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Geneva, 5-7 March 2008



# "Green ITS"

## Towards the environment- friendly networked car

The Fully Networked Car  
Geneva, 5-7 March 2008



# Outline

3

- o The search for an Integrated Approach
- o Good intentions: the starting point
- o A holistic view: connecting up the dots
- o Smoothing traffic
- o In the long run: cooperative systems

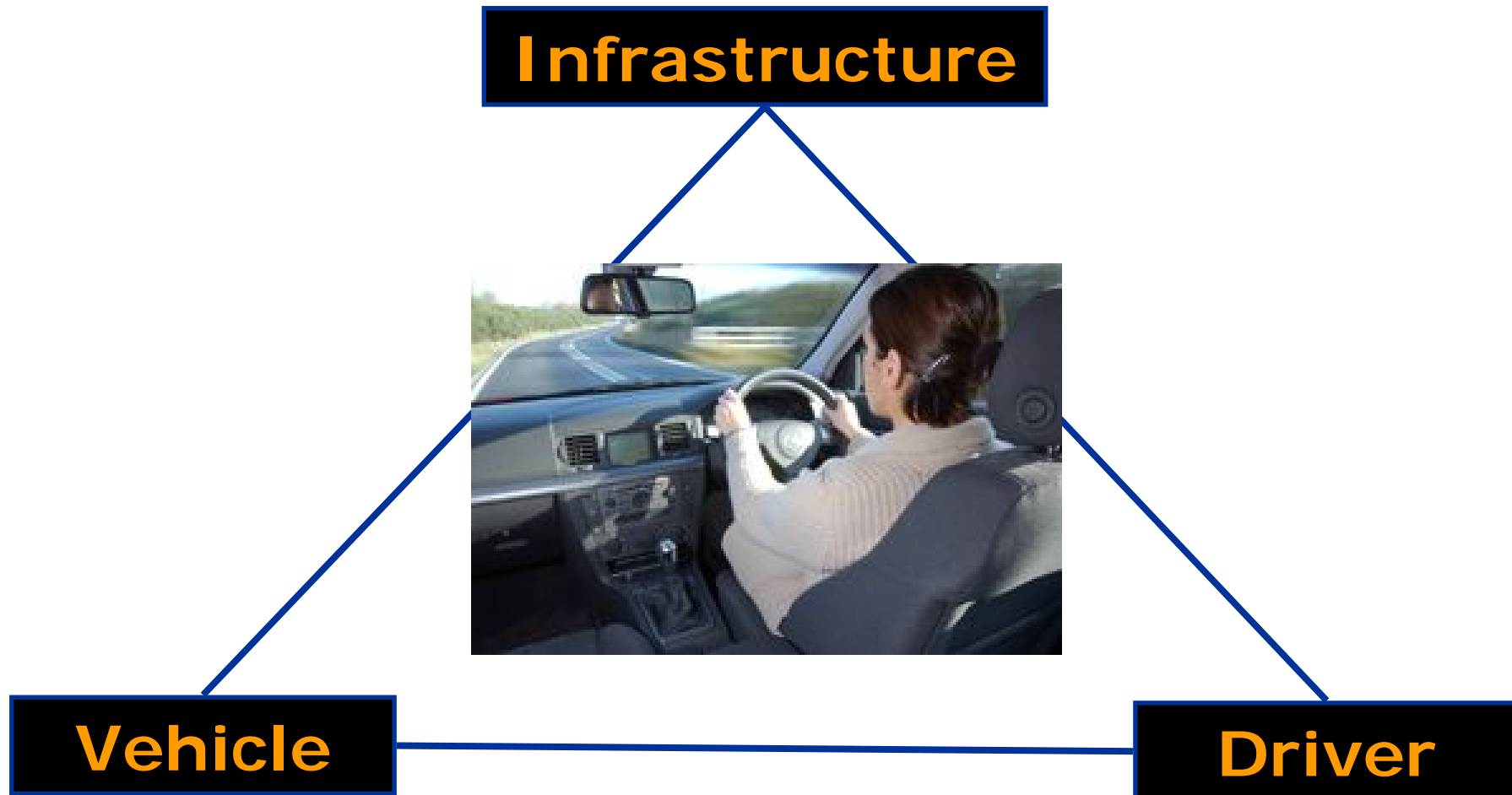
# The “Integrated Approach”

4

- o EC: Sustainable motoring should be a shared responsibility between industry, policy makers and mobile consumers
- o Elements to be deployed - by 2012
  - 130g/km CO<sub>2</sub> from vehicle technology
  - +10g/km from complementary measures
    - tyres & air conditioning
    - biofuels
    - traffic & road safety management
    - eco-driving
    - taxation

# The three main elements

5

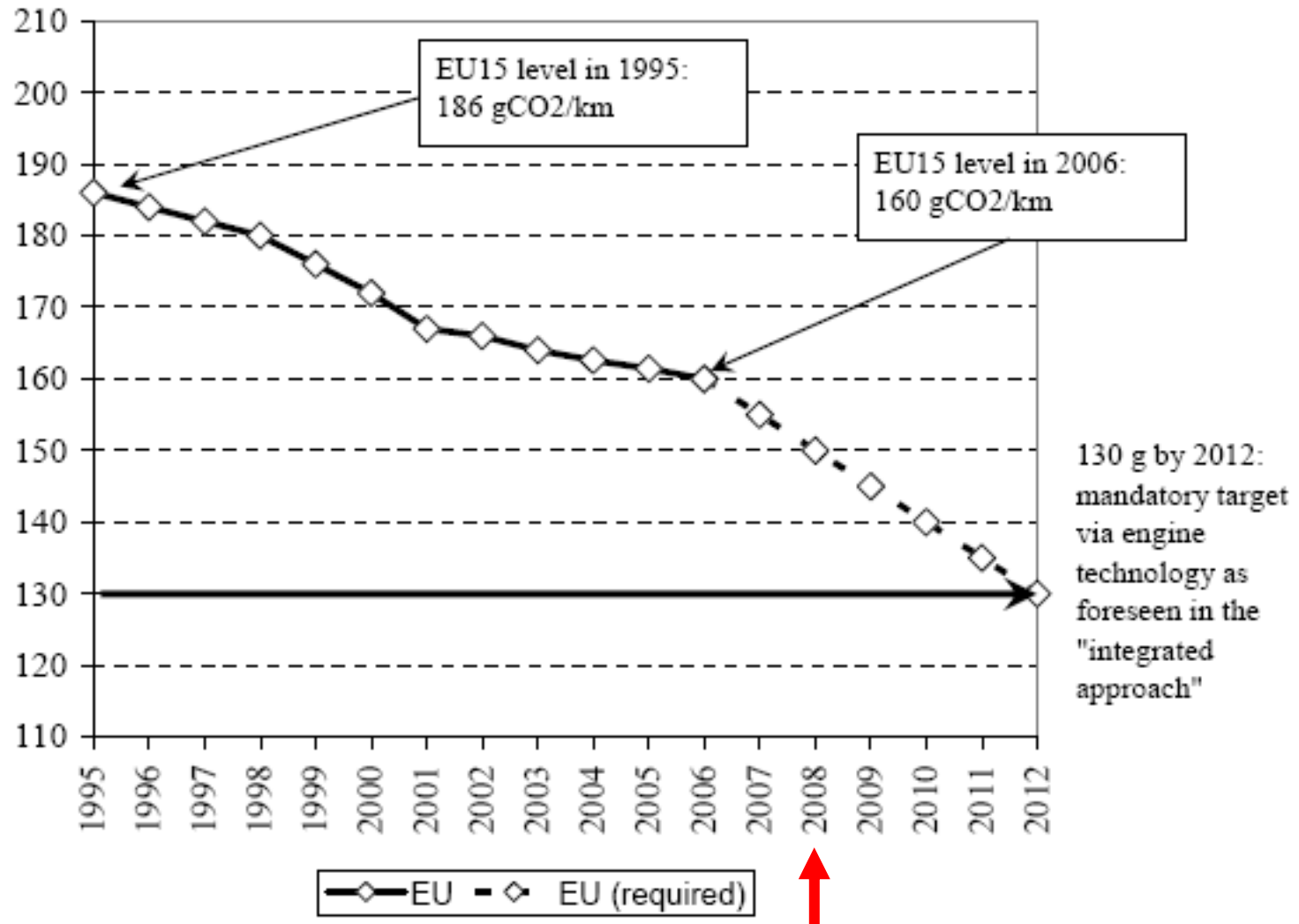


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# The Vehicle...good progress

6



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# The Infrastructure...worse



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# The Driver...little change

8

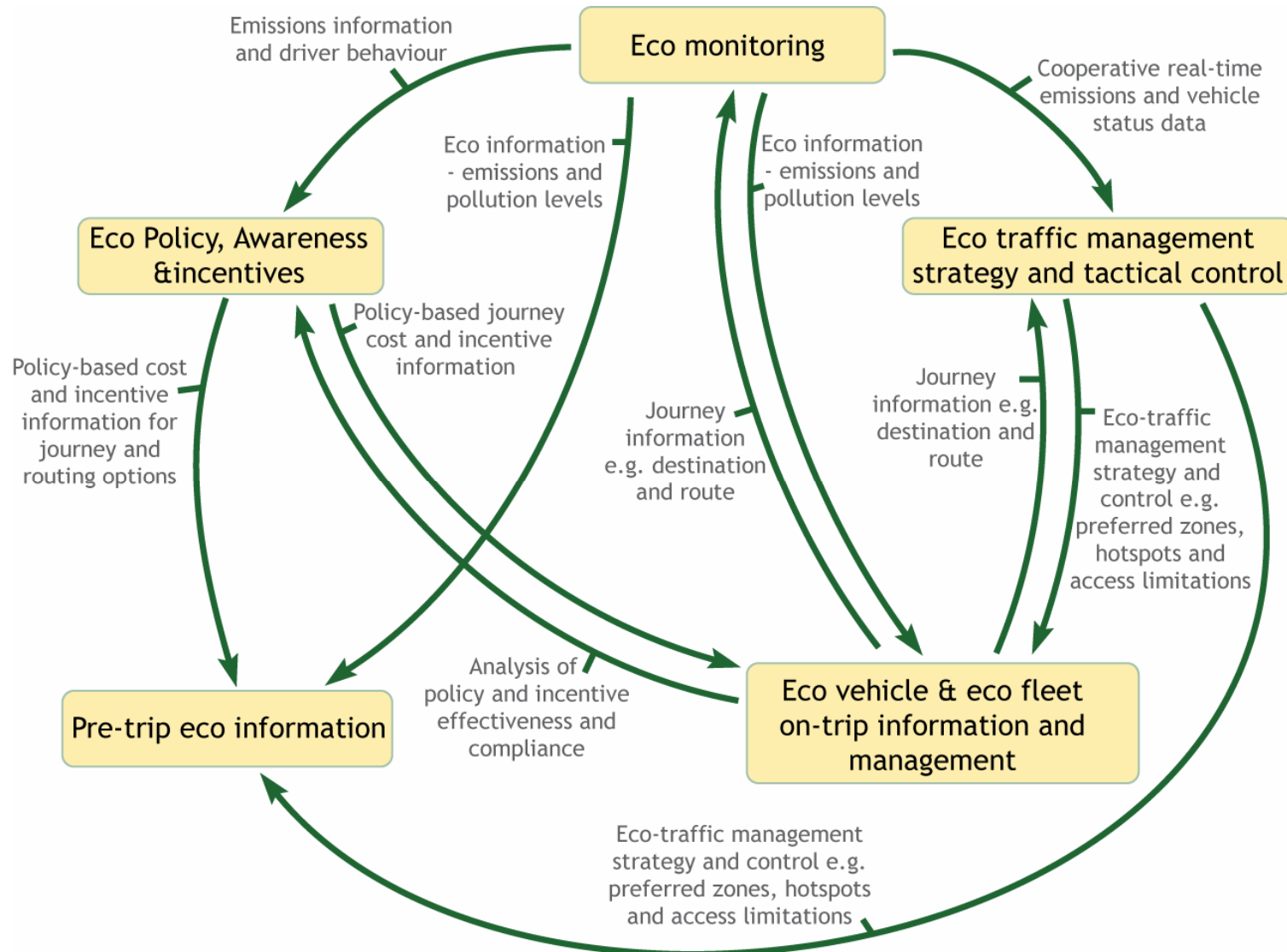


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# A Holistic View



# 1. Collect traffic & environment data

10



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# 2. Inform drivers



SAMPLE ALERT

traffic.com A NAVTEQ Company

### Philadelphia Area Hotspots

Route	Clear	Jammed	Score
I-676/Vine Exwy Eastbound	90%	10%	9.9
RT-1/Roosevelt Blvd Northbound	80%	20%	8.2
RT-1/Roosevelt Blvd Northbound	85%	15%	8.1
I-676/Vine Exwy Westbound	70%	30%	7.7
RT-202 Northbound	75%	25%	7.1

[Register for a free personalized traffic report.](#)

### Philadelphia Area Summary

#### Incidents [All Incidents](#)

- Accident  
Centennial Rd between Colonial Dr and Winding Way - accident
- Disabled vehicle  
Near RT-73 (#36) - disabled vehicle on the right shoulder

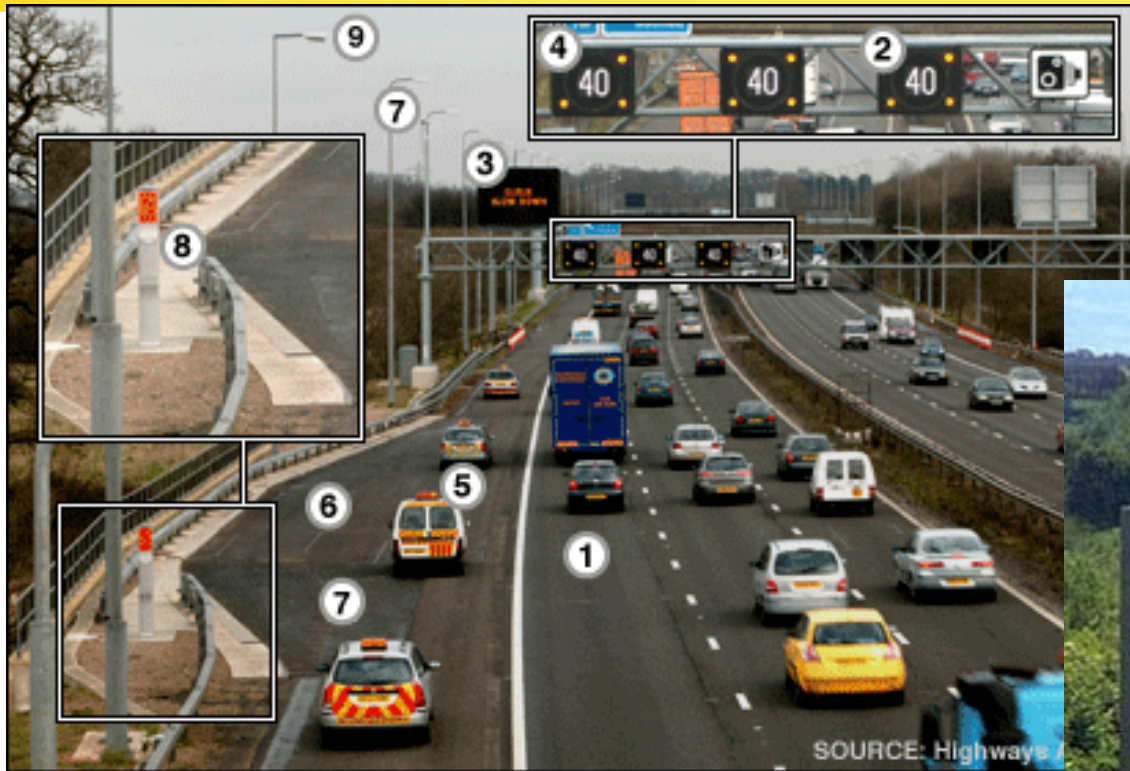
#### Events [All Events](#)

- Race  
4:33 PM - 5:03 PM  
At sprindale rd - race - sunday sunday sunday - monster truck racing

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# 3. Manage traffic interactively...



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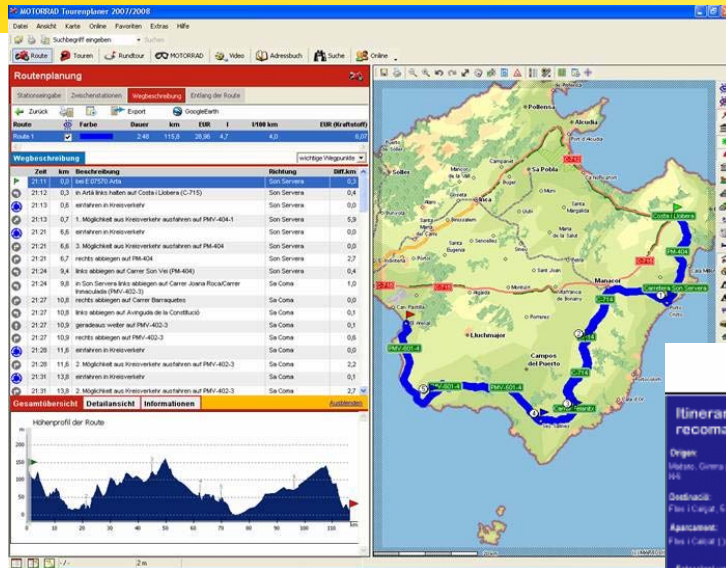
# ...and smoothly



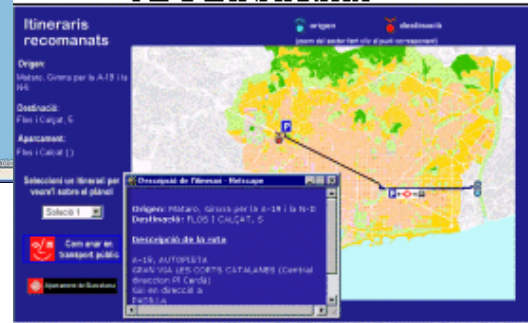
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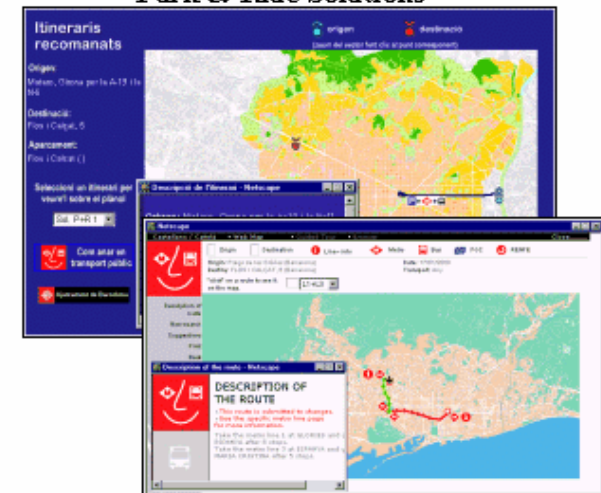
# 4. Pre-trip planning



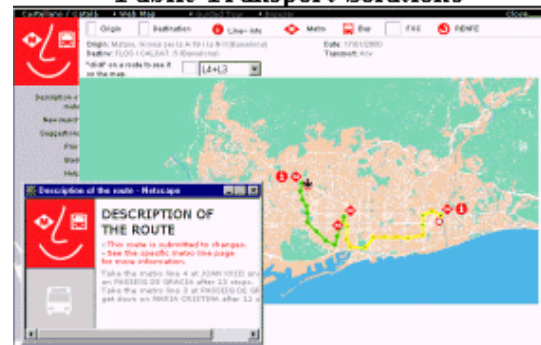
## Car Park Solutions



## Park & Ride Solutions



## Public Transport Solutions



- The Trip Planner calculates:
  - Private Vehicle: origin - car park
  - Park & Ride: origin - car park (private vehicle) car park - destination (PT)
  - Public Transport: origin - destination
- P. T. Trip Planner calculates solutions only by PT.

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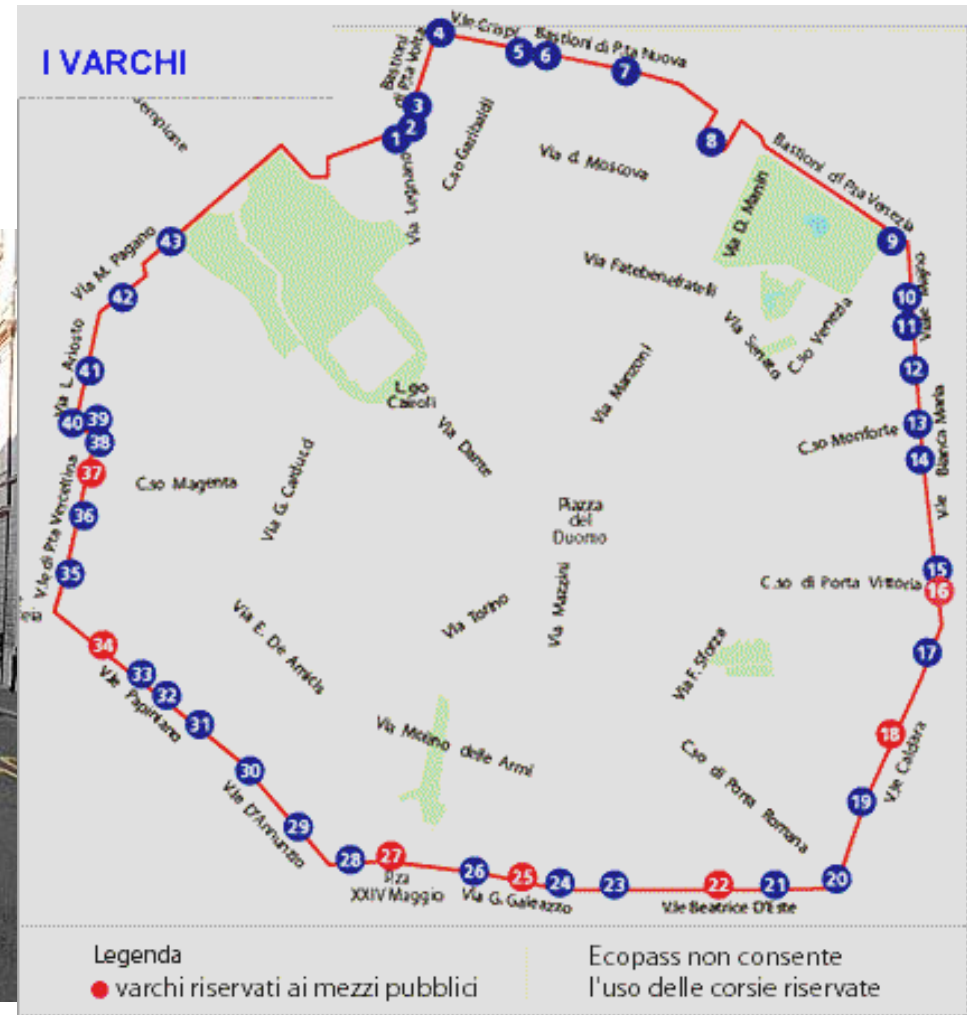


# 5. Eco-driving

1. Shift up as soon as possible
2. Maintain a steady speed
3. Anticipate traffic flow
4. Decelerate smoothly
5. Check tyre pressure often



# 6. Policies & incentives

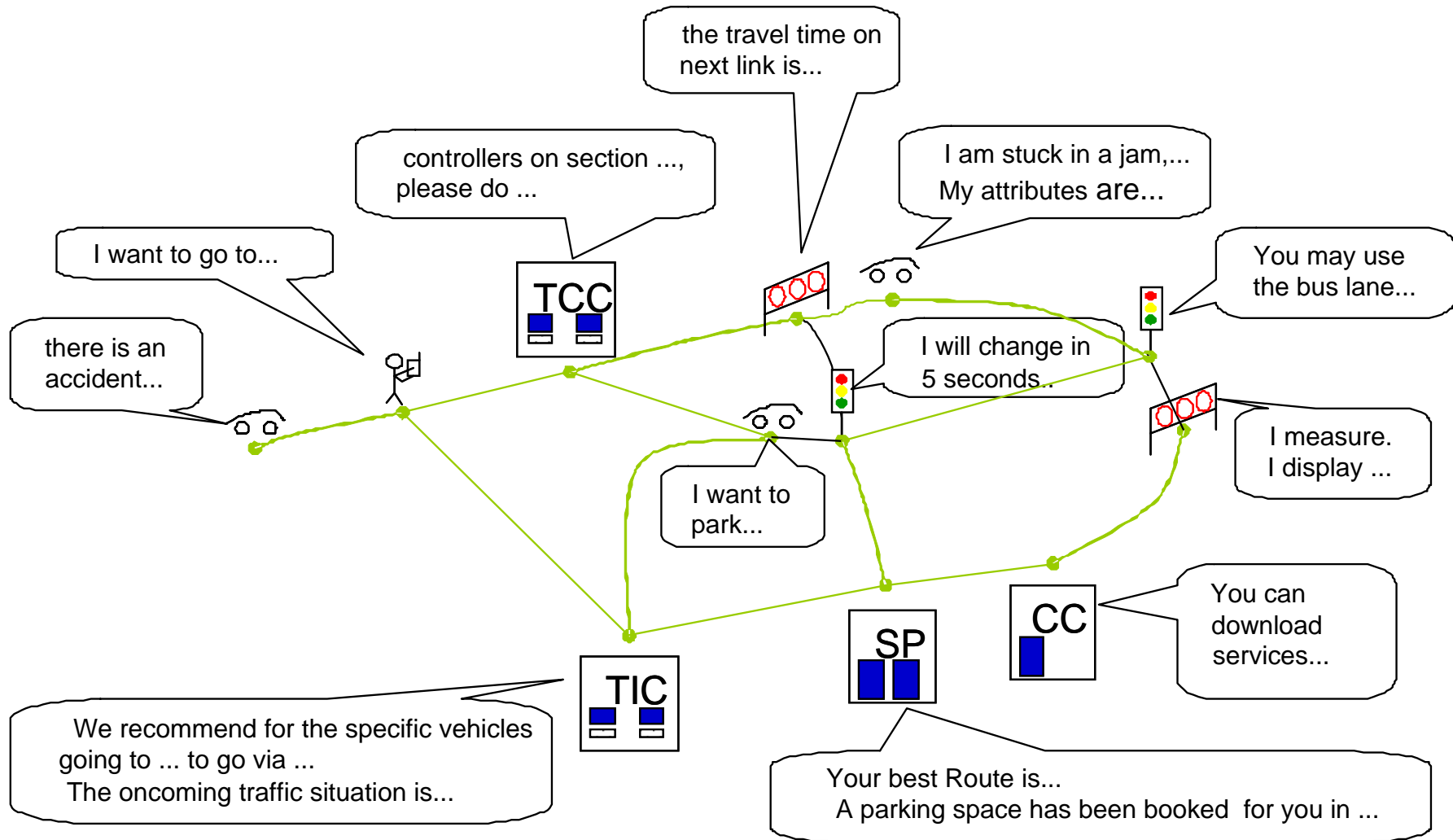


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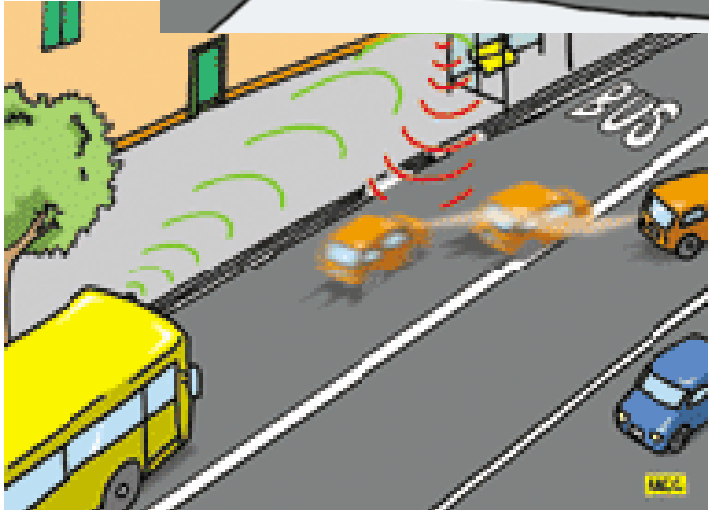
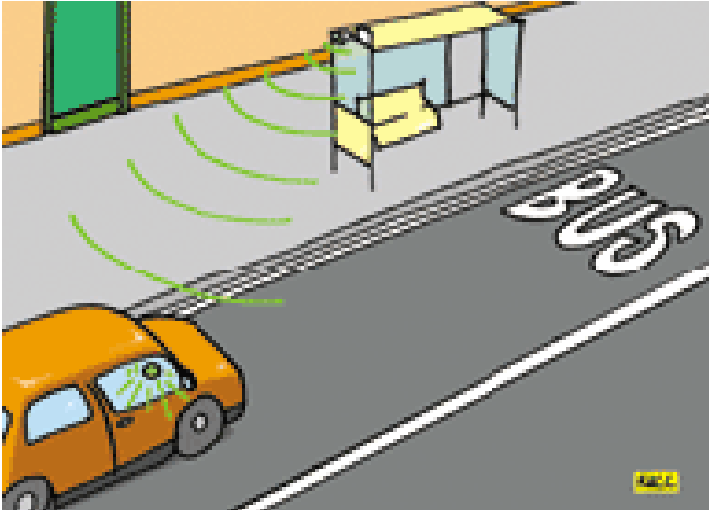




# Finally...cooperative systems



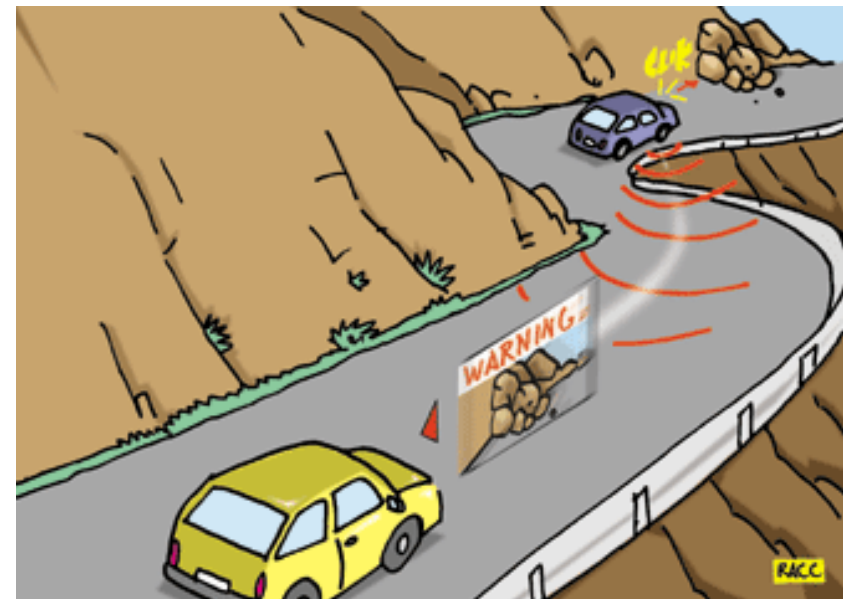
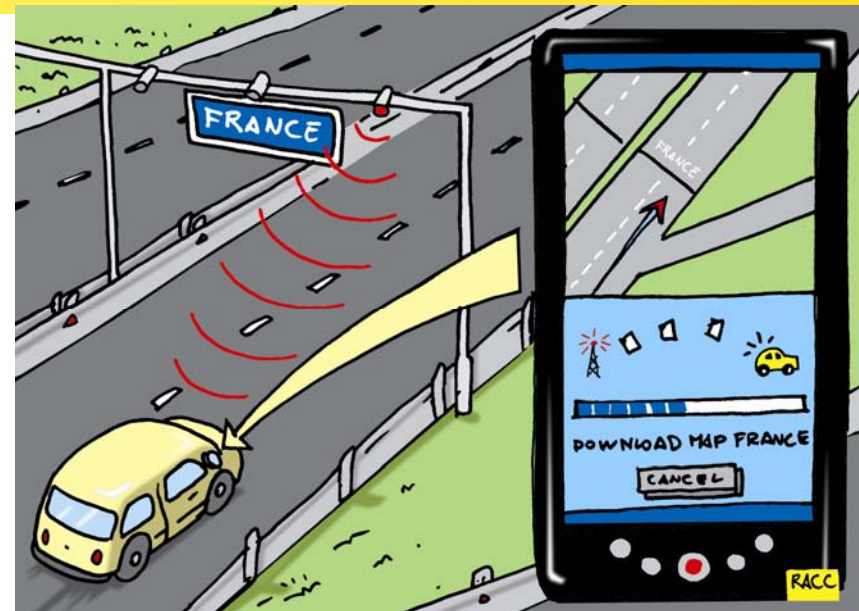
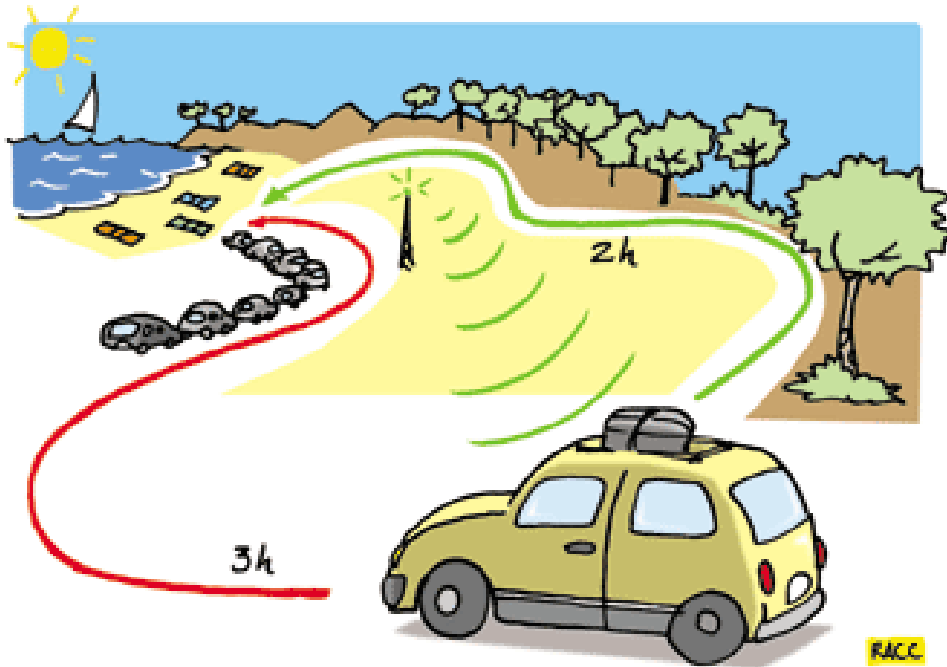
# Urban applications



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# Interurban applications



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- o The vehicle is becoming greener...
- o ...but other elements not yet integrated
- o Who can drive the “integrated approach”?
- o Substantial potential for:
  - better traffic & infrastructure management
  - greener (assisted?) driver behaviour
- o Long-term benefits from networking, cooperation vehicle-roadside system
- o eSafety Forum WG Clean & Efficient Mobility

# Thank you...

21

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