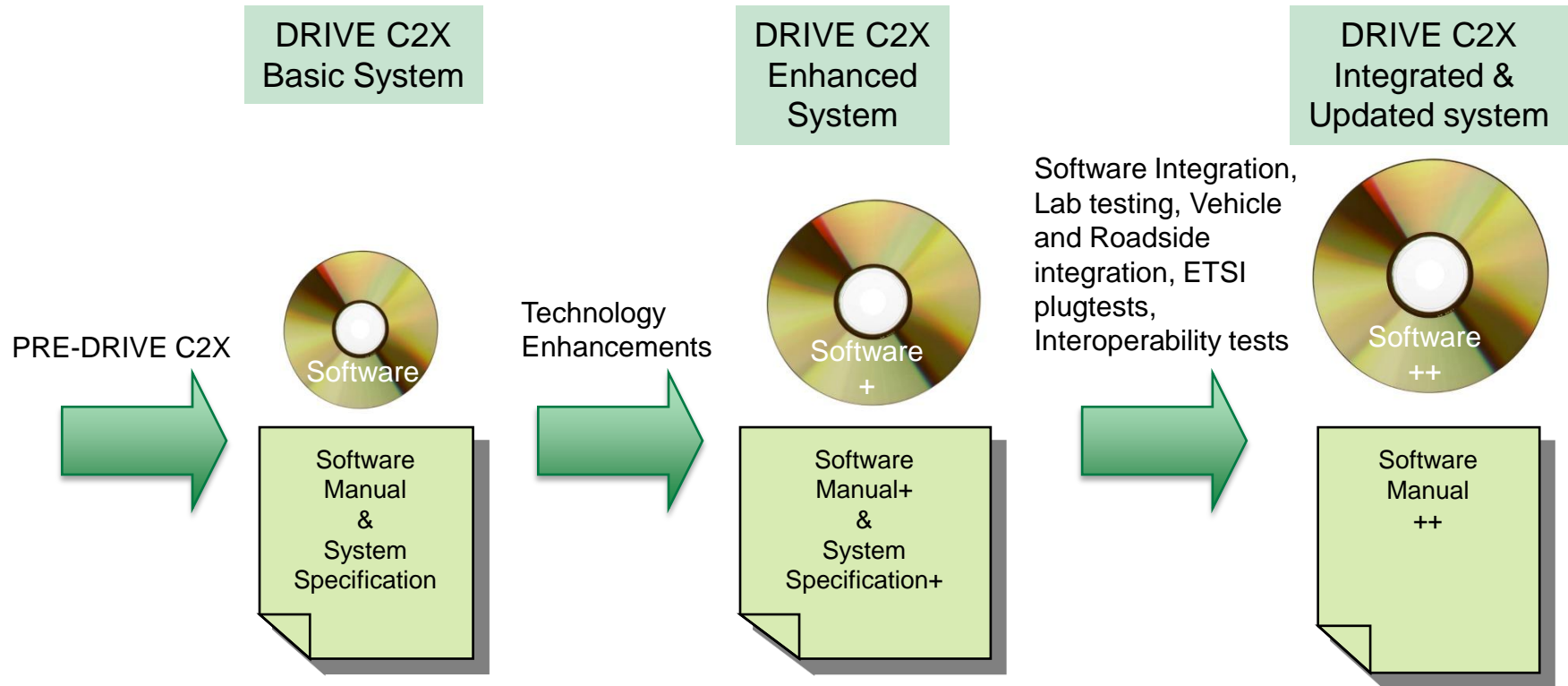
Web Scenario Editor (test planning, test description, test setup and test control)



Communication with Test-Driver



Outlook: Steps of development and rollout



- Subsequently:
 - System validation on STS in Helmond and final event
 - Rollout of DRIVE C2X system to Functional Test Sites

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Many thanks for your attention.

Any questions?