

**VIENNA
PILOT
AUTOMOTIVE
COMMUNICATION
AND NAVIGATION**

OREGIN, February 2001

Presentation Outline



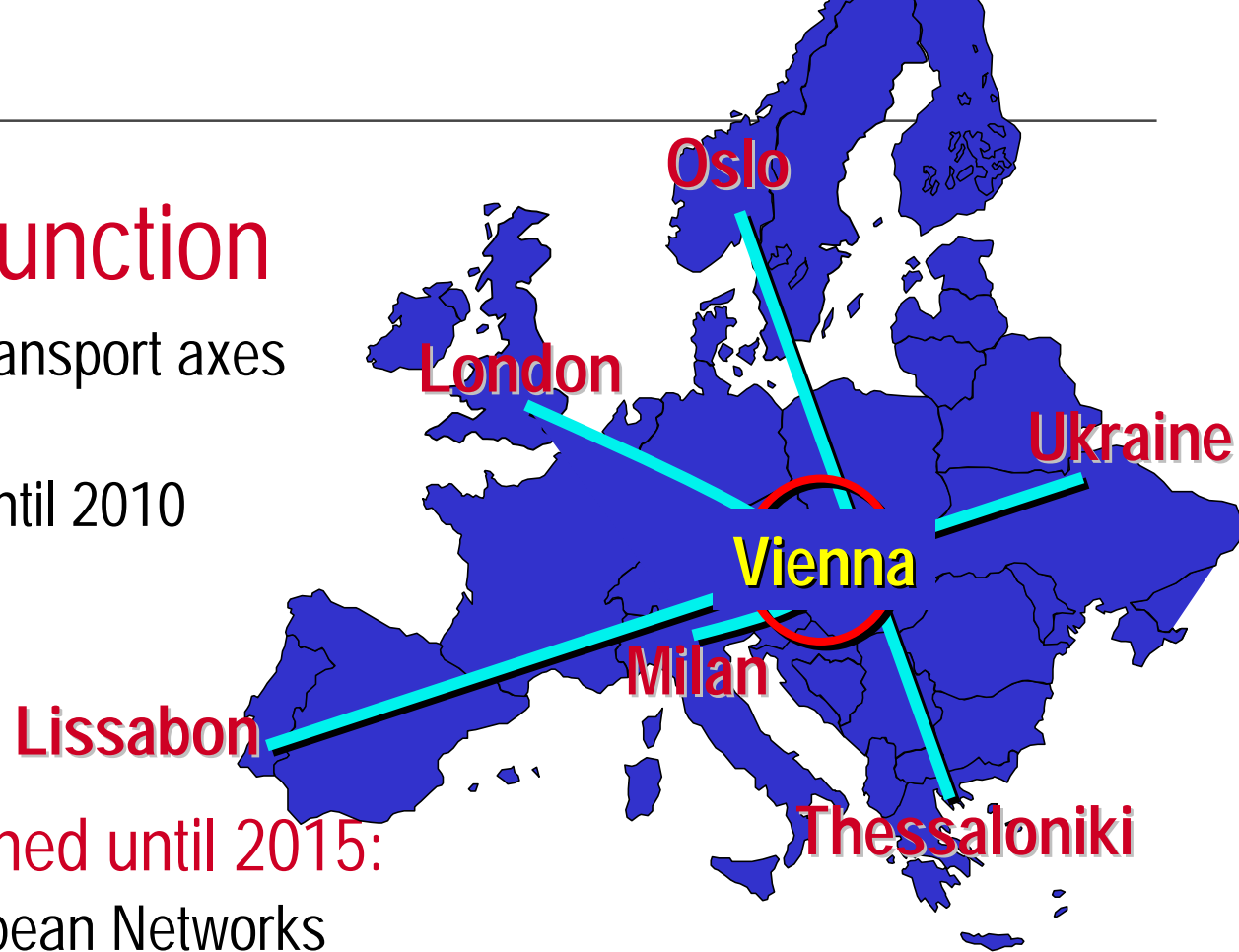
- road mobility:
threats - opportunities
 - Automotive Cluster Vienna Region
 - Vienna Pilot:
 - urban automotive mobility & mobile e-commerce
 - response to Growth 4th Call (Galileo) EGNOS & UMTS testbed
-





A neuralgic junction

- Major European transport axes
- 100% increase of EC freight traffic until 2010



Infrastructure planned until 2015:

- TEN - Trans European Networks
- 15.000 km high-capacity roads
- 70.000 km rail tracks
- additional air-routes and waterways

Vienna Region

- fast growing economy
- 16 Million inhabitants

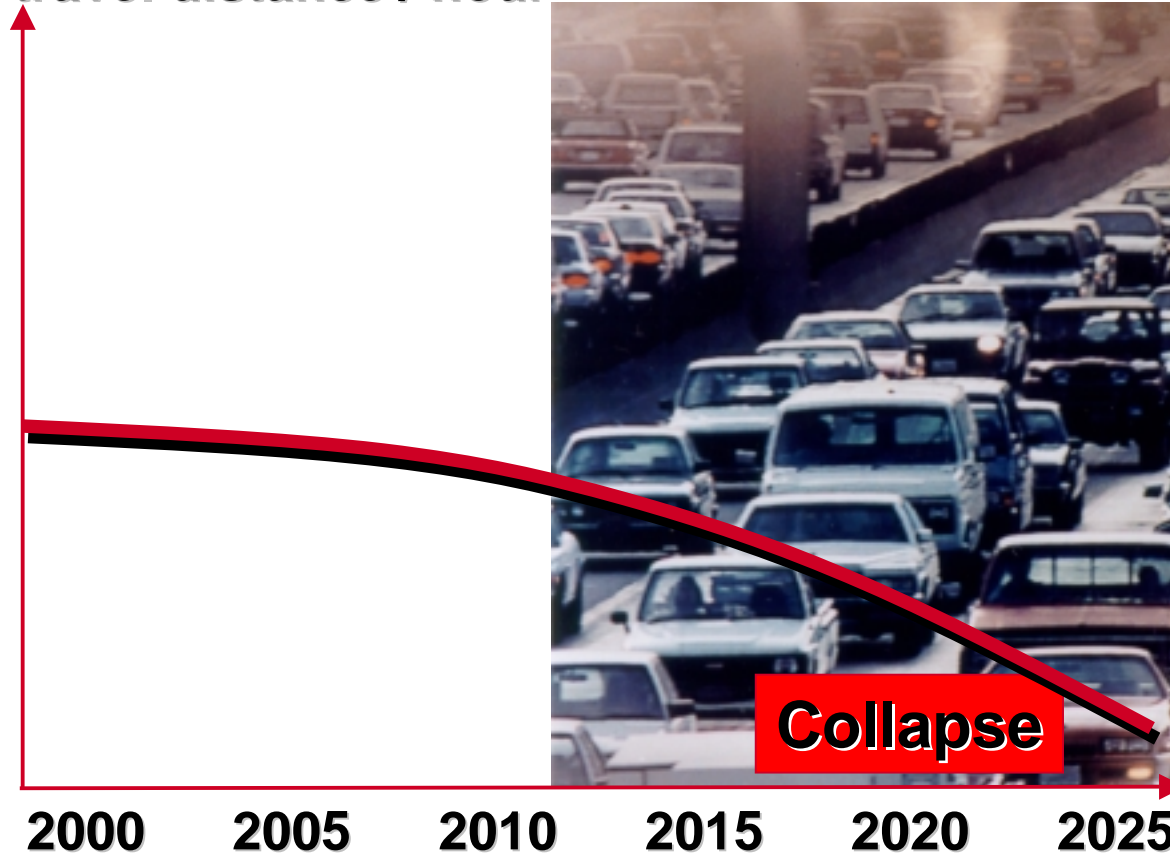


Threat for road mobility

- transit routes problem
- heavy increase of regional truck, bus and car traffic
- environmental impact

Without infrastructure upgrades

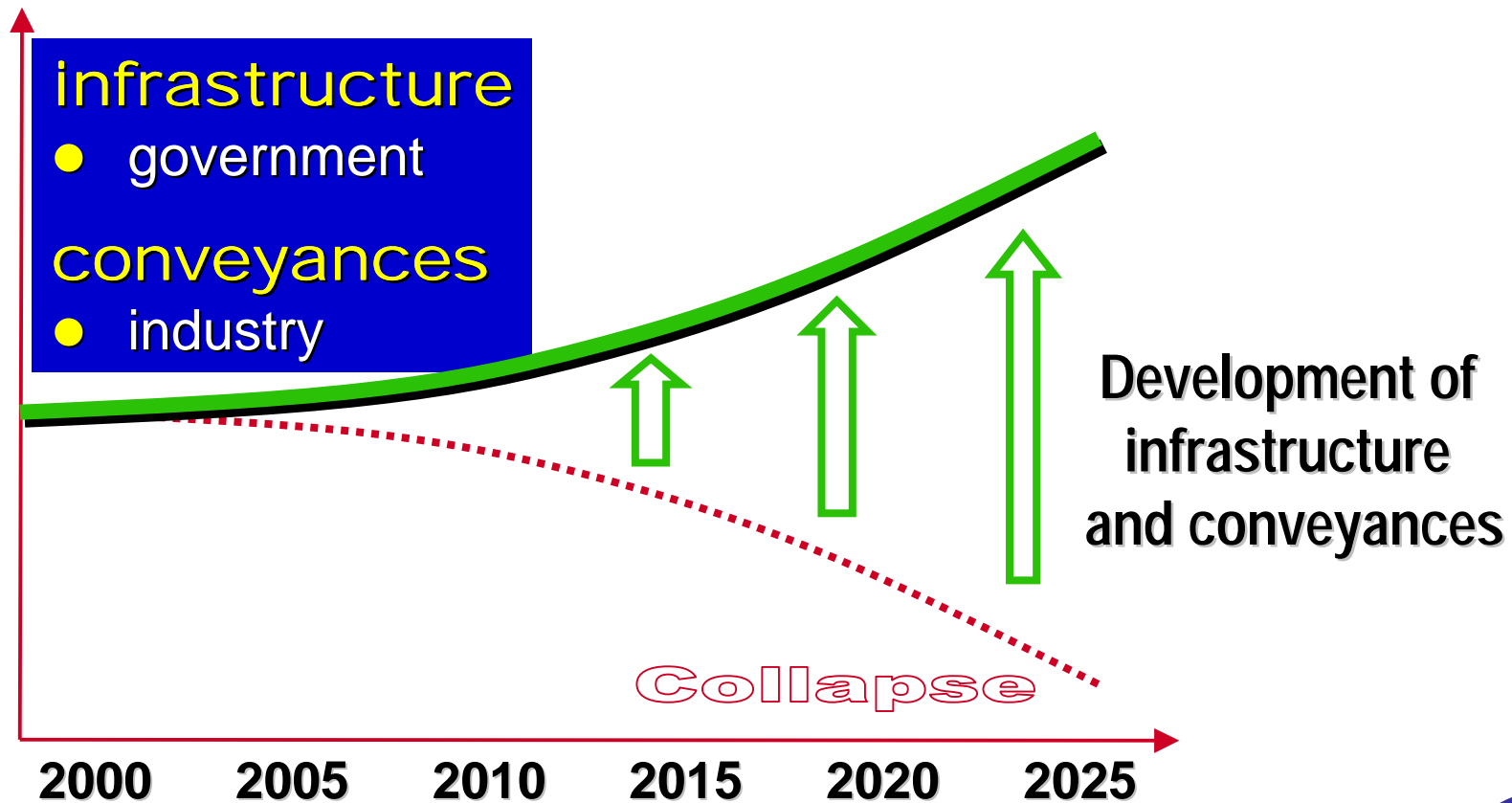
travel distance / hour



- traffic jam costs in Austria: 19 Bio €
- decrease in competitiveness
- negative impacts on labor, environment and prosperity

Vision (there's no alternative)

travel distance / hour

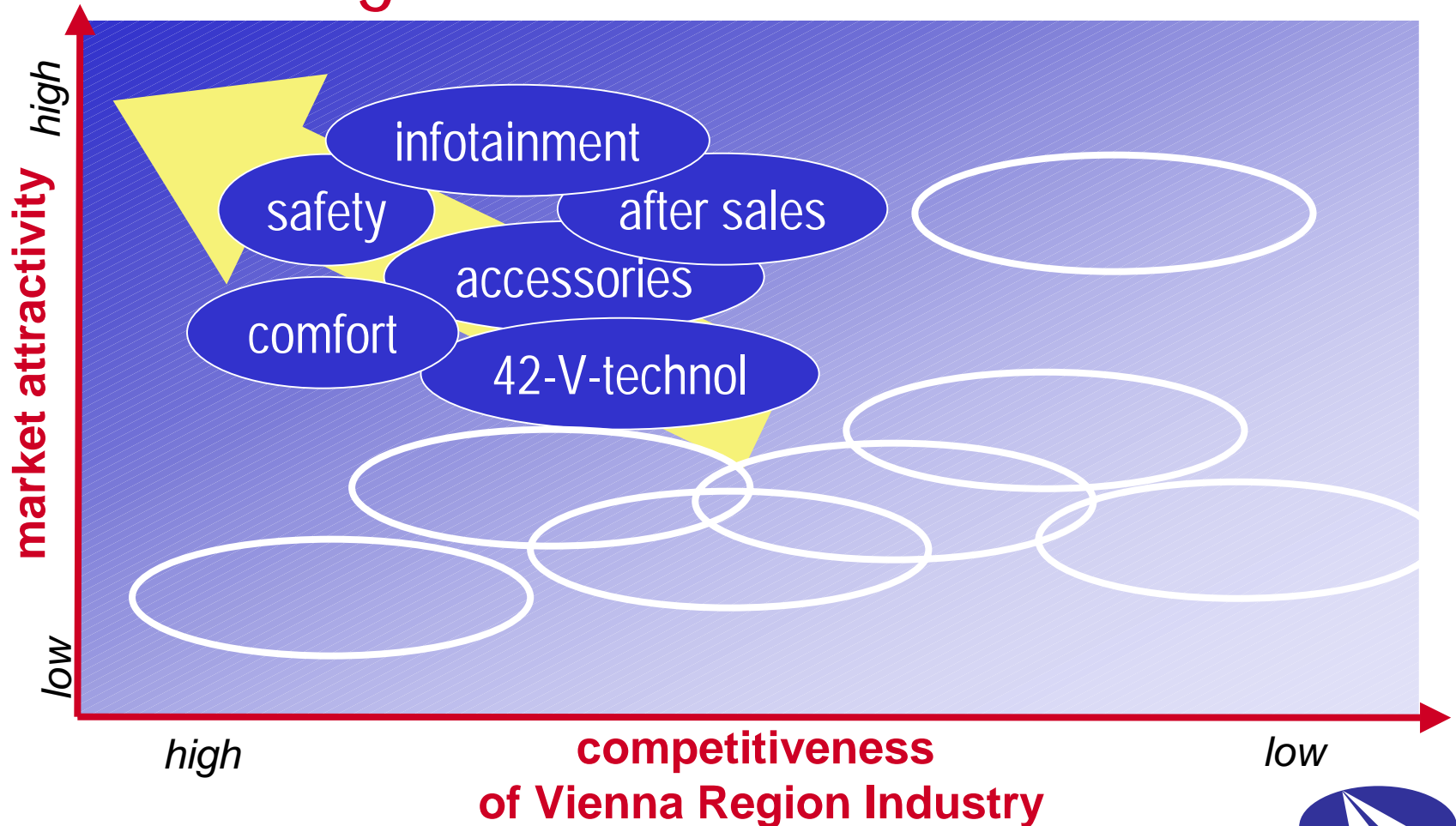


Opportunities: M-commerce and m-multimedia



- Infotainment
- Tourism services
- Fleet management
- Enterprise networks & mobile office
- Emergency services
- Mobility management
- Tolling
- Car status / maintenance
-

Vienna Region Automotive Cluster: SWOT



Sub-cluster



SatNav
Made in Europe

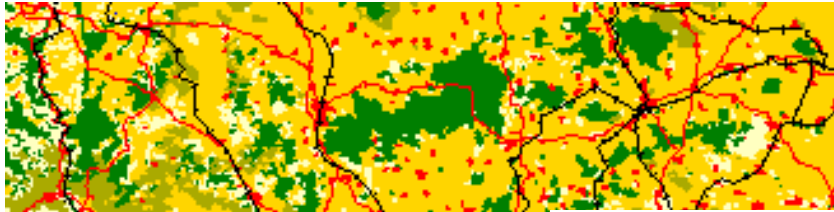


Infomobility
/ UMTS



**Pilot project and field trials
in Vienna Region**

**Automotive Cluster
Vienna Region**



VIENNA PILOT



Vienna Pilot Targets

Urban Automotive Mobility



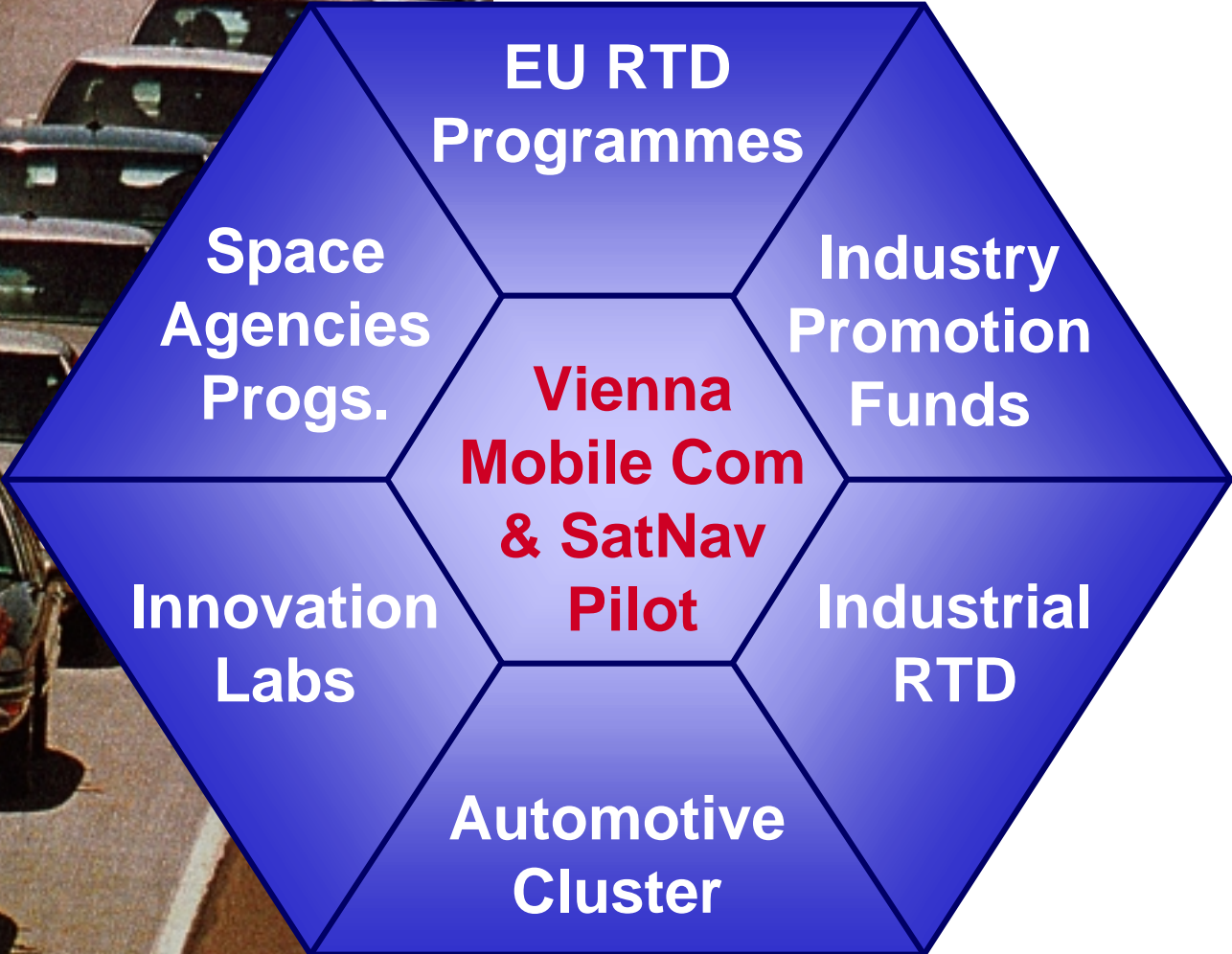
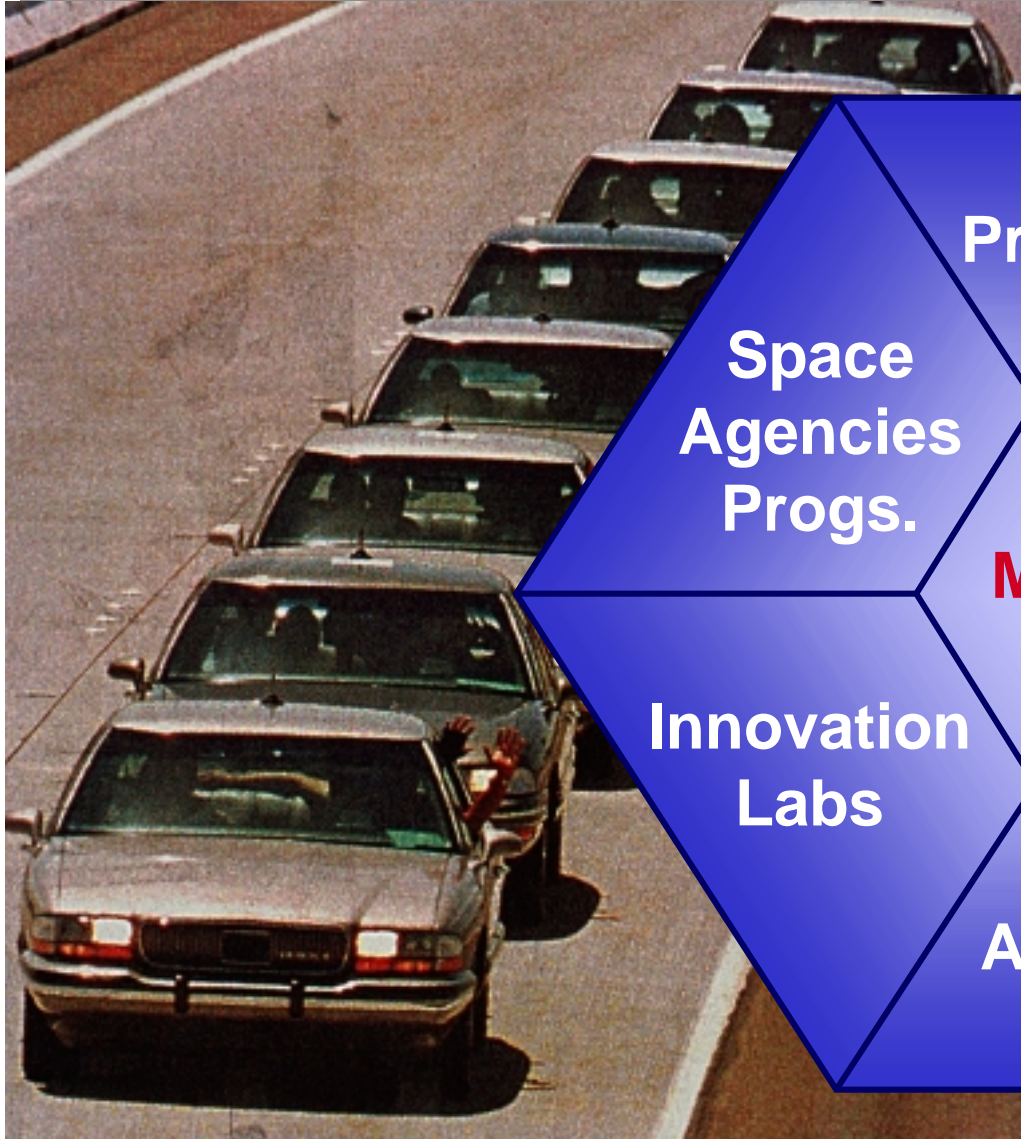
Mobile Com
& Multimedia



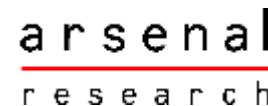
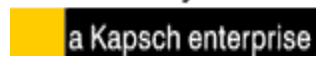
Sat Positioning
& Navigation

Mobile e-commerce

- field trial involving 100+ vehicles and drivers
- hybrid testbed: UMTS + EGNOS
- advanced browser and cockpit equipment
- traffic monitoring and driver guidance services
- safety & emergency management systems
- in-vehicle multimedia business and leisure information
- use of geographic info



Interested Parties in Austria

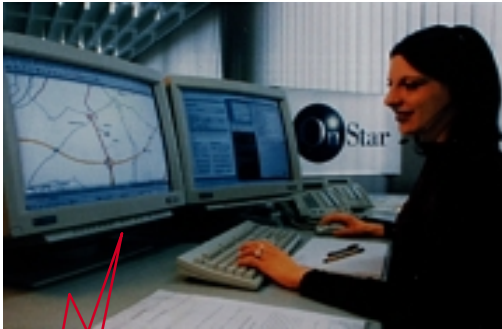


Driver Guidance

GPS / EGNOS Testbed



info center



UMTS Testbed



traffic information

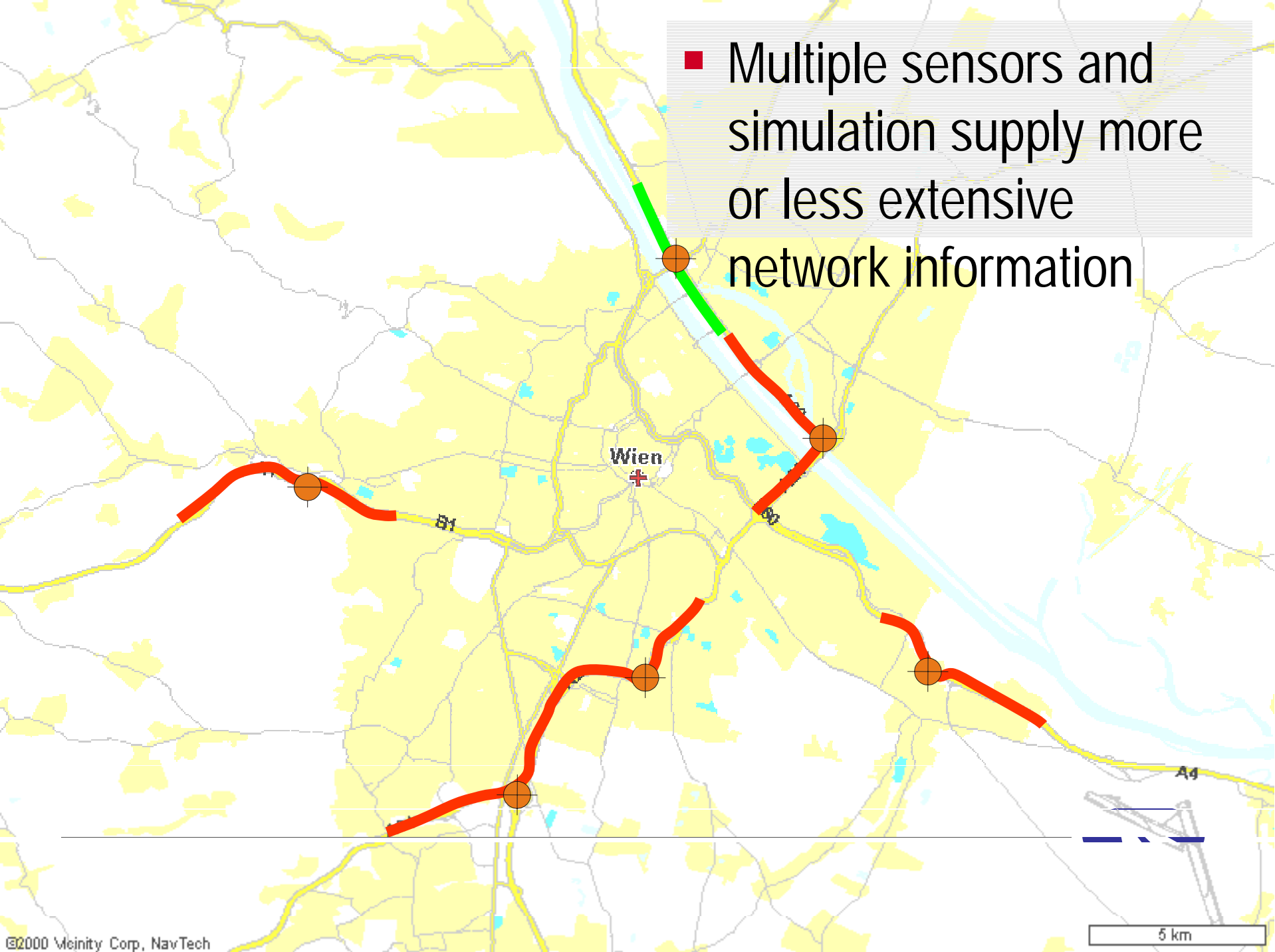


jam warning

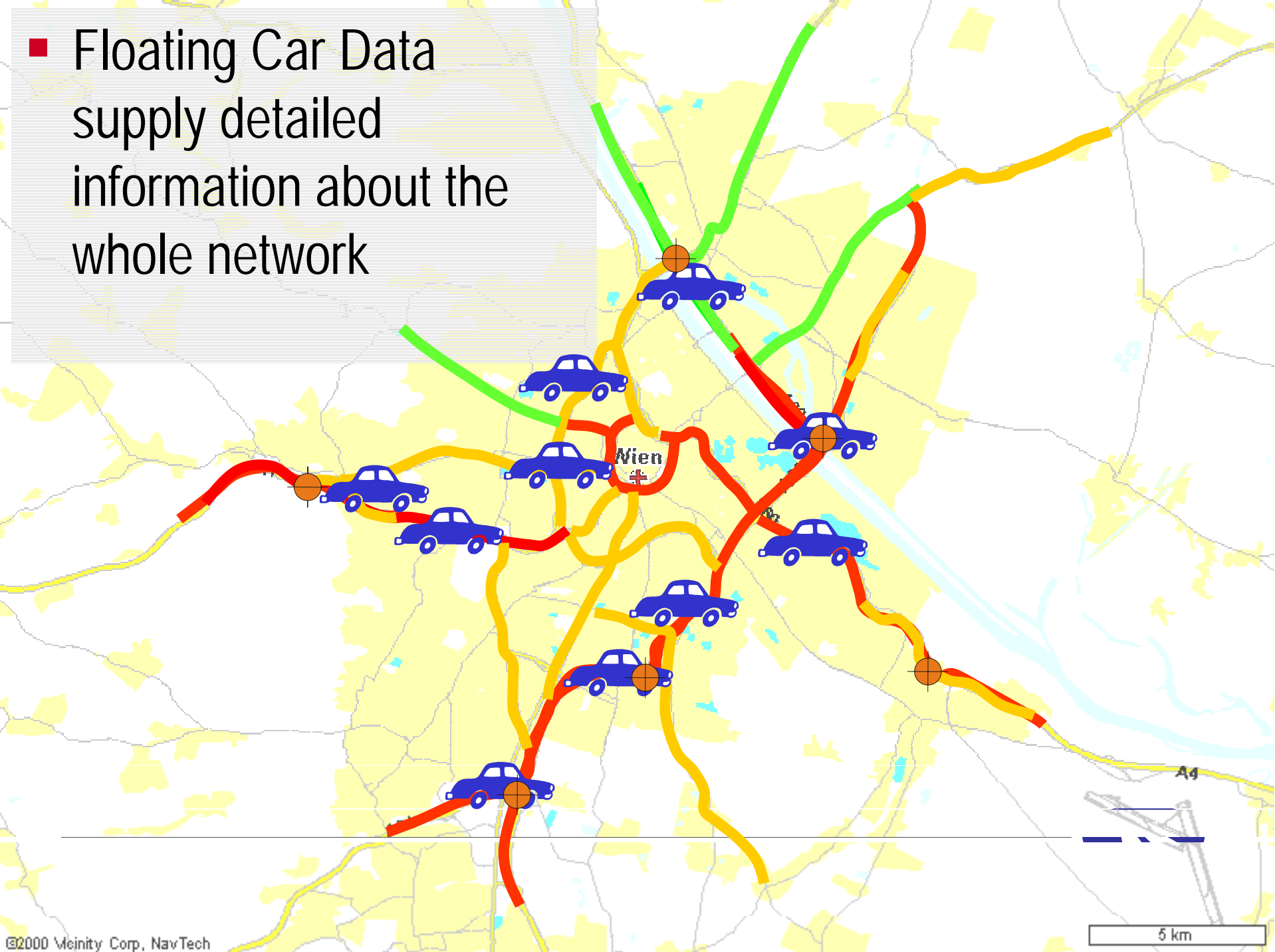


optimised route planning

■ Multiple sensors and simulation supply more or less extensive network information



■ Floating Car Data supply detailed information about the whole network





40 min

stop and go ahead!

**Destination:
DOWNTOWN**



18 min

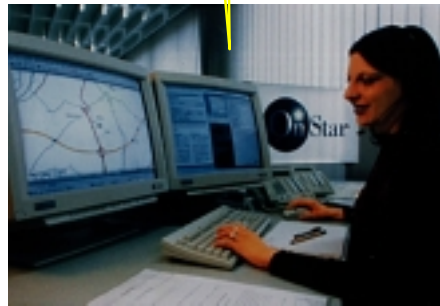
Station next exit

Emergency Management

GPS / EGNOS
Testbed



2: accident
location
detection

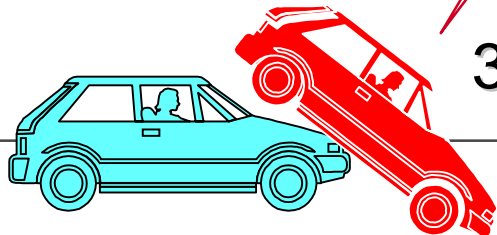


control centre

UMTS Testbed

4: operations order

1: automatic
alarm



3: contact



Business and Leisure Information



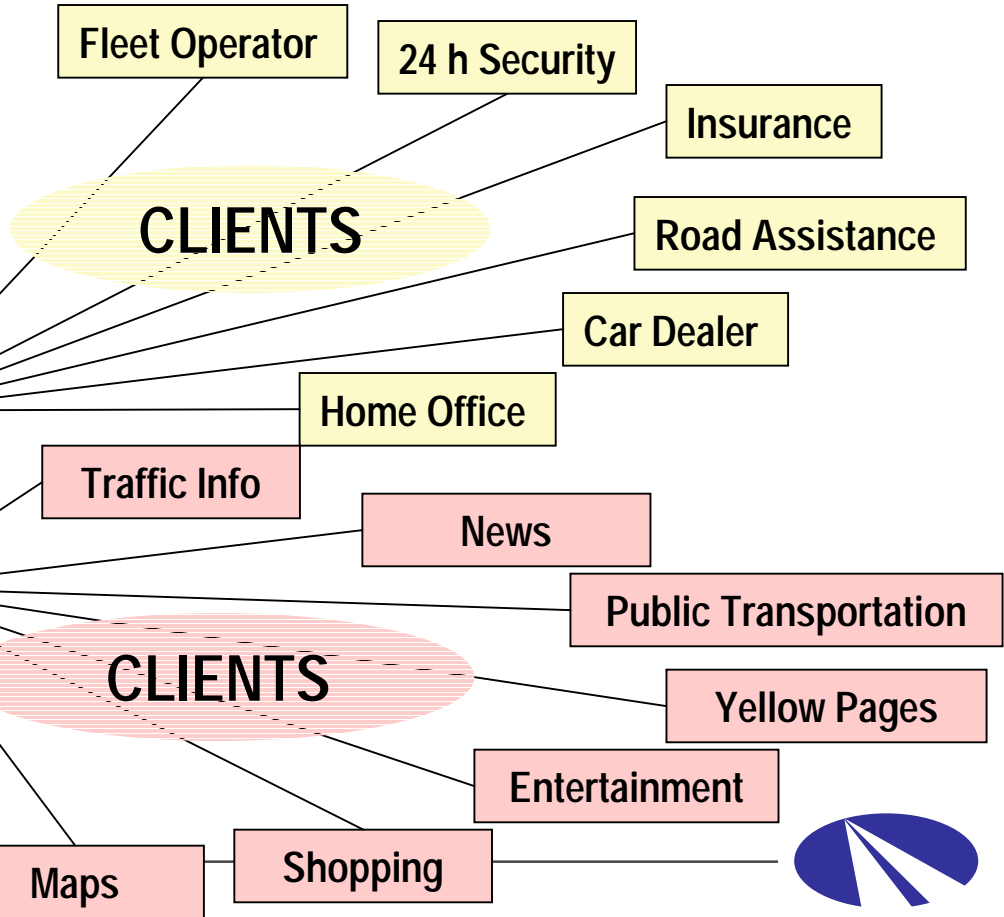
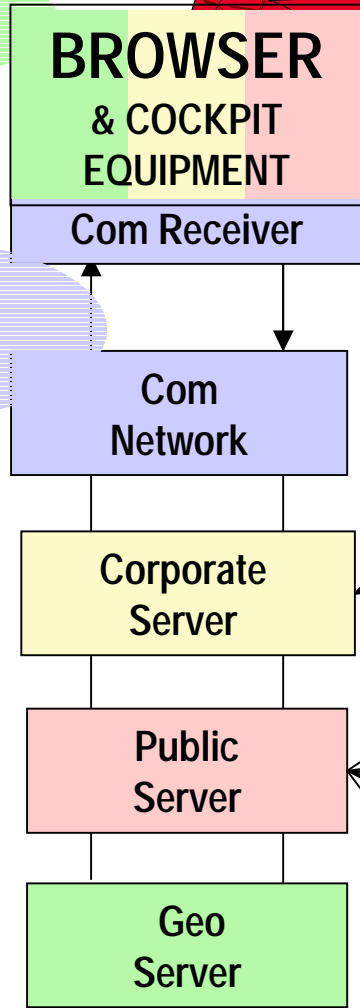
System Architecture



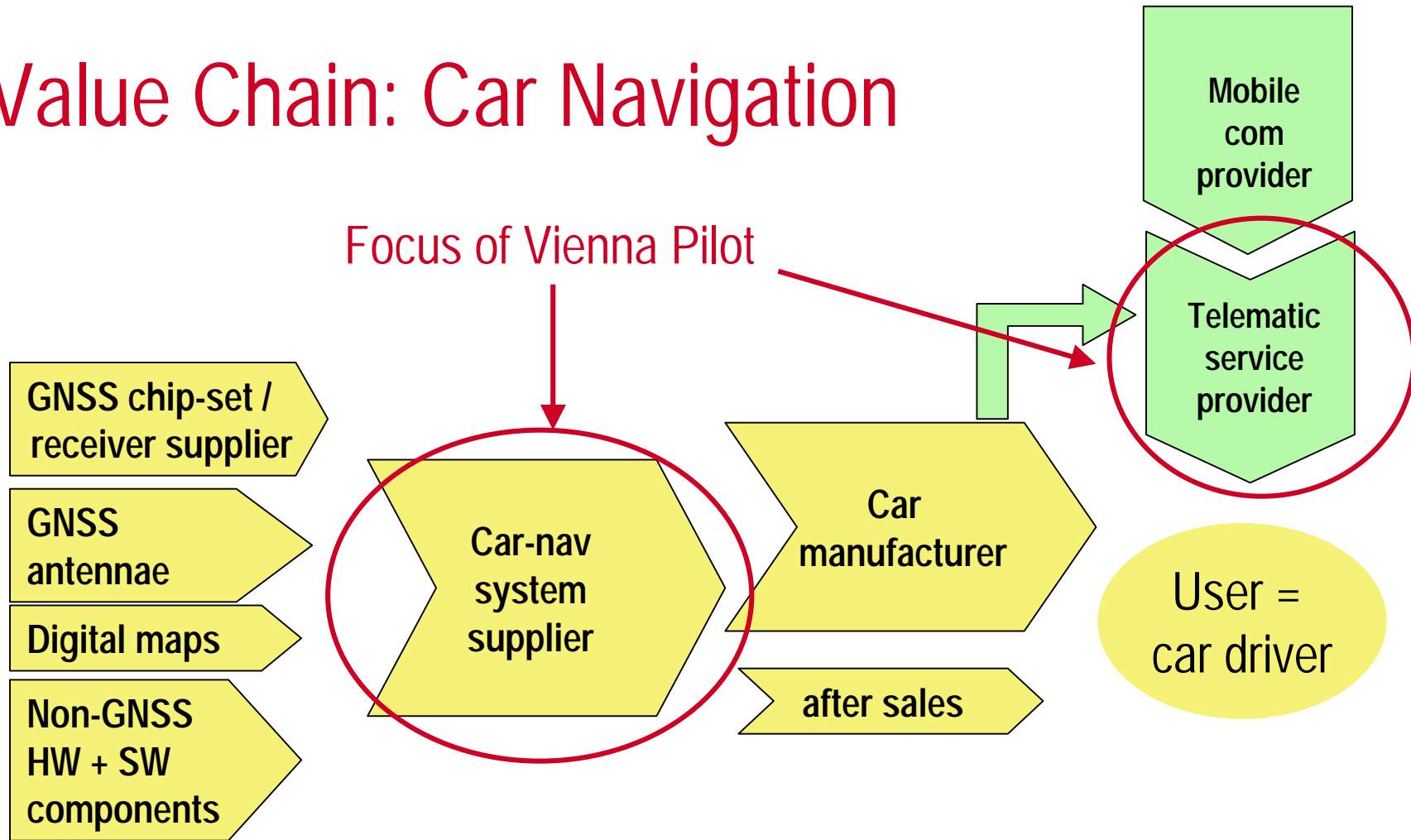
GPS / EGNOS / ...



GSM / GPRS / UMTS ...



















Value Chain: Car Navigation

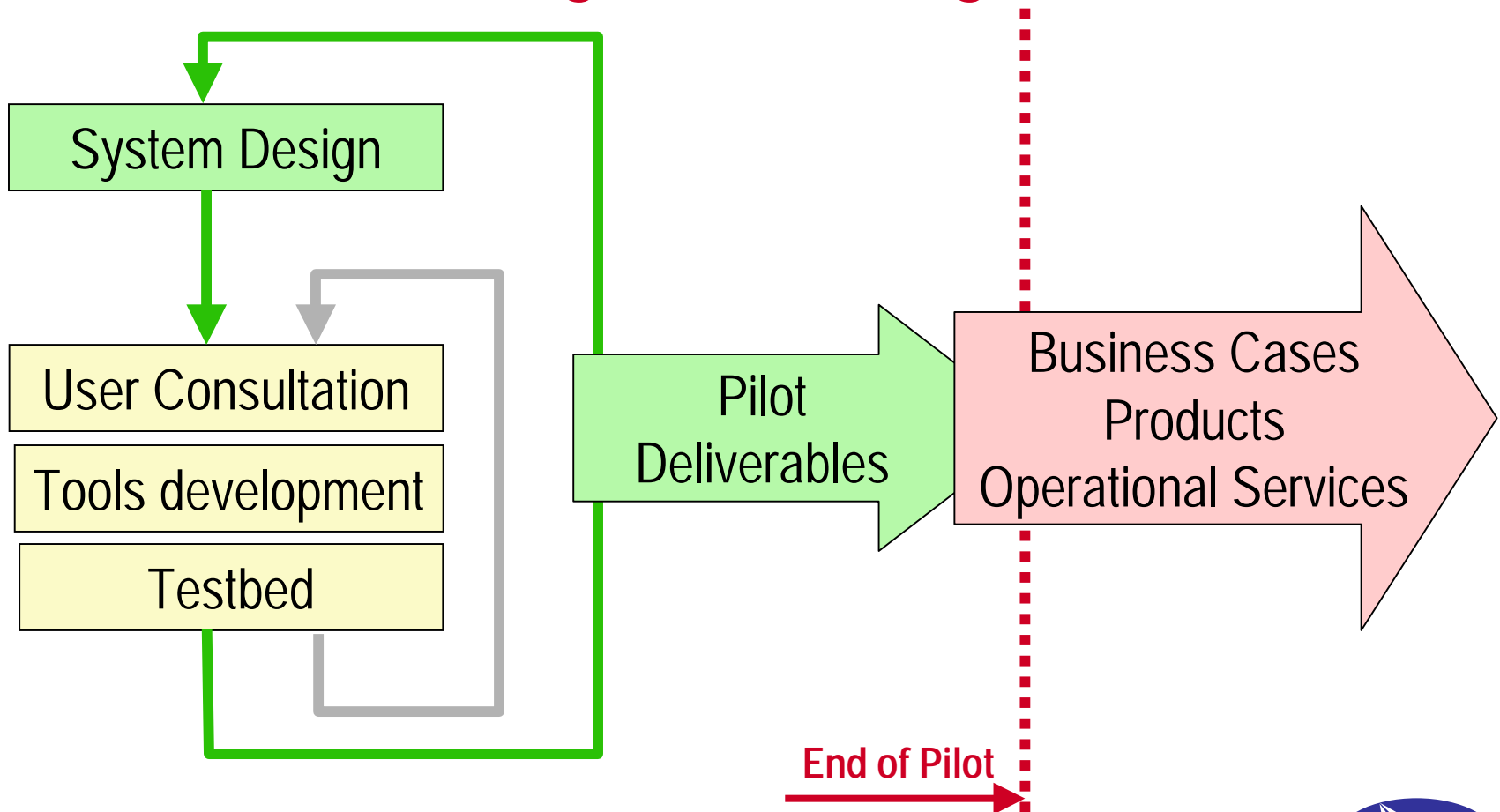


Source: Structural Analysis of the Satellite Navigation Application Segment
Technomar GmbH, November 2000

Participants, Work, Responsibilities

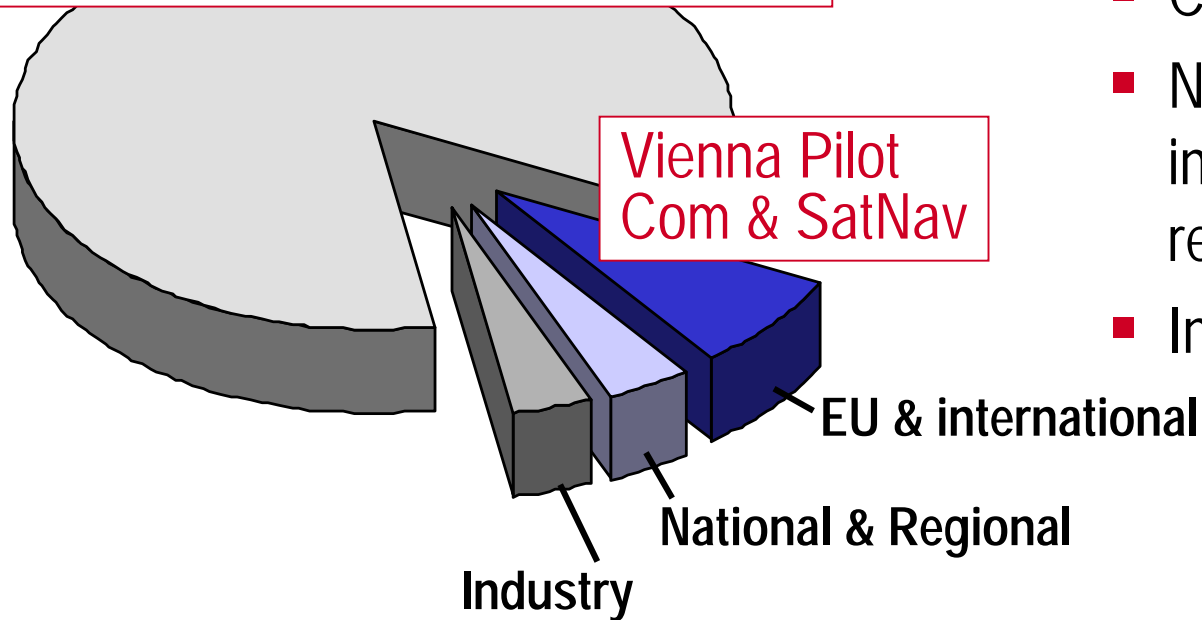
Type of Industry / Task	Equipment Manufacturer & Supplier	Navigation., Coms., Telematics Infrastructure Providers	GIS Experts and Data Producer	Corporate and public service providers	Users (drivers, passengers)
System design requirements					
Market observatory					
User consultation					
Tools /equipment development					
User tests / testbedding					

Programme Logic



Funding

Vienna Mobility Research Initiatives



- Following „Good practice“:
 - Competitive
 - National & international peer reviews
 - Incentives for industry

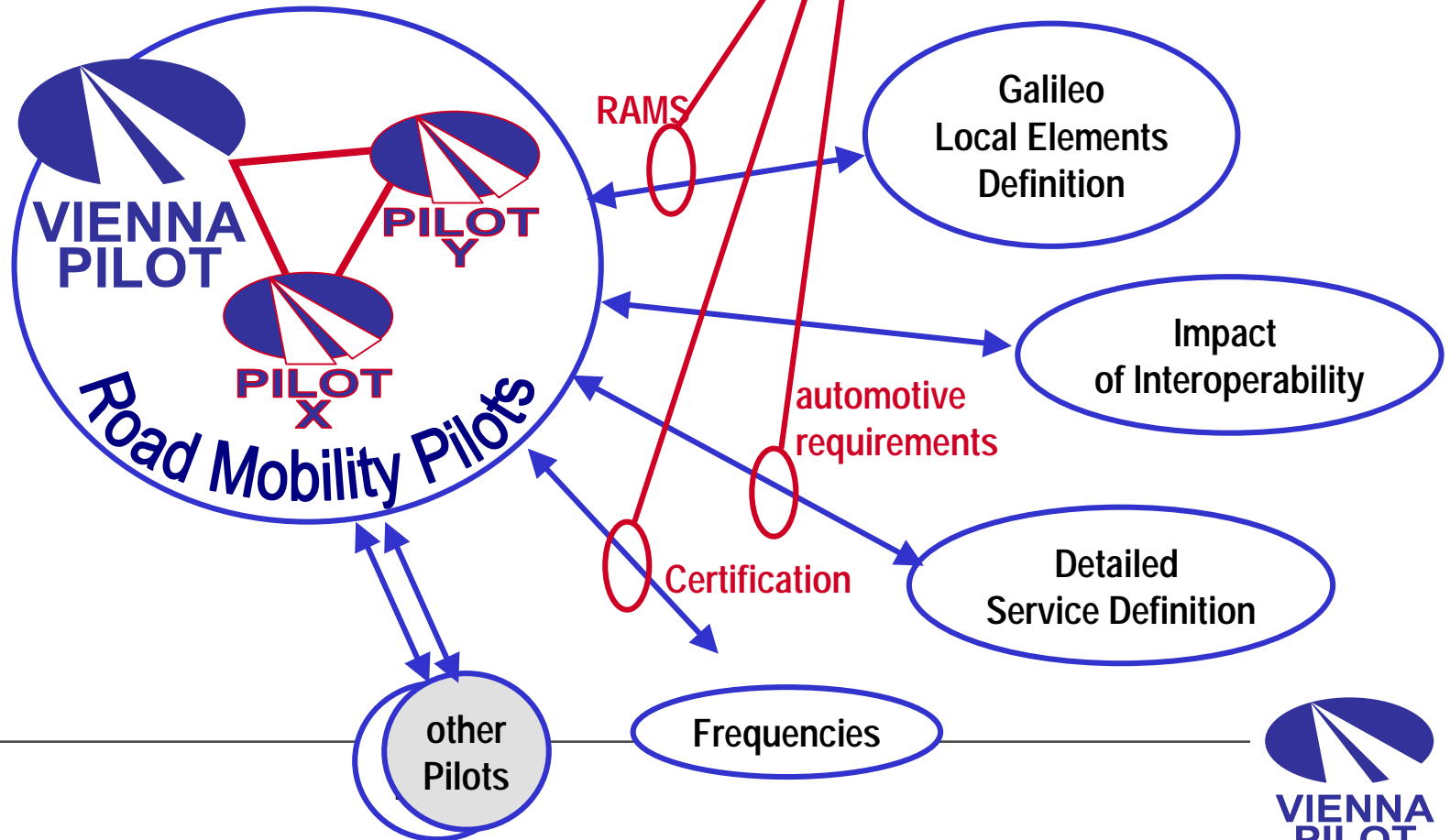
Growth 4th Call: Galileo



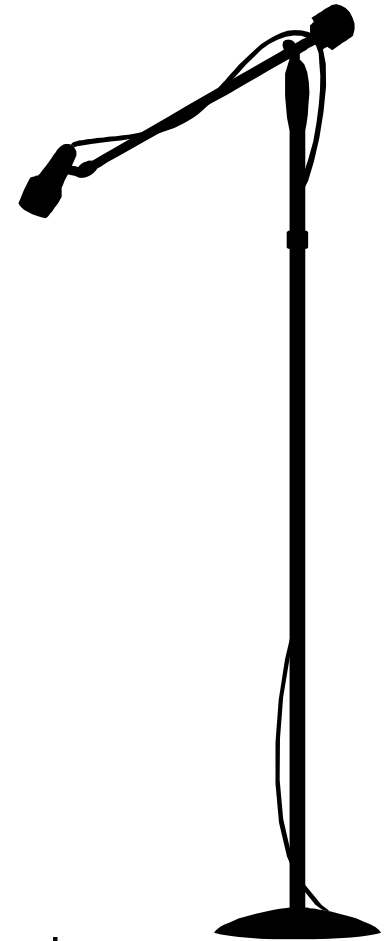
- Vienna Pilot will respond to task 2.3.3/9:
 - large scale pilot
 - road mobility
 - urban & intermodal personal mobility
- Invitation of international partnership

- Invitation to OREGIN Members

AUSTRIAN RESEARCH CENTERS
SEIBERSDORF
contributions



Thank you !




AUSTRIAN RESEARCH CENTERS
SEIBERSDORF

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