

Traffic Control, Communications Systems and
Traveller Information for Public Transport and
Freight Logistics Conference

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Car Park Secure Payment Trial

EBSA / NOW! Innovations

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Introduction to sub-project

- **Mobile-based secure payment system for parking**
- **Web-based user portal with personalised content**
- **Web-based management and reporting system**

FOR MORE INFO...

www.goparknow.co.uk

Project Goals

- **Demonstrate the technical feasibility of a mobile, user-friendly, low-cost payment method for parking**
- **Demonstrate the technical feasibility of an advanced system to manage and enforce parking policies**
- **Demonstrate the potential to deliver more sustainable patterns of travel**

Description

- **Mobile parking trialled at one car park for one month in May/June 2008**
- **Trialled by RBC employees and University of Southampton volunteers**

Selected end-user features

- **General features**

- Real-time billing, unlimited multi-car parking, confirmations, reminders, warnings, financial limits, private and corporate accounts

- **Web self-administration features**

- Preference and limit settings, payments, reporting, help-desk

Selected administration features

- **General features**
 - Mobile parking, digital parking permit issuing, enforcement, penalty notices
- **Administration features**
 - Geographical management, tariff management, multi-operator management, CRM, operator and financial reporting, penalty follow-up

Technology

- **SMS / WAP / Web for end-user interface, possibility to add later RFID, NFC or any other current or future communication technology**
- **Web-based digital wallet**
- **Enforcement over GPRS / WiFi**
- **ASP-based**

Strengths

- **User friendliness (92.9% satisfaction)**
- **Relatively low end-user cost**
- **Low investment and maintenance cost due to very limited capital expenditures in hardware**
- **Speed of implementation**
- **Expandability to other purposes, such as public transport ticketing, Park&Ride, congestion charge, etc.**

Weaknesses

- **SMS system response time (93.6% in less than a minute) not fully satisfactory due to the SMS connectivity provider used in the trial (the mobile parking system itself showed no capacity constraints of any concern)**
 - > *The issue can and will be addressed before launching full-scale commercial operations*
- **WAP system response time when using WAP at times too low due to signal strength issues in the trial area**
 - > *Not a major problem in the global context*

Team/Resources

- **Sub-Project Co-ordination**
 - Transept Consulting Limited
- **Lead Partner**
 - Euro Baltic Software Alliance
- **Software Development**
 - NOW! Innovations

Current Status

- **Successfully implemented fully-functional trial system to schedule**
- **No major delays or issues although some problems in recruiting triallists in Reading**
- **System is ready for commercial deployment**

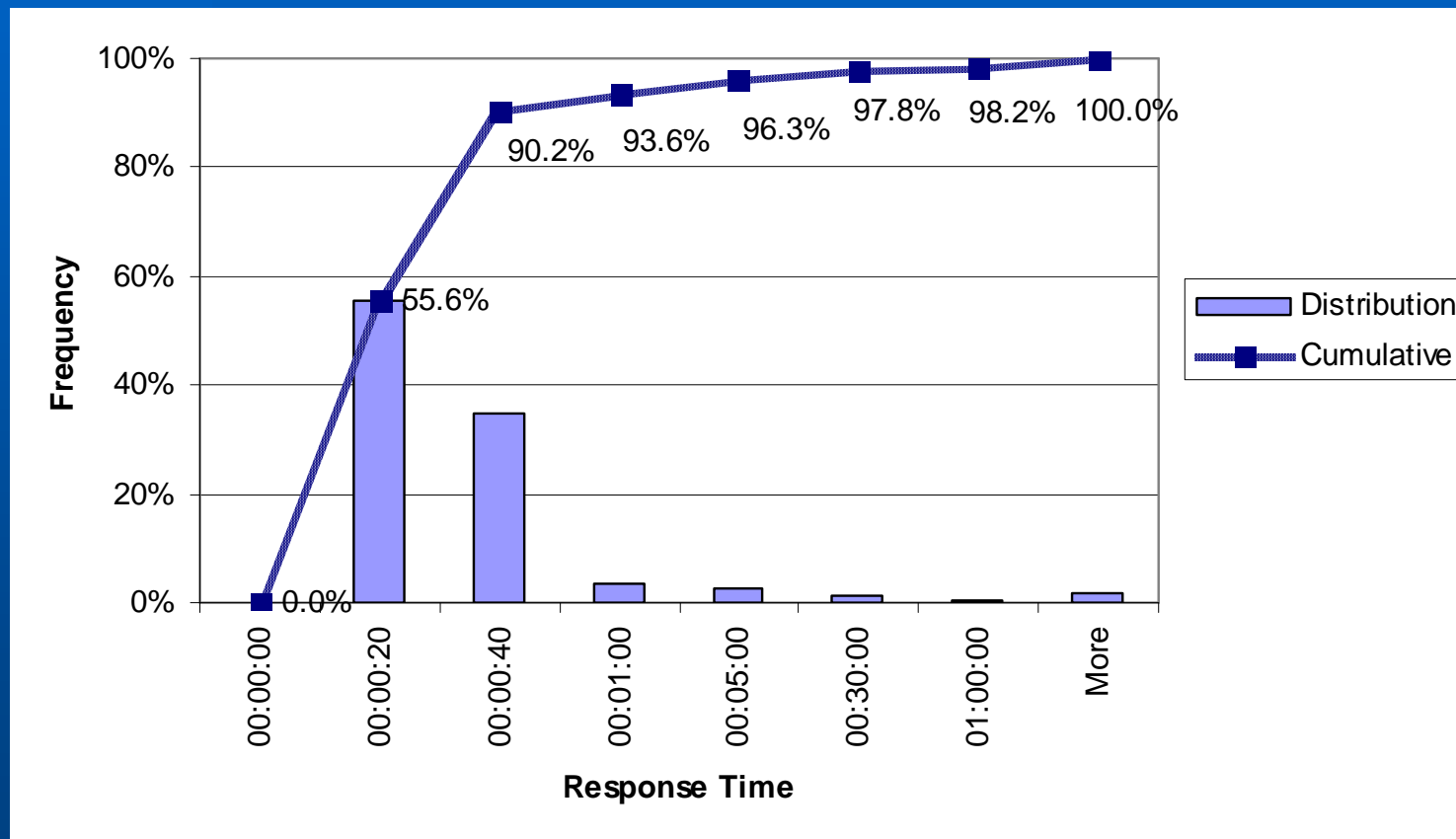
Evaluation

Prepared by TRG

Evaluation methodology

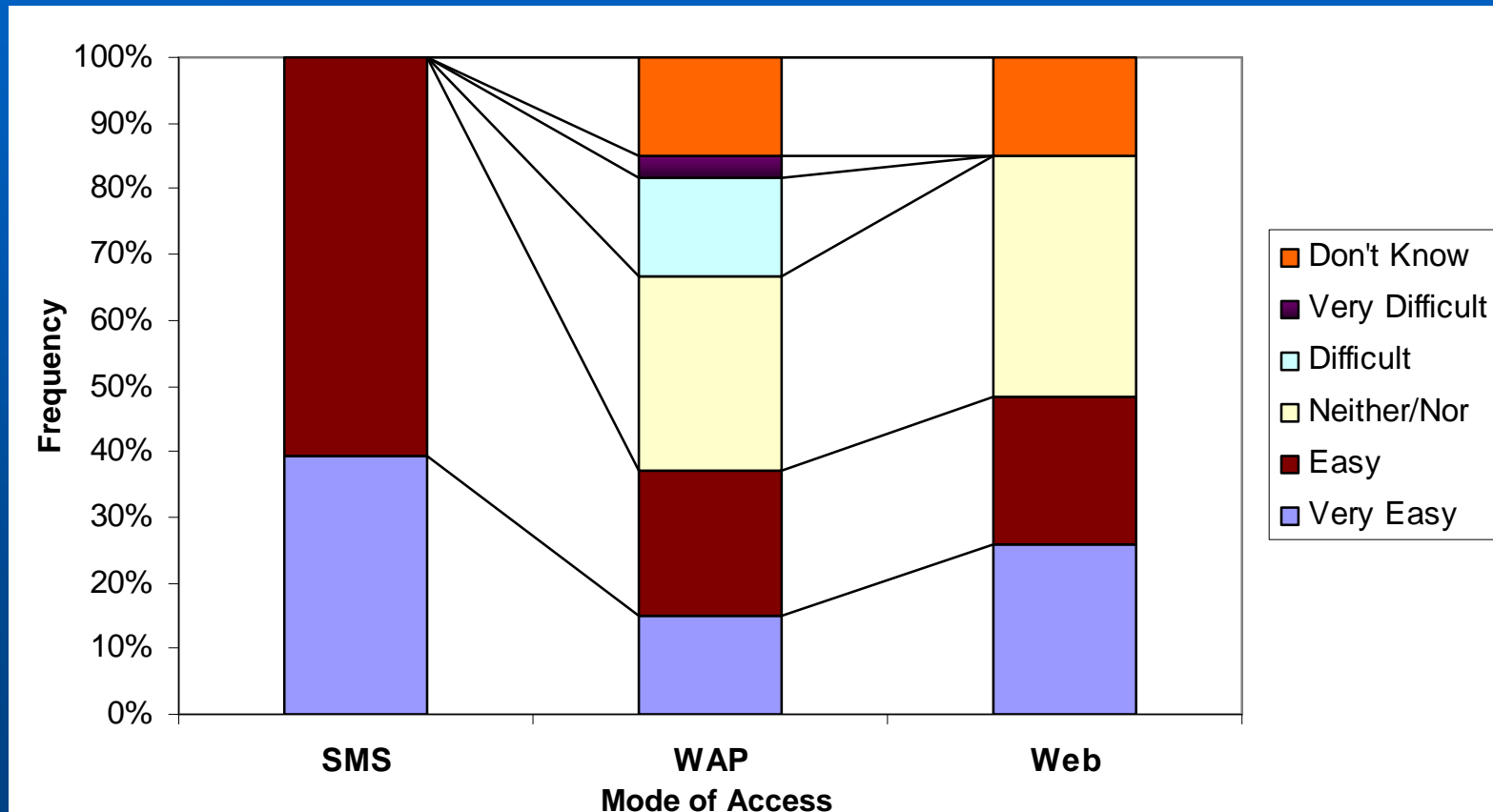
- **A combination of quantitative and qualitative methods has been used to evaluate the secure car park payment system**
 - **The quantitative analysis is focused on the evaluation of technical performance of the system (technical data analysis)**
 - **The qualitative investigation is more related to understanding user experiences and attitudes (questionnaire survey)**

Results(1)



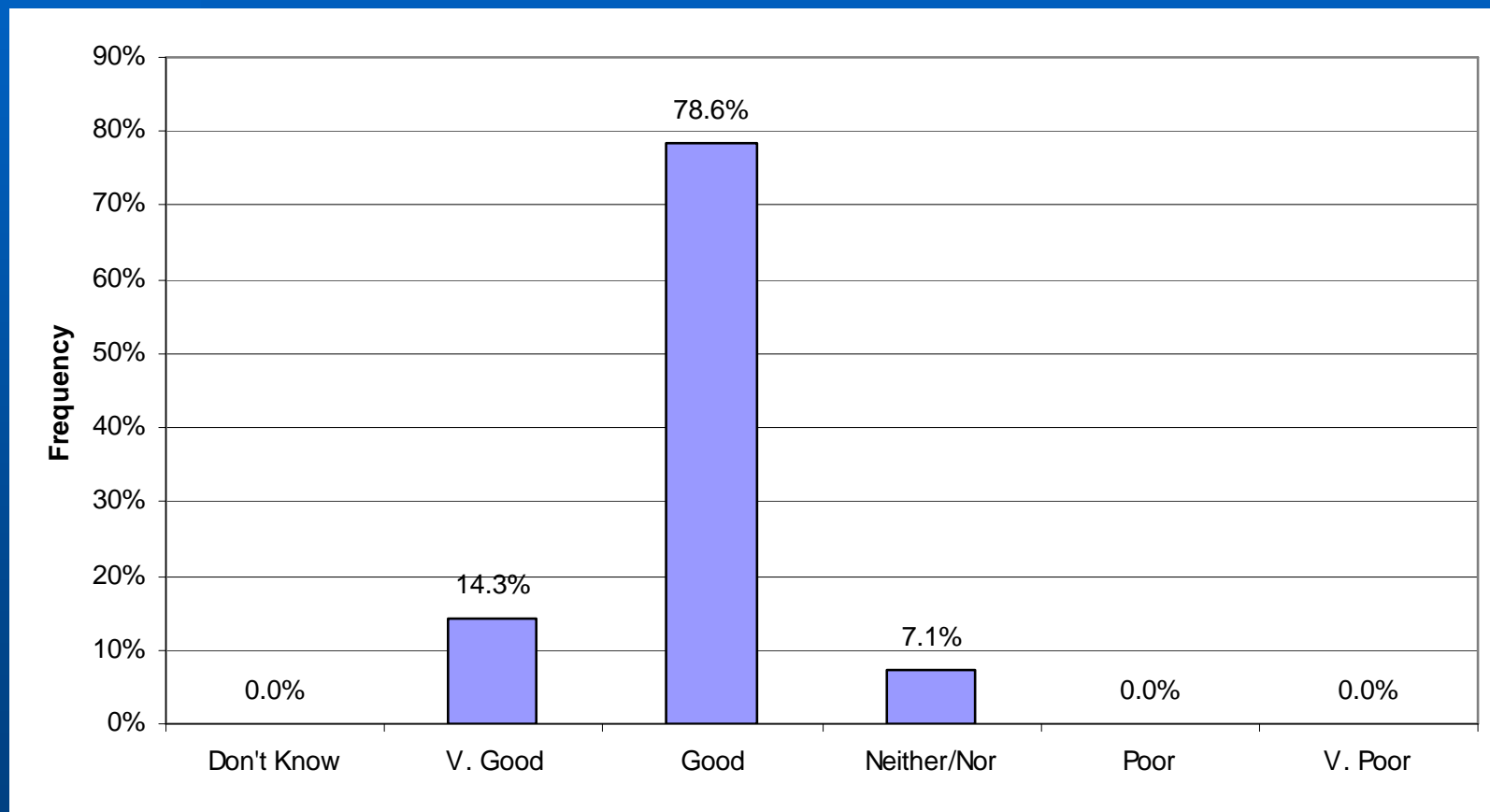
System response time during normal operation

Results(2)



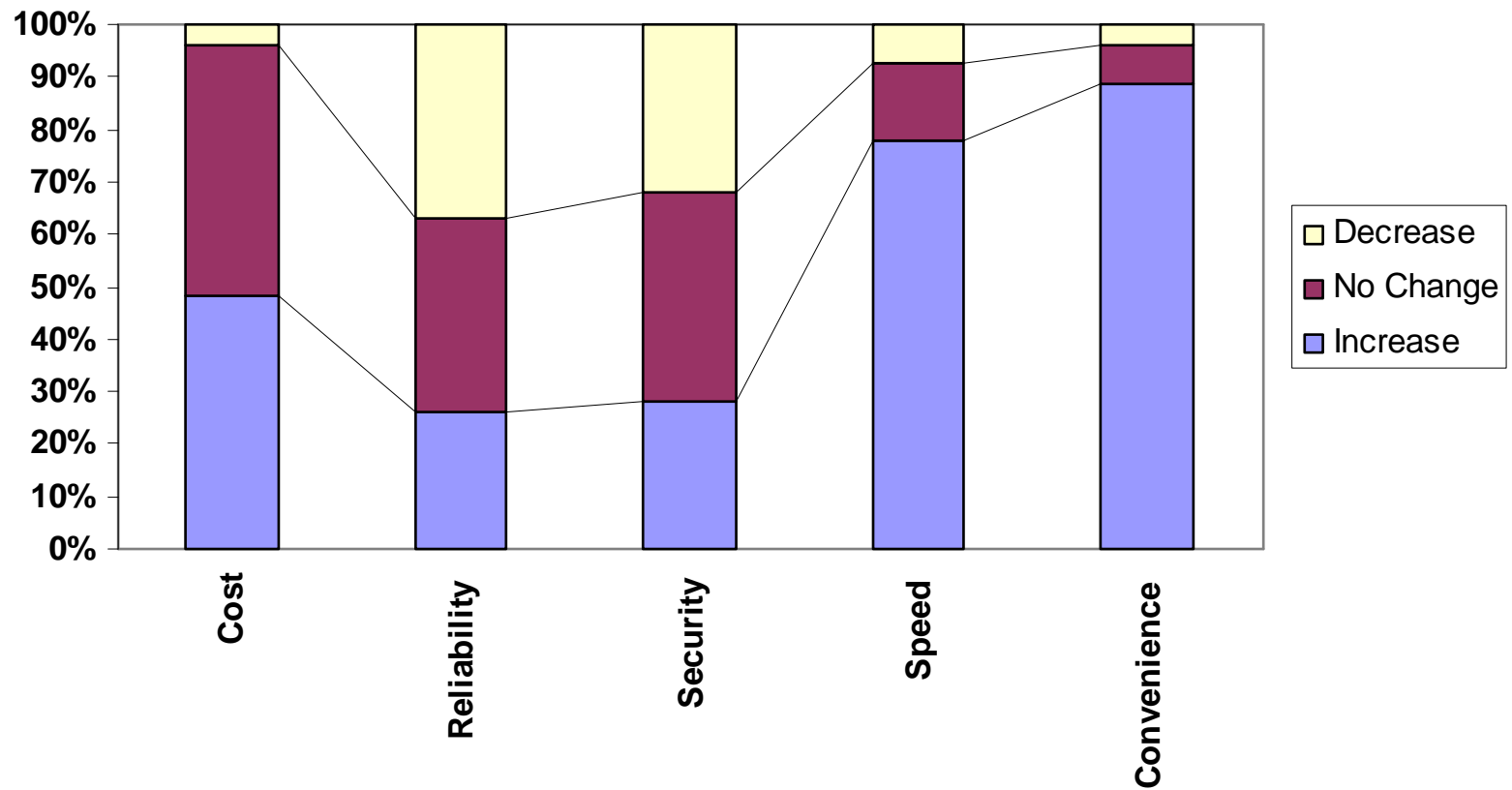
Ease of use

Results(3)



Overall experience with the trial

Results(4)



Perceived effects of the secure car park payment

Further information

- **Submit questions to:**

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