

# **Good Practice Lessons from the Urban Traffic Project, Denmark**

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By Professor Dr. Bent Flyvbjerg, Aalborg University, Denmark

## **Abstract**

In 1990, as the first government in the world, the Danish Cabinet approved a national action plan for sustainable transport. In 1992, as part of the implementation of this plan, the Urban Traffic Project was set up with the EPA. The policy situation was one of a state agency trying to motivate urban municipalities to work with T&E (transport and environment) integration, i.e. integration of concerns for safety, energy, air quality, noise etc. in urban traffic planning. 50 major urban municipalities participated in the project. The most important lessons to be learned from the project are: (1) With a fairly modest investment (DKK 150 million in seed money) it has been possible on a voluntary basis to motivate the majority of urban municipalities to work with T&E integration. (2) The top motivating factor for municipalities to participate was a desire for organisational and professional learning. (3) The use of a concrete, action-oriented approach with a high degree of actual project implementation was key to the success of the Urban Traffic Project. (4) So was a focus on the development of inter-organisational skills, cutting across administrative boundaries and across the administrative-political and public-private divides. (5) Finally, professional support and the establishment of fora for mutual learning were also crucial to the success of the project. The presentation will also cover barriers to the success of the Urban Traffic Project.

## **Context and Objectives of the Urban Traffic Project**

In 1990, as the first government in the world, the Danish Cabinet approved a national T&E action plan for sustainable transport. The action plan was one of several national plans, each covering an important sector of the economy, and each stimulated by the publication in 1987 of the so-called Brundtland report.

In 1992, as part of the implementation of the national T&E action plan, the Urban Traffic Project was set up with the Danish EPA. The objectives of the project were four-fold:

- To follow up on the national T&E action plan.
- To integrate environmental concerns in urban traffic planning.
- To support implementation of local T&E action plans in urban municipalities.
- To initiate concrete projects.

The policy situation for the Urban Traffic Project was one of a state agency trying to motivate urban municipalities to work with T&E integration.

### **Project Design**

The budget for the Urban Traffic Project was DKK 150 million (app. EUR 20 million). The budget was used as seed money aimed at developing and implementing T&E plans and projects in urban municipalities. The money was earmarked for actual project implementation. In order to obtain financial support from the Urban Traffic Project, municipalities would have to (1) Develop an integrated T&E action plan for the whole municipality including specific, implementable projects and (2) Come up with a minimum of 50 percent of the total financing need for projects supported for implementation by the Urban Traffic Project.

In addition to financial support, the Urban Traffic Project also included three forms of professional support: (1) Printed guidelines for T&E integration developed by the EPA. (2) The opportunity for municipalities to collaborate with the EPA in developing their plans and projects. (3) The establishment of learning fora/seminars where municipalities would meet and learn from each other.

The output resulting from this financial and professional input was a T&E action plan for each municipality participating in the Urban Traffic Project and one or more implemented T&E projects in the municipality. The plans covered the following six environmental factors, "seen as a whole": Safety, energy, air quality, noise, barrier effect and visual environment. Projects focused on achieving positive effects on one or more of these factors.

Finally, the Urban Traffic Project comprised a post-evaluation of plans, projects and their effects, emphasising T&E integration.

## **Project Scope**

Before implementation of the Urban Traffic Project, in 1992, only one urban municipality in Denmark had a T&E action plan. After implementation, in 1998, 58 urban municipalities had T&E action plans, corresponding to two thirds of all urban municipalities in Denmark. Of these, 85 percent had received financial support from the Urban Traffic Project resulting in 50 supported T&E action plans.

136 T&E projects received financial support for implementation. In addition to the DKK 150 million spent on projects by the Urban Traffic Project, municipalities spent another estimated DKK 575 million on these and other projects in the T&E action plans, resulting in total spending on these plans until 1998 of app. DKK 725 million. The total budget for all projects in all supported municipalities is app. DKK 2,150 million with project implementation running until 2010.

Comparisons with a control group of urban municipalities show that municipalities participating in the Urban Traffic Project spend three times as much on T&E integration as non-participating municipalities.

## **Environmental Outcomes**

In the post-evaluation of the Urban Traffic Project, the following environmental outcomes were recorded (figures apply to projects with the stated objective and with available post-evaluation data):

- 78% reduction in traffic accidents with injury.
- 10-15% reduction in traffic volumes and speed.
- 15-20% reduction in CO<sub>2</sub>, NO<sub>X</sub> and HC.
- 1% reduction in particles.
- Large improvements in barrier effect and visual environment (qualitative assessment).

No reliable figures were available regarding effects on noise. It should be mentioned that the availability of post-evaluation data was highly uneven across municipalities and projects. Furthermore, even where data was available, frequently municipalities had measured environmental outcomes in ways where they could only be assessed within projects. If improvements had been achieved by moving problems outside the project boundaries (within or outside the municipality), this may therefore not have showed up in the post-evaluation.

## **Key Lessons**

The experience with the Urban Traffic Project as regards T&E policy integration can be summarised in five key lessons.

### **Lesson no. 1: T&E integration is possible**

In the specific policy-situation of a state agency trying to motivate urban municipalities to integrate environment into local transport planning, with a fairly modest investment (DKK 150 million in seed money) it has been possible on a voluntary basis to motivate two-thirds of all urban municipalities to develop action plans for the integration of transport and environment; of these municipalities 85 percent received financial support from the Urban Traffic Project. T&E integration was placed high on the policy agendas within municipalities, but T&E integration was not limited to policy statements and plans. Integration was backed by actual expenditures and implementation of several hundred T&E projects, as described above under "Project Scope".

### **Lesson no. 2: Urban municipalities are highly motivated to learn about T&E integration**

Perhaps surprisingly, the top motivating factor for municipalities to participate in the Urban Traffic Project was not the economic incentives provided, although such incentives were also important, but a desire for organisational and professional learning in relation to transport and environment in the municipality. This explains why so many municipalities decided to participate in the project, despite the relatively limited amount of funds available.

### **Lesson no. 3: Concrete project implementation is key to success**

Policy statements and plans are necessary means to achieve T&E policy integration. But they carry only so far and may backfire if they come to be seen as empty rhetoric which is not backed by actual project implementation. The use of a concrete, action-oriented approach with a high degree of project implementation was key to the success of the Urban Traffic Project. 335 projects, or 25 percent of all planned projects, had been or were being implemented at the time of post-evaluation in 1998. Two thirds of municipalities followed the planned schedule for project implementation, which runs until 2010. Municipal planners appreciated the implementation-oriented approach because it gave them the opportunity to produce real-life changes instead of paper plans. Local politicians liked the approach because it gave them the opportunity to point to specific projects and tell voters, "We did this during our term in office". Subsidies from the Urban Traffic Project to specific municipal projects mattered as an economic incentive to getting project implementation going at a high rate.

#### **Lesson no. 4: A focus on inter-organisational skills is key to success**

In those municipalities where stakeholders were able to collaborate across administrative boundaries and across the administrative-political and public-private divides, T&E integration was more pronounced and more likely to cover the full gamut of environmental effects, including energy consumption, greenhouse gasses and air quality. Many municipalities did not get this far but stayed with a more conventional approach focused on traffic safety handled by a more conventional organisational set-up. Since this set-up is generally geared to construction this resulted in a large amount of construction projects: Two thirds of all projects were construction projects, and two thirds of these projects were road and bike path projects. Thus the emphasis on non-construction oriented T&E integration, for instance via campaigns or new technology, was relatively weak. Here there is substantial scope for further improvement. A substantial degree of inertia must be expected because deeply ingrained professional and organisational habits are at stake.

#### **Lesson no. 5: Provision of learning fora and professional support are crucial**

Due to the high motivation to learn about T&E integration identified under lesson no. 2 above, it is crucial to provide the fora and professional support which facilitate learning. T&E integration is still a relatively new and unknown activity in many municipalities with many planners and politicians on the steep part of the learning curve. Guidelines for how to plan for and implement T&E integration are therefore necessary as are professional support and sparring. Furthermore, municipalities are excellent at learning from each others' experience. It is therefore crucial to establish fora where municipalities may meet and exchange their experiences with T&E integration. The state agency may assist municipalities by acting as facilitator in such meetings.

#### **Main Barriers to Good Practice**

Briefly, the following barriers were found to be particularly limiting to the establishment of good practice regarding T&E integration within the Urban Traffic Project:

- *Lack of long-term political and institutional ownership of T&E action plan and projects in some municipalities.* Consequence: T&E integration tends to become a one-time activity losing its significance over time. Antidote: Integration of T&E plans and projects with the existing, on-going municipal planning system.
- *Dominance of "construction mentality"(seeing construction as the solution to most problems).* Consequence: Environmental projects tend to become

construction projects, but it is often not possible to construct environmental problems away. Antidote: More room for measures involving changes in behaviour, pricing, technology, regulations, etc.

- *Competition between municipalities regarding auto accessibility.* Consequence: Stalemate, waiting for neighbouring municipalities to make changes first. Antidote: Make changes in groups of neighbouring municipalities at the same time.
- *Lack of mutual respect between local and national government.* Consequence: Lack of seriousness in collaboration. Antidote: More clearly defined roles with each level doing its part.

## **Summary and Conclusions**

The most important lessons from the Urban Traffic Project are: (1) With a fairly modest investment (DKK 150 million in seed money) it has been possible on a voluntary basis to motivate the majority of urban municipalities in Denmark to work with T&E integration. (2) The top motivating factor for municipalities to participate was a desire for organisational and professional learning. (3) The use of a concrete, action-oriented approach with a high degree of actual project implementation was key to the success of the Urban Traffic Project. (4) So was a focus on the development of inter-organisational skills, cutting across administrative boundaries and across the administrative-political and public-private divides. (5) Finally, professional support and the establishment of fora for mutual learning were also crucial to the success of the project.

Main barriers to the success of the project were: (1) An uneven degree of political and institutional ownership of T&E action plans and projects across municipalities. (2) Dominance of a "construction mentality" in many municipalities. (3) Competition between municipalities. (4) Lack of mutual respect between local and national government.

In conclusion, the Urban Traffic Project has been highly successful in tapping into and supporting a desire in urban municipalities to learn about T&E integration and on this basis to achieve, over a short period of time and with moderate investments, a high level of activity and political priority regarding the production of T&E action plans and the actual implementation of T&E projects in urban municipalities. The project has had medium success with establishing long-term political and institutional ownership of T&E action plans and projects in municipalities. Finally, the project has had least success in

transforming the "construction mentality" found in a majority of municipalities, according to which environmental projects are conceived of as construction projects, to a mode of thought which also emphasises behavioural change, the price mechanism, new technology and changed laws and regulations as means to achieve environmental improvements in the transport sector.

### **Further Readings**

The following three reports about the Urban Traffic Project were published by the Environmental Protection Agency, Copenhagen:

*Evaluering af Trafik- og Miljøpuljen 1992-1995: Hovedrapport* (Evaluation of the Fund for Traffic and Environment 1992-1995: Main Report), with a summary in English, 1998.

*Evaluering af Trafik- og Miljøpuljen 1992-1995: Eksempler* (Evaluation of the Fund for Traffic and Environment 1992-1995: Case Studies), 1998.

*Evaluering af Miljøtrafikugen 2000* (Evaluation of the Environment-and-Traffic Week 2000), Miljønyt, no. 57, with a summary in English, 2000.