INFOMOBILITY AND INNOVATIVE ROAD WORKS APPROACH IN THE FLANDERS REGION

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This PRESENTATION

◆ A multi-modal mobility information architecture for Flanders

◆ A new innovative approach for important road works
  • Case: the international ring road of Antwerp
THE FLEMISH INFOMOBILITY ARCHITECTURE

- **A layered architecture for road traffic**
  1. Traffic information
  2. Incident management
  3. Traffic management
     - Parkings, traffic lights control systems, highway management, public transport control
  4. Management of Infrastructure related systems
     - parkings, loops, traffic lights, vehicles, infopanels

- **The Flemish Traffic control centres**
THE FLEMISH INFOMOBILITY ARCHITECTURE

◆ An integrated monitoring en real-time passenger information system
  • 3500 buses and trams
  • Urban, interurban and rural
  • Real-time info at busstations (6 in operation, 10 under construction), individual stops

![Diagram of the Flemish Infomobility Architecture]
THE INNOVATIVE ROAD WORK APPROACH

◆ Context: the ring road – the work

◆ Antwerp ring (120,000 vehicles a day/ link)
  • main regional road structure
  • the international highway between the Netherlands and France
  • Main entrance structure to the Antwerp harbour
THE INNOVATIVE ROAD WORK APPROACH

◆ Context: the ring road – the work

◆ The work: Rebuilding the entire roadstructure
  – 2 x 14 km
  – 48 connection links between the ring and the highways to Antwerp

◆ Expected impact? Reduction of capacity of 60% 
  – Congestion on the international highways to Antwerp
  – Non-accessibility of the city and the harbour
THE INNOVATIVE ROAD WORK APPROACH

◆ objectives

– guarantee an acceptable level of the functioning of the road system
– guarantee the multi-modal accessibility of the city and the harbour
– support to use of alternative modes
  • e.g. public transport and bicycle
– inform the users
– make them to accept the works
THE INNOVATIVE ROAD WORK APPROACH

Key elements of the integrated approach

LIMITING NUISANCE

GLOBAL (MULTI-MODAL) TRAFFIC CONCEPT

- Building phases
- Building methods

Optimization building phases – organisation of work area

Communication
- Information
- User acceptance

Internal communication structure

Contact centre

Technical group
- Design of measures
- Monitoring
- Evaluation

Deviations – signalisation
Traffic lights modifications

Coordination of all works in the region

Implementation of specific measures for each focus group

Users of the traffic system
- Public transport
- Bicycle
- Emergency services

Activity groups
- School
- Shop keepers
- Companies
THE INNOVATIVE ROAD WORK APPROACH

- The multi-modal concept: dedicated actions for each user of the transport system
- Extension, facilitating and promotion public transport (bus, tram, train)
- Supporting actions bicycle users
- Rerouting long distances traffic
- All local and destination traffic on an improved regional ringstructure (red singel)
THE INNOVATIVE ROAD WORK APPROACH

◆ Infomobility strategies and instruments – specific objectives
  - Internal communication and project management
  - Involve the users of the traffic system to raise their awareness of the need of the work and their acceptance of the work
  - Inform them how to behave: rerouting on local and regional level – other modes
THE INNOVATIVE ROAD WORK APPROACH

◆ Infomobility strategies and instruments
  – a wide intensive press campaign
    • Traditional press
    • Brochures
    • Local and national television
    • Specific radio emissions
THE INNOVATIVE ROAD WORK APPROACH

- Infomobility strategies and instruments

  coordination and efficient project management
  needs communication and information:
  - a interactive website for the main actors:
    road workers, public responsible, police services, emergency services, public transport operators, …
    - To exchange documents and (signalisation) plans
    - To inform about the phasing and the planned works (tables and maps)
  - A website for the direct affected user groups: communes, important enterprises to inform where works will be done in the region of Antwerp
THE INNOVATIVE ROAD WORK APPROACH

◆ Infomobility strategies and instruments
  – a special www.antwerken.be site for the general public:
    • General info on the works
    • Info on the multi-modal accessibility concept during the works
    • a dynamic route planner
    • multi-modal accessibility guides
    • Rerouting maps for long distance transport
THE INNOVATIVE ROAD WORK APPROACH

- Infomobility strategies and instruments
  - a special [www.antwerken.be](http://www.antwerken.be) site for the general public:
    - a dynamic route planner including week after week all road works in order to give the car drivers the exact info and best routing
THE INNOVATIVE ROAD WORK APPROACH

◆ Infomobility strategies and instruments
  – a special www.antwerken.be site for the general public
THE INNOVATIVE ROAD WORK APP

- Infomobility strategies and instruments
  - a special www.antwerken.be site for the general public:
    - multi-modal accessibility guides (car, public transport, bicycles)
    - to be down-loaded for each zone of the region
THE INNOVATIVE ROAD WORK APPROACH

◆ Infomobility strategies and instruments
  – a special www.antwerken.be site for the general public:
    • Rerouting maps for long distance transport
THE INNOVATIVE ROAD WORK APPROACH

◆ Infomobility strategies and instruments
  – The Flemish Traffic control centre Antwerp
    • Incident management
    • monitoring : evaluation of reroutings
    • Control of traffic lights on deviation routes
    • Integration of radio services : direct traffic info
    • Integration of police and emergency services : integrated operation
    • Real-time rerouting panels
THE INNOVATIVE ROAD WORK APPROACH

- Infomobility strategies and instruments
  - a limiting nuisance centre with dedicated Accessibility Managers

![Diagram showing the innovative road work approach with various stakeholders and processes.](image-url)
CONCLUSIONS

◆ In general: need for a multi-modal open architecture to cover all aspects of traffic and transport data management and information.

◆ An integrated and well balanced approach of important road works can reduce the negative impact in an important way:
  - eg. Antwerp ring road
    - No negative impact on the economic life of the city and the harbour
    - Positive reaction of the users: acceptance of the works
    - A model shift and a good organisation of reroutings on local and regional level (signalisation, optimisation of the vehicles lanes,) offered enough capacity to keep the city accessible

◆ Specific infomobility tools have an important contribution to inform, to make accept and to manage the process.