Assessing Pedestrians’ Quality Needs progress

Rob Methorst
Chair COST 358 PQN
Outline

- Introduction
- Why system approach
- Modelling the system
- Identification of requirements
- Assessment of current features
- Identification of deficits and remedies
- Decisions on interventions
- The PQN Final Report
- Some preliminary conclusions
Introduction

• Limited effect of traditional approaches
• ‘We can do better’ → COST 358
  – 20 countries, 49 research organisations, 70+ researchers
  – started November 2006, ends 2010
• 3 perspectives: Functionality, Perception, Durability and Future prospects
• Started with Country reports
• Progress reported in WALK21’s
Why system approach

- Systematic generative approaches not yet obvious to stakeholders
  - covers all options
  - offers best value for money
  - improves image
- Process model (on next slide)
1. Model of system

2. Identification of requirements

3. Assessment of current features

4. Identification of deficits and remedies

5. Decision on interventions

6. Implementation

7. Evaluation and re-adjustment

the policy development process

NO

YES

Pedestrian SYSTEM

PQN results 2009
1 Modelling the system

- Key question: what system are we talking about?
- 3 system layers:
  - input – system – output
  - 4 elements (see picture)
  - quality determinants, following NOA model (Needs, Opportunities, Abilities)
2 Identification of requirements

1. Identification of Needs & Abilities
   • deductive vs. inductive classifications
   • solution: a composite
   • Levels of needs & abilities: lifestyle, strategic, tactical, operational
   • basic needs: mobility, accessibility, safety, health

2. Identification of quality requirements
   • requirements \(\rightarrow\) opportunities
   • pre-conditional requirements
   • functional requirements for support of decisions re. Lifestyle, Strategic, Tactical and Operational decisions

3. Grouping and ranking of quality requirements
   • various typologies
   • multiple categorization to be scored by panels
3 Assessment of current features

• What *is* there?
  – (Country) Reports and statistics
  – Tackling stock through requirements checklists

• Criteria:
  – Comprehensiveness
  – Structure
  – Quality
4 Identification of deficits and remedies

1. Identification of problems
   • pedestrian performance, compliance & satisfaction

2. Identification of causal factors and mechanisms
   • chain of events: reasons behind the problem
   • sacrifice and reward mechanism

3. Identification of promising interventions
   • Cascade principle (see next slide)
   • Selection of most suitable interventions

4. Identification of Gaps in Knowledge and Good Practises
Cascade principle

The Fundament
**focus on: Policy Preconditions**

Lifestyle - Strategic level
**focus on: Travel Preconditions**

Tactical level
**focus on: Latent problem causes**

Operational level
**Focus on: traffic behaviour**
5 Decisions on interventions

1. Assessment of benefits, rewards and sacrifices
2. Formulation of recommendations
3. Formulation of action plan
The PQN Final report

Part 1 – Conceptual Framework
Part 2 – Research findings
  – Introduction
  – Country Reports
  – Working Group reports
  – Measuring Walking
  – Steps in policy process development
Part 3 – Policy Process Guidance
  – Management Summary
  – Glossary
Some preliminary conclusions

- Data availability is a problem
- Insight is generally somewhat biased
- Synergy with international projects is improving
- Success = academic work + creative ideas
- For more: see www.walkeurope.org
Colofon

Author:
Rob Methorst
Rijkswaterstaat Centre for Transport and Navigation
PO Box 5044
2600 GA Delft, The Netherlands

E-mail:
rob.methorst@rws.nl

Telephone:
+31 88 7982 453

Websites:
www.walkeurope.org
www.rijkswaterstaat.nl