THE TRAVEL-GUIDE PROJECT:

RECOMMENDATIONS FOR HUMAN-CENTRED PROVISION OF TRAFFIC INFORMATION

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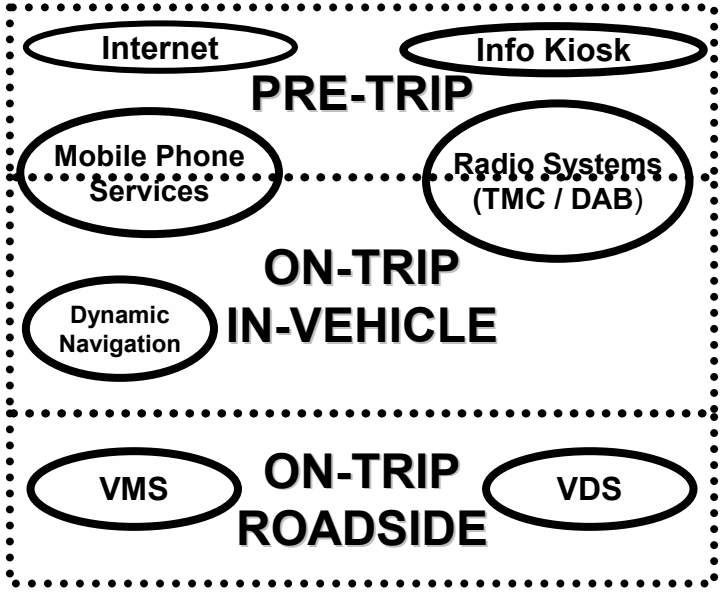
EC co-funded project:

Traveller and traffic information systems: Guidelines for the enhancement of integrated information provision services



HUMAN-CENTRED APPROACH

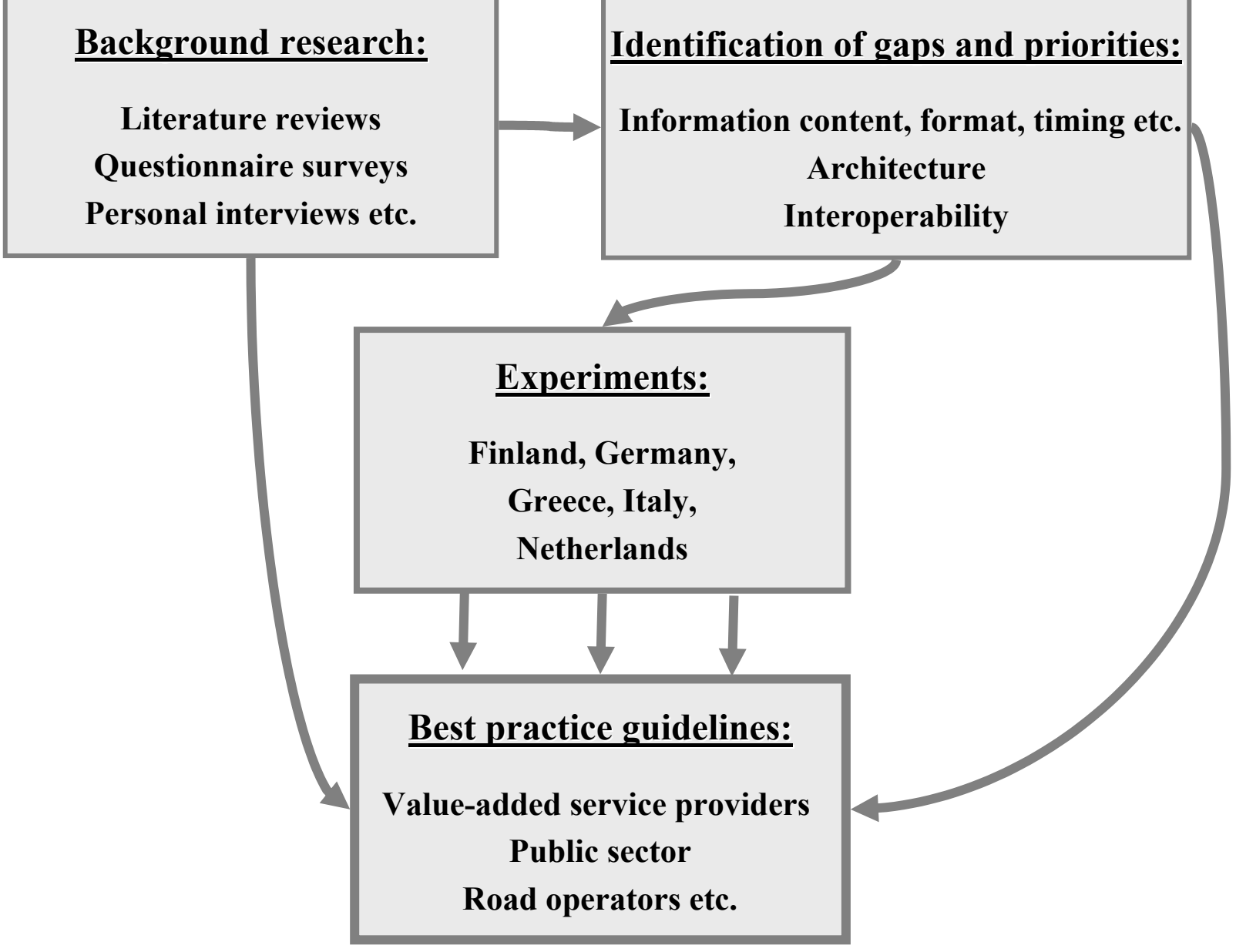
Information provision matched to
user needs and
human info processing resources

Two central dimensions:

- ➲ **Road user subgroups**
- ➲ **Information structure**

GOAL:

High information value
by low processing demands


Background research:
Literature reviews
Questionnaire surveys
Personal interviews etc.
Identification of gaps and priorities:
Information content, format, timing etc.
Architecture
Interoperability
Experiments:
Finland, Germany,
Greece, Italy,
Netherlands
Best practice guidelines:
Value-added service providers
Public sector
Road operators etc.

Tests performed:

- **University of Thessaloniki, Greece: Combination of on-trip (radio messages) and roadside information (VMS)**
- **IFADO, Germany: Situation Awareness in different traffic situations**
- **Research Centre Fiat, Italy: Traffic and parking information on demand**
- **Public Transport Company Florence, Italy: Information needs of drivers of flexible public transport services**
- **VTT, Finland: Integration of traffic sign information and in-vehicle information**
- **University of Stuttgart, Germany: Identification of optimal formats for different types of messages**
- **University of Groningen, Netherlands: Evaluation of different types of roadside information panels**

Case Study: Dutch - German traffic panel evaluation

Situation:

- **New Dynamic Route Information Panel** for Dutch city **The Hague**
- Artery sasonally used by **Dutch and German tourists**

Goal:

- Identification of **optimal DRIP layout**
- Key objective: **Comprehensibility for foreign road users**

Step 1:
Layout and icon evaluation by Dutch and German subject groups

Step 2:
Evaluation of **traffic safety effects** in a simulator study

Step 3:
Assessment of **driver compliance** to information provided by the new DRIP

Panel prefered by subjects in dr. simulator experiments.
None of the vehicle measures significant.

RECOMMENDATIONS DERIVED FROM STUDY:

- **A diagrammatic layout is preferable to a textual one.**
- **Use of colour coding should be kept to a minimum.**
- **Language use should be kept to a minimum.**
- **Characteristics of the target group have to be taken into account.**
- **Guiding principles: Parsimony and simplicity.**

Sommer, Brookhuis & Rama (2003) Providing traffic and route guidance information to tourists. I
In: Stephanidis & Jack (Eds.) Human-Computer-Interaction. Theory and Practice, Vol. 2, pp. 23 – 28. Mahwah: LEA.

Final result of TRAVEL-GUIDE studies:

- **62 recommendations for different aspects of human-centred provision of traffic information**

  System interface features
  Type of messages
  Content of messages
  Timing of messages
  Output mode
  etc.

- **Included in final report, available on request (sommer@ifado.de)**

- **Most relevant guidelines will be described in full paper**

End of part 1:

Thanks for your attention