

Brabant in-car projects

SRE (Collaboration region Eindhoven)

About this Best Practice Case

By joining forces with governmental bodies, private companies and research institutions, the SRE (Collaboration region Eindhoven) developed three projects that focus on innovative and practical ITS-applications in traffic to optimize the accessibility and safety in the region. Three consequent tenders were submitted: Brabant in-car I, II and III. Although each tender's focus was on a different kind of ITS application, the tender process – procurement with an open request for subsidy – was similar for each project.

Title: Brabant in-car appliances

Cluster Topic: ITS

Country: Netherlands

Procuring Authority: SRE

Procedure: Request for subsidy (procurement of R&D)

Brabant in-car projects I, II and III

Key Points

- **The project started with a wide and open view for creating innovative solutions on the mobility problem and ended with well-developed and applicable technologies.**
- **By doing three consecutive projects, Brabant in-car helped to slowly converge to a proven and evaluated solution.**
- **A wide range of involved parties and large amounts of technologies were developed.**
- **Raising low expectations with policy makers helped in getting the first subsidies.**

The Procurement Objectives

Brief description

The SRE (Samenwerkingsverband Regio Eindhoven, lit. Collaboration region Eindhoven) initiates and stimulates cooperation between 21 regional municipalities and looks after the regional interests on a provincial and national level. By joining forces with governmental bodies, private companies and research institutions, the SRE specializes in teamwork for realizing successful projects. The Brabant in-car projects of the SRE focus on innovative and practical ITS-applications in traffic, in the goal of optimizing accessibility and safety in the region. Three consequent tenders were submitted: Brabant in-car I, II and III. Although each tender's focus was on a different kind of ITS application, the tender process – an open request for subsidy – was similar for each project.

Relating to the content, Brabant in-car I concentrated on testing interactive navigation systems in practice. Using 150 TomTom navigation systems, cars could interact with each other, and as a consequence, traffic jams could be easily located during rush hours. Brabant in-car II took on a wider focus to create innovative solutions on the more general accessibility problem. Multiple solutions like in-car apps and FM communication networks were created. Some were effective and some were not. The program succeeded in bringing innovative solutions on the market. Brabant in-car III had a similar open approach for creating innovative ideas, but took on a very practical case to solve the A67's highway congestion problems.

Reasons for this procurement

The South-Eastern region of the Brabant province is a region well-known for its High Tech Systems, automotive industry and logistics in the Netherlands. Highways form a key element in the connection between the harbours of Antwerp and Rotterdam on the one side, and the European hinterland on the other. The highway A67, which the Brabant in-car project III focussed on, is a crucial highway within this network. It has a lot of congestion despite upgrades of the highway and roads around Eindhoven. One of the main issues on the A67 is the high percentage of freight traffic, merging with the regular traffic in rush hours, causing traffic jams and accidents. The

problem is aggravated due the highway's many short entrance and exit ramps, which cause even more delays and dangerous situations.

The goal of SRE was to find solutions for quality of life, accessibility and safety issues with upcoming technologies within the field of ITS. This program started to treat the gap between public and private companies. Public authorities have ambitions and goals for realizing a higher amount of safety and connectivity, whereas the market is able to find solutions and ideas to solve these issues. SRE speaks the language of both worlds and connected the public and private sectors to create ITS end-solutions for dealing with transport issues.

Innovative Aspects

The Brabant in-car projects had a very open character to allow maximum flexibility for the market so they could develop a wide range of solutions. By not raising high expectations with all financing public bodies, this open character worked out well. The project (especially Brabant in-car I) would not solve any big problems, but only was a first step in creating new technologies and possible starting solutions on mobility issues. The relatively low budget of Brabant in-car I (around 0.6 m€) also made it easy to receive the first subsidy. The consequent in-car projects build forth on the previous ones, had higher budgets (5.0 m€ and 7.8 m€), but still hold an innovative mindset.

The Procurement Process

Each procurement (I, II and III) had a time span of about two years and followed a standard procurement process. The framework agreement and award criterion are the special elements in this case, since small, medium and large companies, research institutes and public authorities had to be combined. Next to that, the process had to be of an open character to support innovative ideas in the first two procurement processes, and merge into solutions for the last procurement.

Procurement Procedure

For each Brabant in-car project, individual subsidy programs were created. The procedure focused on giving possible candidates clear guidelines about the specific needs and criteria in the contract. This enhanced the chance of receiving a subsidy and decreased the amount of effort possible candidates had to make. A standard procedure is used, containing the following steps:

1. Opening tender (open for project proposals)
2. Possibility to ask questions about the process
3. Subscription projects
4. Presentation of the proposal (optional, for clarifying purposes only)
5. Assessment of proposals
6. Subsidy grant

Key Reasons for using the framework agreement

This procedure is the formal and most easy way of granting a subsidy. Companies can bring in different kinds of solutions and thus have a very innovative character, which is a key element of this project.

The framework agreement in Short

The available financial resources are given by the Ministry of Infrastructure & Environment, the Province of Noord-Brabant and the SRE. The subsidies fall into the much larger 'Beter Benutten' programme of the Dutch government. In the 'Beter Benutten' ('Optimising Use') programme, the Dutch government, regions and businesses are working together to improve road, waterway and railway accessibility in the busiest regions. The Brabant in-car programs are a clear example of such projects.

Though no strict specifications were given, guidelines of a deliverable product were provided. Examples are measures for realising a modal shift, or measures that ensure an optimised planning for (truck) traffic, alternate routing or different travel times.

For Brabant in-car III specific solutions were asked for the A67, in which they had to find a solution for the mobility issues by using ITS applications. Measures taken may not be at the expense of the total network effectiveness. Initiators grant their contribution in the form of a subsidy to stimulate the collaboration between companies and research institutions. The granted subsidy depends on the size of the participating company (smaller companies receive a larger share (45%) of subsidy than medium sized (35%) or large undertakings (25%). Additional subsidy of 15% was offered if:

- The project realised a collaboration between at least two independent undertakings.
- None of the undertakings takes more than 70% of total subsidy budget.
- The project contains at least one small or medium sized undertaking OR a cross-border collaboration (within EU Member States) OR collaboration between an undertaking and a research institute.

The contract award criterion

This section contains the award criteria for Brabant in-car III. Each submission for the in-car III project is judged by five individual representatives of the Ministry of Infrastructure and Environment, the Province of Noord-Brabant, Eindhoven University of Technology, Van den Broek Logistics B.V. and the SRE. This team assesses whether the submitted proposals fulfil all mandatory requirements. Afterwards, the projects are prioritized based on eight criteria which are rated on a five-point scale. The total score is determined by multiplying each criterion with a weight. Parties with the highest score are taken into consideration for a subsidy.

The eight criteria on which the projects are rated are:

- Provable resolving power
- Scalability
- Transferability
- Continuously
- User-friendliness
- Cost/benefit of subsidy
- Teamwork (Triple Helix)
- Communication about the project.

Pros and Cons of this procedure

Standard and proven procedure of the procurement. Award criteria were clear and rated by many different parties. New technologies were tested in previous phases, so converging in following phases was done with tested and evaluated methods and parties.

Since the project and subsidies were small, no large or worldwide applicable solution could be found. Neither could the traffic situation in the province be improved. To create actual solutions for traffic management in the area (and beyond), more time and knowledge is needed.

Key Results

The first Brabant in-car project created many different solutions and technologies. The following projects took the best practices of each foregoing project and continued to develop the best solutions. Different consortia made different things such as delivering data, building apps, in-car hardware. In the end, these had to be combined into one product. But the individual projects were also of high value which resulted in concrete practices and steps for a follow-up. As a key result, a large amount of technologies are designed, tested and evaluated. Some start-ups were created and were able to grow. In the beginning, many solutions were given, and the end of the final project the best combinations of technologies are further being developed.

Key Lessons Learnt

By starting small and with an open goal, many innovative solutions can be created. The technologies which prove to be best can be further developed in later projects.

By having many different parties involved, each creating their own solutions, it was easy to define new concrete procurement goals since a lot of experience and expertise from practice was gathered.

Creating low expectations with policy makers helped in getting the subsidies.

The combination of public and private bodies, including research institutions created innovative and workable solutions.

References and Further Information:

References

<http://www.beterbenutten.nl/assets/upload/files/Samenvatting%20Brabant%20in-car%20III%20eindrapportage.pdf>

<http://www.beterbenutten.nl/brabant-in-car-iii>