

# [ Use Case: Hotel Booking

Author

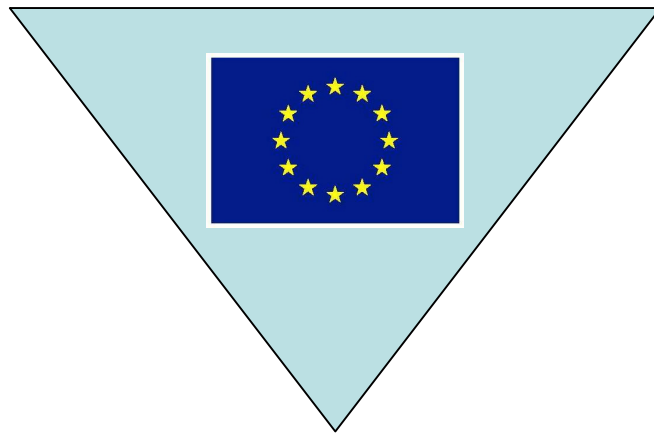
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PRECIOSA / CVIS / eSecurity

# Context of use case

- eSafety forum / eSecurity WG
- CVIS - PRECIOSA partnership concerning privacy
- European R&D Programme
- Use case inspired by existing and future ITS

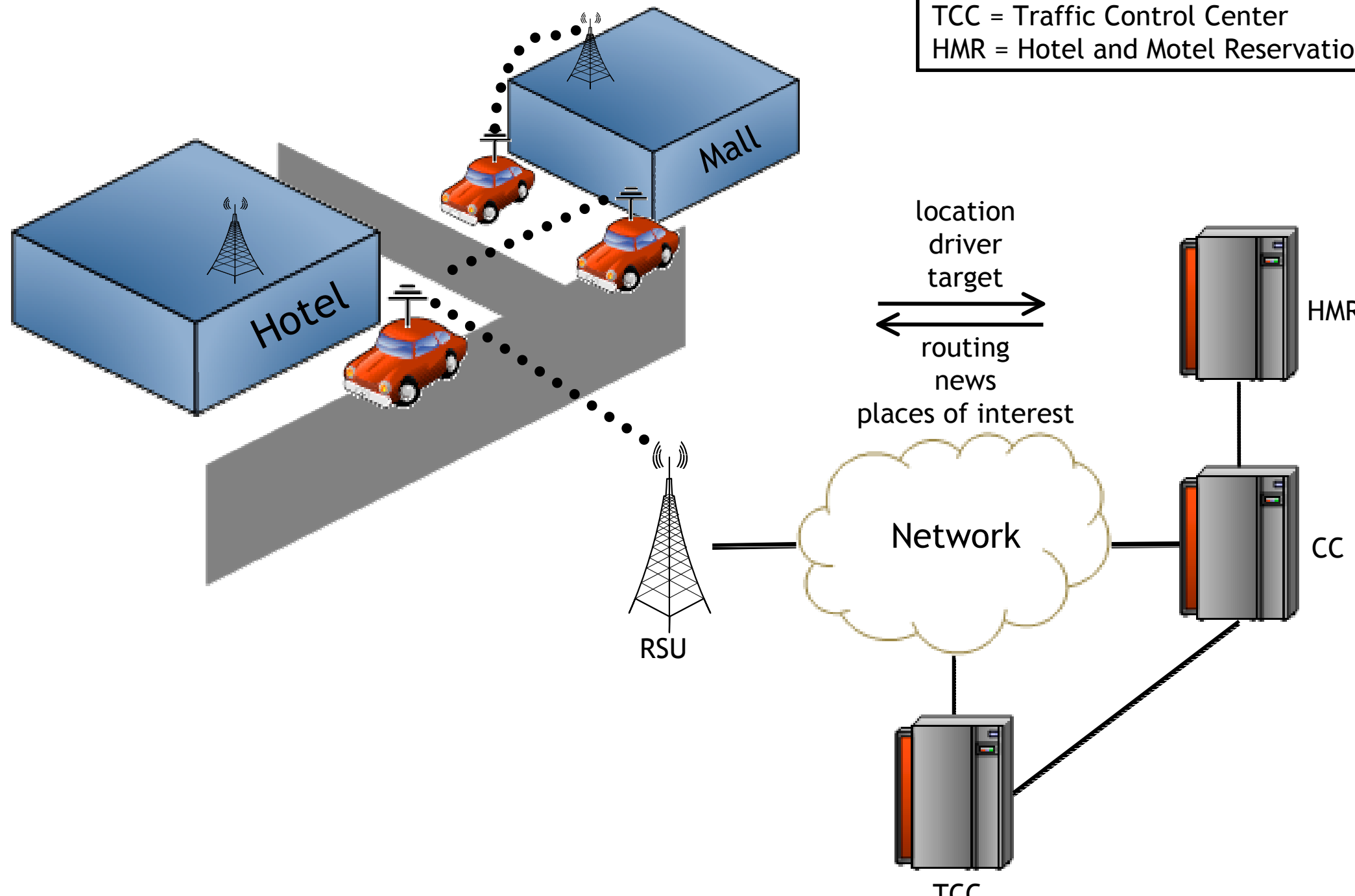


# [ Summary

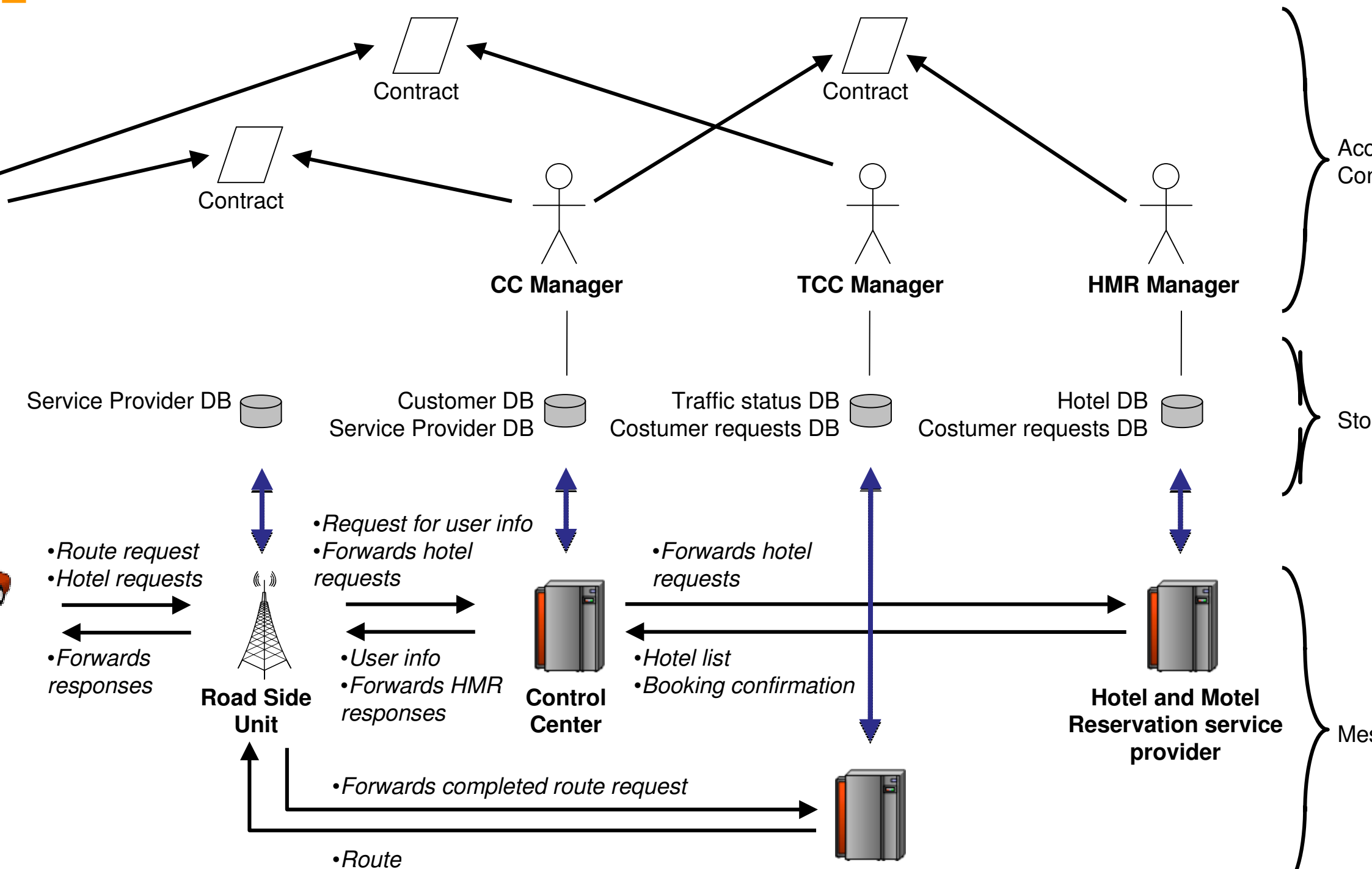
- The Use Case *Hotel Booking on the Road* demonstrates the use of backend services for customer specific needs
- Scenarios include the **two phases**
  - n **Calculating** a Route from the Current Position to Home
  - n **Booking** a Hotel on the Road
- Actors
  - Driver using a vehicle device
  - Road Side Unit (RSU)
  - Backend
    - » **RSU** collects information about traffic status
    - » **Service providers** (CC, TCC, and HMR) provide user specific services and maintain databases of customers

# Overview

RSU = Road Side Unit  
CC = Control Center  
TCC = Traffic Control Center  
HMR = Hotel and Motel Reservation



# Messages, Storage, and Access



# Description - Detailed

## Actors

- **Driver** with vehicle device/On-Board Unit (OBU) - customer
- **Road Side Unit (RSU)** - access gateway
- **Control Center (CC)** - centralized identity manager and provides access to some backend services
- **Traffic Control Center (TCC)** - provides searching for places and online navigation
- **Hotel and Motel Reservation service provider (HMR)** - provides searching and booking of hotels

Contracts exist between the customers and the two service providers CC, and HMR

Customers use an on-board unit (OBU) in the car equipped with GPS

- GPS provides the current location
- OBU for sending service requests and for displaying the results

The CC maintains a database with customer information and provides access to some backend services

## Steps executed

- n **Sending requests** from the vehicle device to the infrastructure
- n **Communicating** requests **inside** the **infrastructure**
- n **Calculating results** by service providers
- n **Sending the responses** back to the vehicle

# Data Controller and Policies

System Components	Data Controller	Storage Policies
Vehicle device	Driver	- Do not store payment information
Road Side Unit	?	- Just store aggregated location based information - Do not store forwarded requests
Control Center	CC Manager	- Audit requests for personal information
Traffic Control Center	TCC Manager	- Erase information about requests after its processing - Just store anonymized/aggregated information
Hotel Reservation service provider	HMR Manager	- Erase information about hotel search requests after its processing - Just store information about booking requests in encrypted form for jurisdiction; for instance to judge the correctness of credit card payments by (legally) authorized parties

# Application benefits

Benefits	Driver	Control Center	Traffic Control Center	Hotel Reservation service provider
Online Navigation considering the current traffic situation	✓		✓	
Providing access to backend service providers as mediator		✓		
Providing advanced services (hotel booking) using one interface (vehicle device)	✓	✓		✓

[ Thanks