



Grant agreement no. EIE/06/025/SI2.444657

**ECHO ACTION**  
**Energy-Conscious Households in ACTION**

Intelligent Energy – Europe (IEE)

# Data on users of the car pooling and ride sharing system

Period covered: November 2006 – November 2008

Date of preparation: November 2008

Start date of the project: November 2006      Duration: 30 months

End date of the action: April 2009

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# 1. Final report: Data on users of the car pooling and ride sharing system

## 1.1 Objectives

ECHO ACTION aims at creating a model of active and voluntary involvement of families, local suppliers of energy technologies/services and financial institutes, co-ordinated by the local energy agency, for the implementation of RUE & RES solutions in households (e.g. substantial retrofit of building envelopes and heating plants) and private mobility (e.g. shifts in mobility patterns, use of cleaner fuels, car sharing and car pooling systems).

The Municipality of Karlstad is the leader of Work Package 5, helpdesk, in the project. This final report refers to the whole reporting period, from the kick-off of the project (November 2006) to month 24 (November 2008). The goal of the final helpdesk is to give a report on how the work in the different partner cities has been going and to report the result of the local helpdesks.

In November 2008 an interim helpdesk report was delivered to the project management. In order to give a screen shot on the work in progress in spring 2007, a short overview of that will be included in this report.

## 1.2 General achievements

- Before the interim report was produced, two questionnaires were sent to the partners in order to get an overview of the results.
- The WP leader has offered advice on issues regarding the local helpdesks and Mobility management.
- A checklist of mobility management was created and sent as a support to the partners. The checklist was also published on the project website for all partners to take part of. See Appendix 5.
- An analysis of car sharing and car pooling was created. See Appendix 4.
- A report about the WP leaders' experiences and conclusions from their Mobility Management work in Karlstad was created. See Appendix 7.
- The performance indicators were not reached

## 1.3 Work Package leaders

The city of Karlstad was assigned the role as leaders of WP 5. Before and throughout the project Karlstad have had a very qualified front office manned by advisors who can give guidance to individuals in person. The helpdesk has been operating for over ten years. The helpdesk is also the advisory centre in environment- and consumer guidance questions in Karlstad (Rådrummet). It is open for the public Monday to Friday 11am to 4pm and manned by experts on environmental questions. The cornerstone of the work is the helpdesk's accessibility with generous opening hours and an easy way of reaching the advisors. It lies strategically by the Main Square in the centre of the city. The core is the communication between the public and the city and communicating environment- and consumer guidance questions to the public. In total there are twelve officials, five of them especially with ECHO ACTION, working at the helpdesk. ECHO ACTION participants as well as the public can get answers to questions regarding environmental and consumer issues and receive information, for example leaflets, brochures, energy saving advice, maps of bicycle tracks etc. The advice and information given is professional, free of charge, and independent. The front office also includes phone, web site and email where the ECHO ACTION families as well as the public can reach the helpdesk weekdays 8am to 7pm. The website and e-mail are available daily around the clock.

As WP leaders Karlstad has supported the other partners in questions around their local helpdesk and also with information around car sharing, car pooling and other mobility management activities. Karlstad is maybe the partner that has worked most with mobility management issues and also has most experience of it.

## 1.4 Timetable

The interim report was due November 2007, 12 months into the project, and was delivered in time. The report on car pooling is due 24 months into the project, in November 2008, and is delivered in time.

## 1.5 Methods

Questionnaires were used as the form for receiving data on the work in progress in the different partner cities. Three questionnaires were sent during the project period and the helpdesks were discussed on every PSG meeting. Opinions from the discussions were also registered. Each partner has been responsible for starting their local helpdesk, free to ask for support from AGIRE and the work package leaders.

### 1.5.1 Questionnaire 1 and 2

In order to get an overview of the local conditions of creating a helpdesk in the partner cities, a first questionnaire was sent by email in February 2007. At the kick-off meeting in Venice, Karlstad also was assigned to create a mobility management checklist. This list was created and sent before the first questionnaire. The first questionnaire is attached as Appendix 1 to the report. To follow up the first questionnaire, and to see the ongoing work with the local help desks, a second questionnaire was sent by email in July 2007. This version was more detailed, asking for more in depth information about the helpdesks and the partners work with car sharing/car pooling. The questionnaire, together with the checklists for the partners to partake and get advice from, was sent in early June 2007. The second questionnaire is attached as Appendix 2 to the report.

### 1.5.2 Final questionnaire

After the 4<sup>th</sup> PSG meeting in London a final questionnaire was sent in late August 2008. The intention of it was to capture as many aspects of the helpdesks as possible, as it is the base of the final helpdesk report. The final questionnaire, in the end, resulted in answers from all partners and the WP leaders got a good overview on the situation in the different partner cities. It created a good base for the final helpdesk report. The final questionnaire is attached as Appendix 3 to the report. In the next chapters a description from the final questionnaire regarding CP and CS will be given.

## 1.6 Definition of car pooling and car sharing

**CAR POOLING** = Organised car pooling is the sharing of rides in a private vehicle among two or more individuals. An example of an organised form of car pooling is a website, sms, telephone lines etc.

**CAR SHARING** = A number of persons share the use of one or more cars. The use of a car is booked in beforehand and the user is paying a fee based on the distance and/or time.

## 2. WP 5 – Car pooling and Car sharing

### 2.1 Project plan – description of WP 5

In the project description plan, the following text describes WP 5:

The project helpdesk consist in an additional support of made available to households as specifically regards general information and the “lightest” action that can be implemented. Each partner city, depending on its local needs and conditions, will choose the most appropriate technical way of providing such informative service. Another important part of the helpdesk will be the actual management of the car pooling /ride sharing systems. Helpdesks will be networked with frequent mailing lists and direct contacts managed by AGIRE. The idea is to create a sort of “European ECHO ACTION Helpdesk”, where all issues and questions arisen in each Helpdesk can be discussed and solutions can be found together, with an exchange of experiences, case studies, best practices etc.

**TASK: Creation of the project Helpdesks regarding car pooling and car sharing with the following tasks.**

1-3. Covered in D8 – Final report on Help desk.

4. Info desk on RES, RUE and sustainable mobility for general public (citizens) - technical solutions and financing possibilities

5. Definition of the car pooling and ride-sharing system (organized by participating families) and management.

### 2.2 Project plan - function of WP 5 regarding car pooling and car sharing

The following text describes the function of the helpdesk, in the project description plan:

Each partner city will open an ECHO ACTION Help Desk that will serve to the implementation of the project, but will also be a link between the project and the entire city. Helpdesks could be actual front offices, opened one or more days a week, or telephone lines, or just on-line helpdesks, according with the available facilities in the different cities involved in the project. Main functions of such offices will be:

1-3. Covered in D 8 – Final report on Help desk.

4. *Organisation and management of ride-sharing* (s centrally organized hitchhiking) and car pooling. Partners will promote through their local information networks (civic network, local newspaper and magazine, local TV-station, etc.) the presence of the front office/info points.

### 2.3 Performance indicators

The next table summarizes the performance indicators, as derived from the Annex I of the project contract.

Performance indicators	Quantification of success
Number of households enquiries forwarded to the Help Desks (covered in D8)	5 000
Number of additional users of car-pooling and ride-sharing systems	500

The performance indicators for additional users of car-pooling and ride-sharing systems were not reached. This will be discussed further in chapter 4.

## 2.4 Decisions made on the PSG meetings

### 2.4.1 Decisions made on the 2<sup>nd</sup> PSG meeting in Berlin

- No common IT-based solution for car-pooling/sharing in ECHO ACTION
- Each local partner organize car-pooling and car-sharing on the basis of local condition
- AGIRE coordinate mobility management issues between the partners and are responsible of updating the checklist of MM
- Data on users etc. is sent to City of Karlstad (for the helpdesk report)
- City of Karlstad delivers an analysis of car-pooling/sharing project and a checklist of MM-activities

### 2.4.2 Decisions made on the 3<sup>rd</sup> PSG meeting in Sintra

On the 3<sup>rd</sup> PSG meeting some important decisions about the continuing work with the helpdesks were taken:

- The partners together decided to create a template for enquires regarding Car pooling/Car sharing/other MM activities, se below. Each partner documents the number of enquires
- The performance indicator is not adjusted (as the WP leaders suggested)

Month	Number of additional users of car-pooling	Number of additional users of car-sharing systems
Until Nov 07		
Dec 07		
Jan 08		
Feb 08		
Mar 08		
April 08		
May 08		
June 08		
July 08		
Aug 08		
Sept 08		

Mobility Management (MM) activity	Number of users

### 2.4.2 Mobility Management (MM)

A checklist for mobility management was completed by the WP leaders and sent to all partners in the beginning of the project in order to function as support in their work with these issues. Advice on MM-activities was given to some partners, through email and phone contact. An analysis of car sharing and car pooling was carried out. A report about Karlstads experiences and conclusions from Mobility Management work was carried out and distributed to all partners. The checklist is attached as Appendix 5.

## 2.5 Prerequisites for car pooling and car sharing before ECHO ACTION

The conditions for car pooling/car sharing in the beginning of the ECHO ACTION project were very different in the partner cities. In some cities car pooling/car sharing never have been tried. Caparonni, Boraem, Energy Solutions and Sintra had no existing car pooling or car sharing system when the project started. The reasons are various, for example local conditions. Because of the nature of the territory in Capannori for instance, it is not easy to organize a car pooling or car sharing service (even public transport is difficult, and in Capannori there is no taxi service either). Karlstad, Berlin and Venice are the partners that have worked most with car sharing and car pooling. Below are the results from the initial questionnaire: "Existing car pooling and car sharing at the start of ECHO ACTION, in autumn 2007".

<b>BERLIN</b>	<p><b>Car-sharing</b> Has a national commercial car-sharing company. Car sharing in Berlin was founded in 1988 as the first car sharing organisation in Germany. Today "Green wheels" cares for the tasks.</p> <p><b>Car-pooling</b> On the website <a href="http://www.mitfahrzentralen.de">http://www.mitfahrzentralen.de</a> private people can find a ride from Berlin to other cities. A second offer in this field is found on the website <a href="http://www.citynetz-mitfahrzentrale.de/">http://www.citynetz-mitfahrzentrale.de/</a>. The offers are for all people and are not free of charge</p>
<b>BOLOGNA</b>	<p><b>Car-sharing</b> We have car sharing with ATC (public transport service of Bologna). The service is managed from ATC on behalf of the Municipality of Bologna and has been active since 2003.</p> <p><b>Car-pooling</b> We have car pooling for the employee of the municipality of Bologna and some good practice in several companies.</p>
<b>BOURGAS</b>	<p><b>Car-sharing</b> No organized car-sharing exists. However, some similar individual practices for car sharing are established in Bulgaria, but these are not legislative regulated and organized. Examples: one family used one car, two or three colleagues or students used one car.</p> <p><b>Car-pooling</b> No organized car-pooling exists.</p>
<b>CAPANNORI</b>	<p><b>Car-sharing</b> No organized car-sharing exists.</p> <p><b>Car-pooling</b> No organized car-pooling exists.</p>
<b>KARLSTAD</b>	<p><b>Car sharing</b> There is an internal car-sharing for employees in the Municipality of Karlstad (not for the public) with 10 cars.</p> <ul style="list-style-type: none"> <li>- There is also a cooperative car-sharing organisation for the public with 3 cars.</li> <li>- No commercial car-sharing company exists.</li> </ul> <p><b>Car-pooling</b> No local organized car-pooling in Karlstad exists. Some national free car pooling-site on the Internet exist</p>
<b>KAUNAS</b>	<p><b>Car-sharing</b> Not answered.</p> <p><b>Car-pooling</b> We have no sort of organized car-pooling system. It is difficult to imagine one if you look at the present situation. This is why KREA asked the ECHO ACTION management to skip this topic from our work program.</p>
<b>LONDON CD</b>	<p><b>Car-sharing</b> We are not involved directly in any such schemes but there are several websites that help people to share rides: <a href="http://www.sharethecar.org">www.sharethecar.org</a> and <a href="http://www.liftshare.org">www.liftshare.org</a> These are both free.</p> <p><b>Car-pooling</b> Have same free car pooling-site on the Internet.</p>
<b>LONDON ES</b>	<p><b>Car-sharing</b> Not answered.</p> <p><b>Car-pooling</b> No organized car-pooling exists.</p>
<b>SINTRA</b>	<p><b>Car-sharing</b> Not answered.</p> <p><b>Car-pooling</b> No organized car-pooling exists.</p>
<b>VENICE + AGIRE</b>	<p><b>Car-sharing</b> A commercial car-sharing solution is available since a few years. It is operated by the local mobility services company, ASM Venezia. There is a car fleet of 45 cars, located in various car-parks of the city of Venice. In order to join the project, one has to register free of charge.</p> <p><b>Car-pooling</b> No organized car-pooling exists.</p>

A majority of the partners point out that the most beneficial way to start/test a car pooling system in their community would be to create carpools related to work, education, employees of big companies etc. Experience from Karlstad shows that cooperation between big companies and their employees increase the power and interest for the project but do not naturally lead to a better result. The partners also conclude that websites are useful tools in implementing car pooling. Car pooling is a complex question – on one hand it is very simple but on the other hand very relatively difficult to work with. The best and perhaps the easiest solution is if one (or two) people share a ride with one day a week, get it to become a habit, and let it grow at a natural pace.

## 2.6 Mobility management activities in the initial phase of ECHO ACTION

On the second PSG meeting in Berlin the WP leaders handed out a checklist on other mobility management activities than car pooling and car sharing. The checklist is attached as Appendix 5. The partners were asked to summarize the tasks planned to be carried out from the list. In July 2007 the WP leaders checked the status of the ongoing mobility management activities. The results are listed below.

Fore some partners (Sintra and Bourgas) the mobility management issue is a new topic. City of Venice did not answer.

<b>BERLIN</b>	<p><b>Bicycle</b></p> <ul style="list-style-type: none"> <li>- Disseminate the existing bicycle map with path, routes, facilities and cycle parking etc.</li> <li>- Information about guides for bicycle, for example historical, nature and culture tours</li> <li>- Park&amp;ride with cycle shelters</li> <li>- Possibility to transport bicycle on train and busses</li> <li>- Rent a bike</li> <li>- Benefits to travel by bike (health, time, costs and environmental)</li> </ul> <p><b>Public transport</b></p> <ul style="list-style-type: none"> <li>- Benefits to travel by public transport (costs and environmental)</li> <li>- General information of public transports</li> <li>- Bus- and train route info with time table, road network, ticket system and price of tickets</li> <li>- Interchanges between different forms of transports as buses, trains, bikes and cars</li> <li>- Public transports to work and during holidays</li> <li>- Door-to-door public transport information</li> </ul> <p><b>Car</b></p> <ul style="list-style-type: none"> <li>- Eco Driving, economical way of driving who can reduce fuel consumption and the emission of carbon dioxide.</li> <li>- Promote and awareness the use of clean vehicles. Information of fuelling stations, available clean car models, petrol- and diesel-powered cars with very low fuel consumption, environmental benefits, economics benefits and tax rules</li> <li>- Parking fee and parking scheme</li> <li>- Car pool service and car sharing service</li> <li>- Inform about driving climate neutrally</li> </ul>
<b>BOLOGNA</b>	<p><b>Bicycle</b></p> <ul style="list-style-type: none"> <li>- Disseminate bicycle map with path, routes, facilities and cycle parking etc</li> <li>- Guides for bicycle, for example nature- and culture tours</li> <li>- Possibility to transport bicycle on train and busses</li> <li>- Benefits to travel by bike (health, time, costs and environmental)</li> </ul> <p><b>Car sharing and car pooling</b></p> <ul style="list-style-type: none"> <li>- Parking fee and parking scheme</li> <li>- Car pool service and car sharing service</li> </ul> <p><b>Other</b> Promote online maps giving general information about mobility (by bicycle, foot,</p>

	public transport and car). For example citizen can look for information in City Trak Web of Bologna.
<b>BOURGAS</b>	<p><b>Bicycle</b> In Bulgaria, bicycle riding is mainly something people do in their leisure time. Because of this fact we will promote the benefits to travel by bike (health, time, costs and environmental)</p> <p><b>Public transport</b> We will provide general information on public transport and on the possibilities for interchange of the different type of transport, especially interchanges between public transport and bikes.</p> <p><b>Car</b> The BoRAEM help desk will provide information about good European practices on car sharing system. The staff efforts will be directed to promote and raise the awareness for the use of clean vehicles and environmental and economic benefits of uses of diesel driven cars.</p> <p><b>Other:</b> The mobility management issue is new topic for Bulgaria. That's why we are planning to distribute information on the mobility management to the local authorities, responsible for organisation of the public transport, to the transport company and among the high and secondary schools in the city of Bourgas.</p>
<b>KARLSTAD</b>	All the mobility management activities in the checklist, see Appendix 5.
<b>LONDON ES</b>	<p>Will carry through all the tasks in the checklist, besides "Free bike to borrow" – our organisation does not have the resources to arrange this service.</p> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>– Bicycle maintenance workshop</li> <li>– Cycle training</li> <li>– Linked events to other national and local transport activities such as the national car free day or bike week.</li> </ul>

## 3. Results

### 3.1 General achievements

- Before the interim report was produced, two questionnaires were sent to the partners from the WP leaders in order to get an overview of the results.
- The WP leader has offered advice on issues regarding the local helpdesks and Mobility management.
- A checklist of Mobility management was created. It was sent as a support to the partners that created project handbook. The checklist was also published on the project website for all partners to take part of.
- An analysis of car sharing and car pooling was created.
- A report about the WP leaders' experiences and conclusions from their Mobility Management work in Karlstad was created. See Appendix 7.
- The performance indicators were not reached

### 3.2 Identified problems and corrective actions taken

- Response on questionnaires  
On the whole the deadlines on sent questionnaires have not been respected. For that reason, an incomplete report on the helpdesk situation had to be presented at the 1<sup>st</sup> PSG meeting in Berlin. After the meeting, all partners answered the questionnaire and a complete interim report could be delivered. A form-on-helpdesk was created which listed the contact persons for the different helpdesks in the partner cities. The final questionnaire was sent in august 2008, with a set deadline to September 29<sup>th</sup>. Two partners respected the deadline and the WP leaders got the latest answers November 28<sup>th</sup>. However, the final helpdesk report was delivered in time.
- The work in Berlin  
The helpdesk in Berlin didn't follow the time table, but had acceptance from the project management. The reason is that Berlin changed their local partner during the start up phase of the project and the project was postponed and started in February 2008. The participating households in Berlin get advice until March 2009 and the final meeting takes place in April 2009.
- Poor progress on CS, CP and MM  
The activities around car pooling, car sharing and mobility management have been low. This fact has been evident throughout the entire project. The conditions for car pooling/car sharing are very different in the partner cities. In some cities car pooling/car sharing never have been tried. As WP leaders Karlstad is maybe the partner that has worked most with the issue and also has most experience of it. Karlstad initially, and throughout the project, stressed the fact that car pooling/car sharing only is one of many tools among Mobility Management. Karlstad also created checklists and advice for the project to use in its work on mobility issues. This issue will be more discussed in chapter 4.
- Delays in the working groups  
Some of the work in the working groups has not ended when this report is written. This means that some actions regarding CS, CP and mobility management can be lacked in the report.

## 3.3 Local situation, car pooling (CP) and car sharing (CS)

Below follows a description of the current situation (autumn 2008) regarding car pooling and car sharing in the different partner cities. In Berlin, Kaunas, Capannori and Sintra there are no registered families that have started neither car pooling nor car sharing.

### 3.3.1 Berlin

None of the ECHO ACTION families has started using car pooling or car sharing so far.

**Initiatives taken to start CP and CS** Berlin has a really good public transport system which is why car pooling and ride offers are only interesting to go outside the city. To travel to the surrounding area of Berlin there are also a lot of public travelling offers. That's why the existing offers will be promoted into the project. Car sharing in Berlin was founded in 1988 as the first car sharing organisation in Germany. Today "green wheels" ([www.greenwheels.de/](http://www.greenwheels.de/)) cares for the tasks.

**Prerequisites missing in order to implement CS and CP** All ECHO ACTION families in Berlin are living in the surrounding of the city. Although the transport system is relatively tight, they are going by car to the city. In Berlin there are some projects from the company of public transport to activate people, to change from the individual car to the public transport system. The results are some individual highlights but no significant changes in the majority of motorists.

**Marketing** In October 2008, a workshop was held for the families. The managing director of Green wheels presented the car sharing system in Berlin. At the end of September we started an initiative of CP in the forum. The families should be activated to compare their normal ways by car (e.g. to the job in the morning and back in the evening) to find same ways on the same time and to go together in future. Also in October we will give a special advice for using CS and CP in Berlin.

**Experiences from the work with CS and CP** Until Sept 2008 we did not have any experiences in this field.

### 3.3.2 Bologna

CP: Three families registered in car pooling. In April 2008, there were 135 members in the car-pooling project "C'è posto per te". CS: Some people now and then use car sharing of ATC (City Transport Agency)

#### **Initiatives taken to start CP and CS**

During the ECHO ACTION sustainable mobility meetings we informed citizens about CP and CS initiatives. We made a presentation of "PEDAL" - a project about the sustainable mobility in secondary schools, for students and families. We had a discussion about the problem of air pollution when people bicycle. The best practice was proposed is car pooling, especially between next door neighbours. Explanation of the car pooling system in the city of Bologna and of implementing method obtained thanks to Agenda 21 adherence was given. This practice will be tested between the subscribers of ECHO ACTION. In Bologna car sharing service is active and it is offered by ATC (City Transport Agency). These practices both need to create car pooling groups ad hoc, which is a witness of good citizenship and supportive behaviour.

#### **Prerequisites missing in order to implement CS and CP**

Regarding CS, there is no problem, but it is not the best way to promote sustainable mobility. For the environment it is more important other mobility management activities, such as biking, walking or using public transports.

About CP, we have not created car pooling groups ad hoc for members ECHO ACTION. The reasons are that it is difficult to change home mobility use. To implement car pooling at work and in schools, information and advertising is more important.

During the sustainable mobility meetings, the following points were shown:

- A good practice is sustainable tourism, with the goal to use a mix of means of transportation, like bicycle and train to holiday.
- In general the subscribers of Bologna move usually by bicycle.
- Some subscribers said that their families have managed the daily movement from home to school – work and return, only using the bike.
- Subscribers showed interest for the car pooling service.
- A subscriber and his next door neighbours were arranging a neighbourhood car pooling group.

- The questions and the chat, prove that the subscribers have in common an environmental attention over the average.
- Discussion about the increasing number of air traffic in the latest years.
- We talked about the alternative of the traditional bicycle, represented by the electrical bicycle, that can represent and help for people who want to toil less or who have to cover long distance.
- In the opinion of the subscribers in Bologna we need more bicycle paths.
- To provide incentives the usage of public means of transportation, in the opinion of the subscribers, it could be useful to adopt a unit pricing ticket to use several means of transportation.

**Marketing** We informed citizens during the meetings, through the web site and by mail list contact.

About the definition of the car-pooling and ride-sharing system (organised by participating families) and management, with the help of the Show-room, we proposed the car-pooling project organised by the Province of Bologna, called: “C’è posto per te” (<http://www.autocondivisa.bo.it/>). People who are interested in registering to the car-pooling project, can do it at the help desk open by the Showroom of the Municipality of Bologna, or at the Information Centre of Municipality in the city centre.

**Experiences from the work with CS and CP** It is important to give the subscribers information about the different solutions.

### 3.3.3 Bourgas

There is no established system of CP and CS yet. Within the project this practice has been introduced to the participating household and some started to use CS. For example two colleagues used one car or two children used one car to go to the school.

**Initiatives taken to start CP and CS** There is no established formal system for car pooling in Bourgas and that is why the best European practices for CS and CP have been introduced by the help desk. Additionally the car pooling system have been promoted and introduced to the general public in Bourgas municipality.

**Prerequisites missing in order to implement CS and CP** More efforts should be directed to the behaviour changes of the general public.

**Marketing** Not answered

**Experiences from the work with CS and CP**

The topic of CP and CS is new for Bulgaria, so the project team has difficulties working with it.

### 3.3.4 Capannori

We did not realize initiative regarding CP, CS nor MM activities.

**Prerequisites missing in order to implement CS and CP** The territorial shape of Capannori does not encourage solutions of CP or CS.

**Marketing** Not answered

**Experiences from the work with CS and CP** We distributed the bus and the railway timetable among participants and spread this information to citizens through the website.

### 3.3.5 Karlstad

CS: One person has started car sharing. He sold his old private car and joined the cooperative car sharing in Karlstad.

CP: 10 persons have started to car pool.

**Initiatives taken to start CP and CS** Karlstad has promoted the available alternatives and held specific CP and CS workshop. In addition Karlstad highly stressed other mobility management activities.

**Prerequisites missing in order to implement CS and CP** Generally Karlstad had low expectations of implementing CP and CS in ECHO ACTION due to bad experiences with these kinds of activities. CP has low priority due to earlier bad expectations and results on tried activities. The limiting factor of car sharing is the lack of commercial CS companies.

**Marketing** CS and CP were discussed during the working groups. The cooperative car sharing in Karlstad was promoted.

**Experiences from the work with CS and CP** Generally Karlstad had low expectations of implementing CP and CS in ECHO ACTION due to bad experiences with these kinds of activities. CP has low priority due to

earlier bad expectations and results on tried activities. The limiting factor of CS is the lack of commercial car sharing companies. Therefore Karlstad has promoted other additional mobility management activities as well.

### 3.3.6 Kaunas

No registered families that have started neither car pooling nor car sharing.

**Initiatives taken to start CP and CS** A lecture on sustainable mobility was organized in January 2008. The aims were to introduce the eco-mobility behaviour to the community, present and discussion on clean (eco) fuels, CS, CP, eco driving.

**Prerequisites missing in order to implement CS and CP** There is little information about CP and CS in Kaunas. Local authorities are not interested to diffuse information about it.

**Marketing** A lecture on sustainable mobility was organized. The aims were to introduce the eco-mobility behaviour to the community, present and discussion on clean (eco) fuels, CS, CP and eco driving.

### 3.3.7 London (Carbon Decent)

Three ECHO ACTION participants have joined a car club (CS). Two of these have given up their cars.

**Initiatives taken to start CP and CS** There are already car clubs operating in London. Three of them agreed to support ECHO ACTION, and we held a forum to inform people and encourage them to join.

**Prerequisites missing in order to implement CS and CP** Whilst car clubs already exist, at the forum we held, ECHO ACTION participants gave feedback to speakers from the Car Clubs on how their services could be improved. Here are some of the comments:

- Better information from Car Clubs to the general public about special arrangements
- Better information about the card to use the car
- A variety of types of car to be made available including vans, cars suitable for people using the car for gardening

**Marketing** Held a forum where ECHO ACTION participants gave feedback to speakers from the Car Clubs.

**Experiences from the work with CS and CP** Quite a lot of people were considering giving up their cars, so the timing was good. We expect more people to join car clubs in the future. We were pleased to be able to work with the London Car clubs and that they were willing to take on the feedback on the way they operate.

### 3.3.8 London (ENSOL)

A car pooling scheme has informally been set up by participants in the project for journeys to and from workshops/ events. Trust is an important issue and the CP scheme has developed as a result of familiarity and trust in the group. We are building on this with the aim of establishing a formal CP or CS scheme.

**Initiatives taken to start CP and CS** Energy solutions held a specific CP and CS workshop.

**Prerequisites missing in order to implement CS and CP** Understanding and value of issues and benefits well in advance of any opportunity or offer to change. Incentives are one thing, but most households need to be primed well before taking up such an opportunity.

**Marketing** Work shop and talk from expert

**Experiences from the work with CS and CP** The discussions on CP and CS allowed us to cover the full spectrum of related issues and brought to the attention topics and issues many households were not expecting. Few obstacles as such, most households were open to the ideas presented. We spent time after the initial workshop reviewing actions and behaviour, but this was planned. This helped us to ensure any possible changes were being experimented with and households shared their experiences through experimenting.

### 3.3.9 Sintra

No registered families that have started neither car pooling nor car sharing.

**Initiatives taken to start CP and CS** In the website [www.deboleia.com](http://www.deboleia.com) one group is named "ECHO ACTION" where families can sign up. Some projects are promoted by great transport companies and we are hopeful to be able to take part with the ECHO ACTION families.

**Prerequisites missing in order to implement CS and CP** The population is not very receptive to this concept

**Marketing** The concept of CP and CS was presented to the families.

**Experiences from the work with CS and CP** No experience in this area.

### 3.3.10 Venice and AGIRE

#### Initiatives taken to start CP and CS

CS: Most of the participants were already using car sharing. Some families also joined it thanks to the work of ECHO ACTION. ECHO ACTION contributed to the communication activities regarding the car sharing system, not only through the help desk towards the ECHO ACTION families but also to the general public of the plenary sessions. This led to an outstanding increase of the number of users of the service during the last 18 months.

CP: Car pooling is an already active service in Venice. With the European project "MOBILIS" it was possible to buy additional cars for expanding the service. With ECHO ACTION it was possible to further increase the number of people using the service.

#### Prerequisites missing in order to implement CS and CP

CS: It exists and has already positive results

CP: 1) in Venice the families have quite unpredictable transport paths, because the industrial areas as well as the commercial areas are highly distributed throughout the metropolitan area and the regional area. As a consequence, people travel for business is a very huge set of directions. This results in difficulties of having matching paths among the families if the number of registered people for CP is low. In other words, for CP to be effective, there is the need of having a big-enough number of participants.

2) provided there is the need to have a significant number of participants for CP to be workable, it has to be noted that the families do not find it useful because of cultural restraints, because (a) they prefer their own car in many cases, even if other solutions might be more effective, and (b) because many Venetian families still do not like to register (via web or other way) for such a solution. For instance, the Venetian authorities already developed a software for managing the car-pooling service. It works and is available through a regional institutional website. Nonetheless, very few families tested it to see if pooling solutions might fit their needs.

3) In any case, in order to "push" the families and the citizens towards CP, a wide and strong information and communication campaign is needed. The City of Venice did not implement it to strongly advertise the CP software when it was launched and the system is still now not promoted as much as needed. Such a big communication campaign was out of scope of ECHO ACTION, but with ECHO ACTION we found that there might be possibility to use CP, provided a much targeted communication campaign takes place.

**Marketing** CS and CP were discussed during the working groups. CS was clear and many families started to test it (if they did not already use it). For CP, we described the operating characteristics and tested the software.

**Experiences from the work with CS and CP** The CS system in Venice already exists. Nevertheless, the knowledge about CS among citizens is still very low, even if CS is particularly interesting for families living in the historical centre of Venice. Moreover, the company managing the system (ASM SpA) gained European funds (within the CIVITAS II Programme) for the purchase of additional 10 CNG-fuelled cars during the last 24 months. ECHO ACTION contributed to the awareness raising and dissemination activities inserting CS into the issues discussed in working groups and also during a public event, targeted to the ECHO ACTION families but open to all the citizens, held on 29/03/08, in which ASM participated too presenting car sharing. The ECHO ACTION helpdesk has given information about the system to all the participating families. From July 2007 to August 2008 the number of registered users of the system grew from 2228 to 2800.

## 3.4 Situation regarding other mobility management activities

Below follows a description of the current situation (autumn 2008) regarding mobility management activities in the different partner cities.

### 3.4.1 Berlin

**Mobility Management activities** Eco driving, use of eco friendly cars (natural gas vehicles). Approximately 15 people in the ECHO ACTION project were engaged in mobility management activities.

**Initiatives taken to start mobility management activities**

“Call a bike” is a special service of Deutsche Bahn AG (German railway organisation): a whole fleet of bikes is at service in the city around the clock. The “Call a Bike” principle is very simple: the CallBikes can be hired and returned at all major crossroads by making a telephone call. Each CallBike is protected by an electronic lock that can be opened with a numerical code. To obtain the valid code for the CallBike, simply dial the telephone number in the red circle on the cover of the lock and enter the code in the lock display. To return the bike, take it to the nearest major crossing within the core area and lock it to a fixed object.

On the website <http://www.mitfahrzentralen.de> private people can find a ride from Berlin to other cities. A second offer in this field is finding on the website <http://www.citynetz-mitfahrzentrale.de/>.

**Experiences** We did not have any experiences in this field.

### 3.4.2 Bologna

**Mobility Management activities** About 20 percent of the subscribers tried: bike to work and to school, travel by bus instead of car and motorbike, travel by train instead of car and motorbike, has bought an eco car (1 person), using an electrical bike (1/2 person)

**Experiences** It is important to give the subscribers information about the different solutions.

### 3.4.3 Bourgas

**Mobility Management activities** Some people have started walking or used bike to go to school or to work. We also promoted public transport. Approximately 10 people within the ECHO ACTION project were engaged in mobility management activities.

**Initiatives taken to start mobility management activities** Special events on climate change have been initiated, where the mobility management have been discussed and alternative transport have been introduced – walking, bike use, public transport used, etc.

**Experiences** The topic of mobility management is new for Bulgaria, so the project team has difficulties working with it.

### 3.4.4 Capannori

Capannori did not realize initiative regarding mobility management activities. The territorial shape of Capannori does not encourage solutions of CP or CS to answer to the mobility project. Since the start of the project we advanced and advertised the main use of public transport (above all bus and train). We distributed the bus and railway timetable among participants and spread the information to the citizens through the website.

**Experiences** We distributed the bus and the railway timetable among participants and spread this information to citizens through the website.

### 3.4.5 Karlstad

**Mobility Management activities**

89 percent of the households have taken action in terms of transport. In total, the Swedish families have implemented 277 actions. The most common actions have been that they have swapped car journeys for travel by walking/cycling and practiced the principles of eco driving. Examples of other mobility management

activities that the families carried through was: bike to work, travel by bus instead of car, eco driving, use of eco friendly car service, buying an eco car and start using energy heating. We see an average reduction in mileage per household of 640 km. This corresponds to 110 kg lower emissions of fossil carbon dioxide per household. Some families have reduced their driving much more than the average.

#### **Initiatives taken to start mobility management activities**

Karlstad has marketed many mobility management activities, such as eco driving, plan your travelling, use the bike instead of the car to work, use public transport, be a test-traveller and so on has been promoted and used in the ECHO ACTION project. It has given good results and more response than trying to get people to try car pooling and car sharing.

**Experiences** Generally Karlstad had low expectations of implementing CP and CS in ECHO ACTION due to bad experiences with these kinds of activities. Instead other measures within Mobility Management, such as eco driving, plan your travelling, use the bike instead of the car to work, use public transport, be a test-traveller and so on has been promoted and used in the ECHO ACTION project. It has given good results and more response.

### **3.4.6 Kaunas**

**Mobility Management activities** Approximately 30 people tested mobility management activities. For example, they travelled by trolleybus instead of car and tested eco driving.

**Experiences** Great achievements are at work within mobility management. The ideas reflected of Kaunas city municipality activities (new traffic lights, bicycle paths plan).

### **3.4.7 London (Carbon Decent)**

**Mobility Management activities** We have provided information on eco-driving, alternative fuels and efficient cars, but have no data yet on savings made. We have also discussed walking, cycling and public transport. One person who has joined a car club has also started cycling more. We did mapping exercises and guided walks highlighting local facilities, and increasing interest in and knowledge of the local area.

**Experiences** Quite a lot of people were considering giving up their cars, so the timing was good. We expect more people to join car clubs in the future. We were pleased to be able to work with the London Car clubs and that they were willing to take on the feedback on the way they operate. The guided walks were successful, and most people discovered something new about their neighbourhood.

### **3.4.8 London (Energy Solutions)**

#### **Mobility Management activities**

One household has adopted eco driving and gave feedback information to others in a mobility workshop in September. Others have reduced car use and will try alternatives for certain journeys where they would have normally used the car (cycling, public transport, walking, changes to schedules to reduce amount or length of journeys).

**Experiences** The discussions on mobility management activities allowed us to cover the full spectrum of related issues and brought to the attention topics and issues many households were not expecting. Few obstacles as such, most households were open to the ideas presented. We spent time after the initial workshop reviewing actions and behaviour, but this was planned. This helped us to ensure any possible changes were being experimented with and households shared their experiences through experimenting.

### **3.4.9 Sintra**

No experience in this area.

### **3.4.10 Venice and AGIRE**

Not answered.

### 3.5 Protocols/tools to document the families’ mobility management work

Karlstad and Bologna have used protocols in order to document the family’s mobility management work. Bologna has created a module called “integration of mobility book” and distributed to monitor the sustainable mobility action (by foot, by bicycle or by public transport) and the reduction gained in energy consumption and climate change emission. Some households from Carbon Decent in London have also kept a diary of changes made, but these have not yet been collated. These are attached as Appendix 9.

### 3.6 Effort put into the project: transport vs energy

We asked the partners to value the effort put into the project regarding the transport part vs the energy part (in percent). The results are presented below and naturally mirror the most popular topics to the helpdesks. These results are more commented on in chapter 4.

	TRANSPORT	ENERGY
BERLIN	15	85
BOLOGNA	40	60
BOURGAS	30	70
CAPANORI	10	90
KARLSTAD	50	50
KAUNAS	10	90
LONDON CD	30	70
LONDON ES	30	70
SINTRA	20	80
VENICE	15	85

## 4. Conclusions

### Word confusion

Firstly, it must be pointed out that there has been confusion, throughout the project, of what car pooling and car sharing is, and what the differences are. Some partners have the terms mixed up.

**CAR POOLING** = Organised car pooling is the sharing of rides in a private vehicle among two or more individuals. An example of an organised form of car pooling is a website, sms, telephone lines etc.

**CAR SHARING** = A number of persons share the use of one or more cars. The use of a car is booked in beforehand and the user is paying a fee based on the distance and/or time.

### Car pooling and car sharing

The conditions for car pooling and car sharing are very different in the partner cities. In some cities the systems have never been tried. Karlstad, Bologna and Venice are probably the partners that have worked most with CP and CS and also have most experience of it. A majority of the partners point out that the most beneficial way to start/test a car pooling system in their community would be to create carpools related to work, education, employees of big companies etc. Experience from Karlstad shows that cooperation between big companies and their employees increase the power and interest for the project but do not naturally lead to a better result. The partners also conclude that websites are a useful tool in implementing car pooling. The cities that had difficulties in realising car sharing and car pooling instead have promoted other mobility management activities, for example the use of public transport.

In some cities both car sharing and car pooling worked out well, however, this was mainly in the cities that had the best conditions in the first place, and also had tried it before. For example in the city of Venice, most of the participants were already using car sharing (= car pooling according to the definitions above). Some families also joined it thanks to the work of ECHO ACTION. ECHO ACTION contributed to the communication activities regarding the car sharing system, not only through the help desk towards the ECHO ACTION families but also to the general public of the plenary sessions. This led to an outstanding increase of the number of users of the service during the last 18 months. The ECHO ACTION helpdesk has given information about the system to all the participating families. From July 2007 to August 2008 the number of registered users of the system grew from 2228 to 2800. Car pooling is an already active service in Venice. With the European project "MOBILIS" it was possible to buy additional cars for expanding the service. With ECHO ACTION it was possible to further increase the number of people using the service.

### Factors that benefit car pooling

Several studies in Sweden and other countries show what factors could benefit car pooling:

- Similar workplaces – similar destination, similar information network and acquaint people
- Similar and regular working hours
- The same sex – women prefer to ride with women
- A long route, at least 20 km one way
- Small loss of time, in comparison to driving yourself
- Poor public transport – few alternatives to the car
- Poor/expensive parking possibilities at the workplace
- The economical advantage is obvious, but other economical factors (congestion taxes, parking fees, and deductions for travel to and from work) would probably even further benefit car pooling. These factors naturally carry great weight in different situations and for different people.

Karlstad wants to stress that car pooling is a complex question – on one hand it is very simple but on the other hand very relatively difficult to work with. The best and perhaps the easiest solution is if one (or two) people share a ride with one day a week, get it to become a habit, and let it grow at a natural pace.

## Factors of success for car sharing

The factors of success for car-sharing with the purpose to attract a large number of persons (either individually or in firms or public institutions) include the following:

- Convenience! Provide a high level of service through simplicity of booking, ready access to cars of high quality, and availability of cars near where one is located.
- Economy! Be economically advantageous and make the car sharing cheaper than having a car of one's own, differentiated tariff system which can attract customers who do not use a car very much as well as more frequent drivers, added value by discounts
- Reliability! Be highly reliable due to the support which a highly professional organization can provide and the use of new, well-functioning, environmentally friendly and highly safe cars

## Other Mobility Management activities

The municipality in Karlstad has worked over ten years with sustainable mobility issues. Karlstad was the first city in Sweden to set up a mobility management office called the Transport Advisory service (TAS). The overall aim of TAS is to argue for changes in individual attitudes and behaviour in traffic and environmental matters in Karlstad. TA also strives to achieve a better use of the existing infrastructure through Mobility Management (MM) issues. The MM activities are important tools and contribute to promote sustainable transport and manage the demand for car use by changing travellers' attitudes and behaviour. Karlstad has throughout the project stressed that car pooling and car sharing only is one of many tools among Mobility Management, and has promote other Mobility Management activities.

## Some conclusions of mobility management in Karlstad

- Attitude and behaviour change of lifestyle bound habits is a slow process requiring patience.
- It is essential to conduct a dialogue with all partners involved
- Changes in mobility behaviour have to be based on a push and pull concept
- Advice regarding travel issues requires political support in order to be more effective and accomplish faster results
- People require continuous support in order to amend their habits, but also to continue using environmentally conscious travel methods.
- Most people are prepared to do modal shift if a good alternative based on conclusive argument is available.
- MM is a team effort demanding personal support and continuous training.
- Goodwill is one benefit for companies Through MM activities companies reached a lot of goodwill. If you can combine companies' activities with environmental, health- and economical concerns by using MM you will get added values to everyday life.
- Information and marketing is easily done when several partners are involved. Together with other actors there will raise synergy effects due to advertising and other marketing activities.

More information about this issue in Appendix 5, Mobility Management Checklist and in Appendix 7, Ten years towards sustainable mobility in Karlstad

## Bicycle

In many partner cities bike activities are one already functioning MM activity. Karlstad for example tries to make more people to leave the car at home and instead bike to work. In Bulgaria, people ride bikes mainly in the leisure time and therefore they will work to promote the benefits to travel by bike (health, time, costs and environmental). London arranges bicycle maintenance workshops, cycle training and linked events to other national and local transport activities such as the national car free day or bike week. Bologna will promote the advantages of riding a bike in the project. Berlin has "Call a bike" - a special service of Deutsche Bahn AG (German railway organisation): a whole fleet of bikes is at service in the city around the clock.

## Public transport

Public transport is also an activity that some partner cities promote, mostly through providing general information on public transport. For example, Berlin promotes the benefits of travelling by public transport (costs and environmental).

## Car

Karlstad and Berlin have most experience from working with mobility management regarding cars. Both countries work with eco driving, promote the use of clean vehicles and “parking fee and parking scheme”. In Bulgaria, the helpdesk will provide information about good European practices on car sharing system. The staff efforts will be directed to promote and raise the awareness for the use of clean vehicles and environmental and economic benefits of uses of diesel driven cars.

## Transport vs. energy

When the partners valued the effort put into the project, transport vs. energy, the results clearly show that the issues on energy have been heavily prioritised. Why is that? Perhaps the mobility issues were not marketed enough towards the families? The partners from London argue that this was due to the initial feedback from questionnaires to households as to what their interests and needs were. Karlstad has the same experience - the participating families have been more interested in issues around energy. One important aspect of this issue is that it is generally experienced as easier to change ones use of energy than changing your traveling habits. The reasons are primarily two:

1. There has to exist physical conditions for changing travelling patterns. Is there public transport available? Are there special roads to bike and walk on? Are there any pavements?
2. The second crucial factor is people’s family situation. A single household or a household of two can generally plan their travelling better than a household with children on day nursery or in school. The geographical place of your house is also of importance - if you live on the country side, with poor chances of using public transport etc, or in a city centre.

## Local conditions

The WP leaders has good experience working with mobility issues which probably is the reason why Karlstad is the only partner that value the effort put into the project regarding transport vs. energy to 50/50. During the project time, the WP leaders produced checklists and guidelines that were sent to the other partners. Karlstad also, early in the project, promoted other mobility management activities, as a complement to car pooling and car sharing. Looking at the numbers of people in the project who tried a mobility measure, on one hand you can argue that it is a failure that the partners did not accept the guidelines and the advice. On the other hand the interests in accepting the mobility issues were very low and the work package leaders did not get many questions. Local conditions also, in some cases, explain the lack of mobility initiative. In Sintra for example, the city’s geographical situation makes it difficult to implement biking or walking to work or other mobility management activities. The conditions for these kinds of activities are very different in the partner cities and in some cities car pooling and car sharing never have been tried.

We can establish that energy issues have dominated ECHO ACTION. However, it is important not to forget the actual work that has been carried out in the area of transport in the cities. Some partners argue that the information given to the families was well received and has sparked some positive initial changes. It is also important to remember that to give up a car or changing transport mode is a big decision. The participants will continue to think about the advice given, and will perhaps take action long after the end of the ECHO ACTION project. In Kaunas, great achievements are at work within mobility management. The ideas reflected of Kaunas city municipality activities (new traffic lights, bicycle paths plan).

## 5. Performance indicators

The next table summarizes the performance indicators, as derived from the Annex I of the project contract.

Performance indicator	Quantification of success	Related work package and/or deliverable N°
Number of additional users of car pooling and ride-sharing systems	500	WP 5

The performance indicators have not been reached. 1-10 people have registered that they have started CS and 2-10 that they have started CP. However, many effective other mobility management activities have been carried out throughout the project.

## 6. Appendix

### Appendix 1: Questionnaire nr 1. Local helpdesks.

#### Questionnaire about helpdesk, Mars/April 2007

Each partner city /country should open a local Helpdesk, with layout/activities/etc common to all the other desks. At the same time, a common Helpdesk should be established at the European level. As a preparation for the Berlin meeting, we are planning to create a possible organization of the Helpdesk system, content, communication system (with the citizen and with the other helpdesks). Therefore we would appreciate if you could answers these short questions about both the Helpdesk and Car pooling. Please notice that the questions are concerning the Helpdesk and Car pooling system of YOUR community/city.

#### HELPPDESK

(Definition from the ECHO ACTION project plan = Each partner city will open a ECHO ACTION Helpdesk, that will serve to the implementation of the project, but that will also be a link between the project and the entire city. Helpdesks could be actual front offices, opened one or more days per week, or telephone lines, or just on-line helpdesks, according with the available facilities in the different cities involved in the project).

1. Do you have some sort of Helpdesk already? If yes, please give a short description of it. (1. What is it's technical solution? 2. Does it have any specific target groups (students, companies etc.) 3. Is it free of charge? 4. Do you have any Results and Conclusions of it)
2. What do you think would be the best form of Helpdesk for your community/city? (for example front offices, telephone lines, on-line helpdesks)
3. What are the conditions for different options of a Helpdesk in your community/city? (Here in Karlstad, Sweden, we have the Advising bureau which is a natural Helpdesk for us)

#### CAR POOLING

(Definition = Organised car pooling is the sharing of rides in a private vehicle among two or more individuals. An example of an organised form of car pooling is a website, sms, telephone lines etc.)

1. Do you have some sort of organised car pooling/ride-sharing system already? If yes, please give a short description of it. (1. What is it's technical solution? 2. Does it have any specific target groups (students, companies etc.) 3. Is it free of charge? 4. Do you have any Results and Conclusions of it).
2. What do you think would be the best form of car pooling system suited for your community/city?
3. What are the conditions for different options of a car pooling system in your community/city? In Karlstad we have an internet based service for employees in big companies, organisations etc.)

## Appendix 2: Questionnaire nr 2. Local helpdesks.

### Questions about the ongoing work with the helpdesks, July 2007

#### HELPDESK

As we discussed in Berlin, the common European Helpdesk was a sort of forum/network, for the partners in ECHO ACTION, and are going to exist on the internet. The following questions are consequently not about that, they only focus on your local variants of Helpdesk, for the participating families.

In the project plan, 5 tasks of WP 5 are listed about what should be included in the local Helpdesks. They are listed below:

1. Support to coordination of project and work groups
2. Support to data collection to monitor energy consumptions of participating families
3. Info desk to participating families and private companies
4. Info Desk on RES, RUE and sustainable mobility for general public (citizens) - technical solutions and financing possibilities
5. Definition of the car pooling and ride-sharing system (organized by participating families) and management

On the Berlin meeting we decided that each local partner was to decide which and how many of the five tasks they would carry through in their local Helpdesk. However, as many as possible are preferable.

#### QUESTIONS:

##### 1. Describe your ECHO ACTION Helpdesk.

- It's technical solution
- Does it have any specific target groups?
- Is the Helpdesk only open for participating families?
- Is it free of charge?
- Date of start
- Opening hours
- Staff required

##### 2. Which of the five tasks numbered above are you working with in your local Helpdesk? Please write Yes or No and comment your answer:

- Task 1. \_\_\_\_ Comment:  
 Task 2: \_\_\_\_ Comment:  
 Task 3. \_\_\_\_ Comment:  
 Task 4: \_\_\_\_ Comment:  
 Task 5. \_\_\_\_ Comment:

##### 3. If you have excluded some tasks, describe why and if you have another solution in the comments below:

- Task 1. \_\_\_\_ Comment:  
 Task 2: \_\_\_\_ Comment:  
 Task 3. \_\_\_\_ Comment:  
 Task 4: \_\_\_\_ Comment:  
 Task 5. \_\_\_\_ Comment:

##### 4. What other difficulties do you experience in your work with the local Helpdesks?

##### 5. Describe your expectations of the Helpdesk

##### 6. In the appendix you will find some common advice on how to work with an open office Helpdesk.

## **CAR POOLING/CAR SHARING**

### **1. Describe your ECHO ACTION Car pooling/Car sharing**

- It's technical solution?
- Does it have any specific target groups (students, companies etc.)
- Is it open for participating families only or also for the public?
- Is it free of charge?
- Have you created a special system just for ECHO ACTION or have you used an already existing one?
- Is it commercial or non-commercial?

**At the Berlin meeting, you received a checklist regarding Mobility Management issues. The list is enclosed in this email and is also published on the project website.**

### **2. Have you planned to carry out any of these tasks?**

If yes, which?

If no, why not?

Are you planning anything else regarding the Mobility Management activities?

### **3. Describe your expectations of the car pooling/Car sharing system**

## Appendix 3: Final questionnaire on helpdesk, car pooling and car sharing, September 3<sup>rd</sup>, 2008.

### HELP DESK

#### 1. Description of the local project Help Desk

Describe your ECHO ACTION Helpdesk

- a. It's technical solution (open office, phone or e-mail)
- b. Target groups
- c. Open for participating families only, for the public only or for both
- d. Free of charge
- e. Date of start
- f. Opening hours
- g. Staff required

If you use an already existing Helpdesk as your ECHO ACTION Helpdesk, please explain how you developed it, in order for it to fit the project\*. (For example - in Karlstad we use our already existing Advice Center as the Helpdesk in the project. In order for it to fit ECHO ACTION we have increased the opening hours, hired extra staff and also extended our telephone hours),(another example: in Venice, the helpdesk did exist already, but the participants to ECHO ACTION got a longer and more-detailed assistance during face-by-face meetings at the helpdesk, with technical analysis of their situation, inspection of households, technical recommendations, etc.)

- h. Have you developed or improved your existing Helpdesk during the project?
  - No, we used it as it was.
  - Yes. Please explain how

#### 2. Marketing of the Helpdesk

Describe in detail, how you marketed your ECHO ACTION Helpdesk to the families? (in the beginning of the project as well as during the project).

#### 3. Enquires to the Helpdesk

Please fill in the enquires made to your local Helpdesk

Month	Number of contacts with ECHO ACTION families	Number of contacts with general public	Comment
Until Nov 07			
Dec 07			
Jan 08			
Feb 08			
Mar 08			
April 08			
May 08			
June 08			
July 08			
Aug 08			
Sept 08			

Please fill in the form on contact you have had to your local Helpdesk

Month	Number of email-contacts	Number of phone-contacts	Number of face-to-face-contacts	Comment
Until Nov 07				
Dec 07				
Jan 08				
Feb 08				
Mar 08				
April 08				
May 08				
June 08				
July 08				
Aug 08				
Sept 08				

**Please list the most required topics at the Helpdesk:**

#### 4. The importance of the Helpdesk

##### Helpdesk vs other ways of communicating with the families

On the last project meeting in London we understood that some of the partners thought the importance of the Helpdesks was a bit excessive. In order to investigate that further, to put the Helpdesk's value in a context, and to find its importance for the contact with the families we want you to rank each action below, regarding the importance for the contact with the families. 6 is most valuable and 1 is least valuable.

- Helpdesk (email, phone, face-to-face)
- Meetings with families
- Questionnaires
- Visits to their home
- Newsletters
- Website

Other comments:

#### 5. Experiences from the work with the Helpdesk

Describe your experiences working with your local Helpdesk in the project.

##### Advantages:

1. Finding the best form of local Helpdesk
2. Staff
3. Availability
4. Geographical place of the Helpdesk
5. Other

##### Disadvantages:

1. Finding the best form of local Helpdesk
2. Staff
3. Availability
4. Geographical place of the Helpdesk
5. Other

How did you overcome the obstacles?

## 6. Advice for the future

Taking into account the experiences you have from the project, how would you create your “dream-Helpdesk”? What would it look like and how would it differ from the current one?

## 7. The European Helpdesk

The European Helpdesk hasn't worked as expected in the project. What do you think could have been made differently in order for it to work?

## 8. Future

Will you keep your Helpdesk after the end of the project?

- No. Why?  
 Yes. In what way, compared to the current one?

## 9. Other comments

## 10. Please attach pictures of your local Helpdesk

## CAR POOLING/CAR SHARING

### 1. Definition and repetition

**Car Pooling** = Organised car pooling is the sharing of rides in a private vehicle among two or more individuals. An example of an organised form of car pooling is a website, sms, telephone lines etc.

**Car sharing** = A number of persons share the use of one or more cars. The use of a car is booked in beforehand and the user is paying a fee based on the distance and/or time.

### Repetition

On the London project meeting all partners answered a questionnaire about car pooling and car sharing. To remind you, and also to give you the opportunity to complement your answers, they are included below. Complement your answers in the table below.

### 2. Have any participating families started using car pooling/car sharing so far?

<b>BERLIN</b>	CS: No CP: No
<b>BOLOGNA</b>	1 or 2 persons registered in car pooling. Some person using car sharing.
<b>BOURGAS</b>	It is still an uninformal way of using. There is no established system yet.
<b>CAPANNORI</b>	No. We are going to send a questionnaire to the families in order to start sharing and car pooling system.
<b>KARLSTAD</b>	CS: One person. He sold his old private car and joined the cooperative car sharing in Karlstad. CP: No
<b>KAUNAS</b>	CS: No CP: No
<b>LONDON CD</b>	
<b>LONDON ES</b>	CP: A car pooling scheme has informally been set up by participants in the project for journeys to and from workshops/ events. Trust is an important issue and the CP scheme has developed as a result of familiarity and trust in the group. We are building on this with the aim of establishing a formal CP or CS scheme. CS: No

<b>SINTRA</b>	We have not been informed of any.
<b>VENICE</b>	CS: Most of the participants were already using CS. It seems that some parts join CS thanks to ECHO ACTION. CP: No

**3. Have you taken any initiatives regarding CP and CS in order to try to get it started in your city?**

- No. Why?  
 Yes. Which?

**4. Taking into account, your experiences from the ECHO ACTION project, what prerequisites are missing in order to implement car pooling and car sharing in your city?**

**5. Marketing**

Describe how you marketed car pooling and car sharing to the families.

**6. Mobility Management activities (other than car pooling and car sharing) carried out in the project.**

Complement your answers in the table below.

	<b>Mobility Management (MM) activity</b>	<b>Number of users</b>
<b>BERLIN</b>	No	
<b>BOLOGNA</b>	About 20 % of our subscribers: Bike to work and to school, Travel by bus instead of car and motorbike, Travel by train instead of car and motorbike, Has bought an eco car (1 person), using an electrical bike (1/2 person)	
<b>BOURGAS</b>		
<b>CAPANNORI</b>		
<b>KARLSTAD</b>	Bike to work, Travel by bus instead of car, Eco Driving, Use Eco friendly car service, Buying an eco car, Start using energy heating	Approximately 25 people in the ECHO ACTION project.
<b>KAUNAS</b>	Approximately 30 people in the ECHO ACTION project. Examples: Travel by trolleybus instead of car, Eco Driving	
<b>LONDON CD</b>		
<b>LONDON ES</b>	No up to date data here yet. One household has adopted eco driving and will feedback info to working group in next mobility workshop (September) where we will establish number of people making changes to mobility management activities.	
<b>SINTRA</b>	We cannot answer this right now. In the next survey.	
<b>VENICE</b>		

### **7. Documentation**

Have you produced any protocols or other tools to document the families' MM work?

- No.  
 Yes. Please attach them.

### **8. Experiences from the work with CP, CS and MM.**

Describe your experiences working with CP, CS and MM.

**Advantages:**

**Disadvantages:**

How did you overcome the obstacles?

### **9. Energy vs transport**

Please value the effort put into the project regarding the transport part vs the energy part (in percent). (In Karlstad the numbers are approximately 50:50)

### **10. Other comments**

## Appendix 4: Analysis of car pooling/car sharing April 2007

### 1. Outline of Car Pooling

**Definition:** *Organised car pooling is the sharing of rides in a private vehicle among two or more individuals. An example of an organised form of car pooling is a website, sms, telephone lines etc.*

#### Experience from Karlstad

Between the years 2003-2006, a car pooling project was carried out in Karlstad. Four large official organizations, with approximately 12 000 employees total, participated in the project. The four organisations were the municipality of Karlstad, Karlstads´ University, the regional hospital and the county administration. The participating organisations worked together with a commercial computer company. The computer company was responsible for a web solution which the employees used to report their interest in the car pooling project and also to register their participation. Various marketing projects were carried out: Leaflets were distributed during coffee breaks, information was spread on intranets, articles were published in internal newspapers, articles were written in the local media, leaflets were placed on windscreens of cars, people got personal information on the basis of where they lived etc. The company responsible for the website delivered regular follow-ups of the total number of registered people. In total, 200 people were registered in the system during the project period. No information was given about the number of people who started to car pool. A questionnaire about travel habits that was carried out on the staff of the regional hospital in Karlstad, showed that approximately 30 percent knew about the car pooling project, especially those who lived farther than 15 km away from work. Spontaneous car sharing increased between the travel habit questionnaires, but this increase occurred outside of the established car pooling project. The marketing of the car pooling project and the first questionnaire had probably increased peoples awareness of car pooling as an alternative to other forms of transportation.

#### Our conclusions after the project

- Cooperation between several organisations increases the power and interest for the project but does not naturally lead to a better result.
- Marketing the project is important and necessary but is dependent on factors such as tax legislation, fuel prices, employer incentives that encourage those who car share.
- The web based system was expensive in comparison to the effect.
- Car pooling requires a lot of work comparison to the results we got.
- Car pooling is one of many tools among Mobility Management.

#### The Swedish National Road Administrations´ advice for car pooling

Car pooling is a simple and cheap solution for people who have to travel a long way by car to work. General marketing for car pooling is seldom effective; however, when you work strategically through a workplace there are good opportunities to create positive benefits for some of the staff. Car pooling should also be launched as a complement to other transport solutions, including private cars.

#### Message

Car pooling should be used/considered as a complement to other transport solutions. It is definitely not about selling your car and hitchhiking for the rest of your life. It is not about replacing the car every day of the week either. The best solution is if you can find one (or two) people to share a ride with one day a week, get it to become a habit, and let it grow at a natural pace. A company should therefore encourage their employees to “share a car one day a week”.

#### Factors of success

Several studies in Sweden and other countries show what factors benefit car pooling:

- Similar workplaces – similar destination, similar information network and acquainted people
- Similar and regular working hours
- The same sex – women prefer to ride with women
- A long route, at least 20 km one way
- Small loss of time, in comparison to driving yourself
- Poor public transport – few alternatives to the car

- Poor/expensive parking possibilities at the workplace
- The economical advantage is obvious, but other economical factors (congestion taxes, parking fees, and deductions for travel to and from work) would probably even further benefit car pooling. These factors naturally carry great weight in different situations and for different people.

### **Pitfalls and problems**

Car pooling is a complex question - it is very simple but at the same time relatively difficult to work with. The risk to choose a simple method with no results as a consequence is therefore huge. The following problems exist:

- About every third year a new car pooling site with functions for matching is launched on the Internet. There is already a handful of these world wide including in Sweden. However, they address few of the well-known factors of success of car pooling and are also poorly used. Technical systems can to some degree make car pooling easier, however, it is definitely not a condition for car pooling.
- The employer affiliates the company and its personnel to a car pooling matching service without providing any resources for marketing or consolidation of the project. The largest car pooling service in Sweden has thousands of connected riders; however the use of the service is low. There is no indication that the use of a companies "internal" car pooling project is more successful than these internet sites.
- Car pooling is launched as a project, with a very short active period. On the contrary car pooling has to be established as one of many long-term solutions for the travel needs of the personnel.

A success for car pooling is based on the fact that the company has problems that car pooling (together with other solutions) can solve. With this in mind, it can still be difficult to motivate a company to spend the necessary resources in order to ease their personnels' commute. There is a risk that the company likes the idea, not seldom due to environmental reasons, but does not realise the real undertaking.

## **2. Outline of Car sharing**

**Definition:** *Car sharing means that a number of persons share the use of one or more cars. The use of a car is booked in beforehand and the user is paying a fee based on the distance and/or time.*

The effects of car-sharing have been documented many times and in a variety of different countries. To ensure that the established car-sharing is effective, it is important to bear in mind what distinguishes such a project from traditional car-rental services: Namely the ready access to vehicles, in terms of where these are placed and how keys are managed, and of its being possible to book cars for short periods of time. For such a system to be effective, it is also important that there are a large number of vehicles and a large number of users.

### **Experience from Karlstad**

The Municipal departments in Karlstad use car sharing as one way of solving part of the transportation problems. An internal car sharing scheme has been established, which is shared by employee's through the use of an IT-based booking system. Furthermore, training in how car sharing activities can be encouraged is taught to people responsible for transports in organisations and companies. The Municipality works regularly with spreading information and knowledge in order to stimulate interest in car sharing, both for businesses and private persons. At the present Karlstad has a non-commercial cooperative car sharing organisation for the public. But we lack any commercial car sharing-company.

### **Car-sharing potential**

A study commissioned by the Region West of the National Swedish Road Administration was carried out to investigate the attitudes of Swedish households toward joining a car-sharing organization. The underlying aim was to assess the potential for car-sharing in Sweden. The number of households that felt prepared to join a car-sharing organization with a definite yes was 6 per cent. Similar results have been carried out in other countries and they show that approximated 120 families of 2,000 in ECHO ACTION will be interesting in car-sharing.

Studies have also shown that a member of an average car-sharing project drives only about two-thirds as much as earlier and that a shared car, through being used more effectively, takes the place of about five privately owned cars and as many parking spaces. Car-sharing is much stronger in large cities, the forces of

change there are also stronger. Car-sharing can provide considerable economic advantages here and an increase of available space in the city.

The factors of success for car-sharing with the purpose to attract a large number of persons (either individually or in firms or public institutions) include the following:

- Convenience! Provide a high level of service through simplicity of booking, ready access to cars of high quality, and availability of cars near where one is located.
- Economy! Be economically advantageous and make the car sharing cheaper than having a car of one's own, differentiated tariff system which can attract customers who do not use a car very much as well as more frequent drivers, added value by discounts
- Reliability! Be highly reliable due to the support which a highly professional organization can provide and the use of new, well-functioning, environmentally friendly and highly safe cars

There can be many different variations in how car-sharing is organized. In small car-sharing organizations, in which most of the work is performed on a voluntary basis, simple manual systems for booking and billing often suffice. For managing a large, successful and rationally run car-sharing organization, on the other hand, access to a highly effective administrative system can be essential

### **3. Proposal of organisation of car sharing/car pooling**

With this background and the results from the questionnaire, we propose this.

- No common IT-based solution for car-pooling/sharing in ECHO ACTION
- Each local partner organize car-pooling and car-sharing on the basis of local condition
- AGIRE coordinate mobility management issues between the partners and are responsible of updating the checklist of MM
- Data on users etc. is sent to City of Karlstad (for helpdesk report)
- City of Karlstad deliver an analysis of car-pooling/sharing project and a checklist of MM-activities

## Appendix 5: Mobility Management Checklist

The proposal of mobility management activities below could, with advantage, be used in a helpdesk. The list does not claim to be complete.

### Bicycle

- Disseminate bicycle map with path, routes, facilities and cycle parking etc
- Guides for bicycle, for example nature- and culture tours
- Inform about quality and safety for different cycle models
- Tip for good bicycle equipment and clothes
- Advice to prevent bicycle theft
- Bicycle service and air pumping stations
- Park&ride with cycle shelters
- Possibility to transport bicycle on train and busses
- Parking standards and conditions for cycles
- Free bike to borrow /Rent a bike/
- Traffic safety/ safe behaviour
- Test-travellers ‘Cycling for Health’
- Benefits to travel by bike (health, time, costs and environmental)
- Encourage the public to report lack on bicycle lanes, in sweeping and ploughing
- Encourage the public to give purposes on road improvement and other bicycle issues

### Public transport

- General information of public transports
- Bus- and train route information with time table, road network, ticket system and price of tickets
- Interchanges between different forms of transports as buses, trains, bikes and cars
- Public transports to work and during holidays
- Test-travellers: “Try-bus for a month” and “Try-it-out days”
- Door-to-door public transport information

### Car

- ECHO ACTION, economical way of driving who can reduce fuel consumption and the emission of carbon dioxide.
- Promote and awareness the use of clean vehicles. Information of fuelling stations, available clean car models, petrol- and diesel-powered cars with very low fuel consumption, environmental benefits, economics benefits and tax rules
- Spreading facts about environmentally friendly car wash and car accessories
- Electric engine heaters, reduce emissions and petrol consumption through preheating the engine.
- Parking fee and parking scheme
- Car pool service and car sharing service

### More example

- Travel Smart/ Smart road user, is an individualised travel marketing campaign. The aims are to show the benefits in walking and cycling and help to promote the use of public transport as an alternative to the car.
- Newsletter and pamphlet with message about “sustainable mobility”
- Obtain current information material
- View current exhibitions

## Appendix 6: Car pooling/car sharing July 2008

### BOLOGNA

#### Target groups:

Believe that it will be better to manage a group of people that usually moved inside of the province.

**Commercial or non commercial:** Non commercial

### BOURGAS

There is no established formal system for car pooling in the municipality of Bourgas.

### KARLSTAD

Car pooling: There is no local technical solution today. However, those who are interested can partake in a free national car pooling-site on the Internet. There are also single initiatives, for example people who car pool with a neighbour or a work mate. Generally Karlstad has low expectations of implementing car pooling and car sharing in ECHO ACTION due to bad experiences with these kinds of activities. Car pooling has low priority due to earlier bad expectations and results on tried activities.

Car sharing: Karlstad has a small non-commercial, cooperative Car sharing organisation for the public.

**Target groups:** Private persons

**Commercial or non-commercial:** Non-commercial

### LONDON (ENSOL + Carbon Descent)

**Technical solution:** Via email and telephone, possibly an online service and collaboration with other external organisations.

**Target groups:** All members of the public and private companies/ organisations.

**Commercial or non commercial:** Non commercial.

### SINTRA

Car pooling/car sharing is a solution that is not very disseminated in Portugal. We are in conversations with the responsible people of a Portuguese site dedicated to car pooling ([www.deboleia.com](http://www.deboleia.com)).

### VENICE + AGIRE

The Venice's Helpdesk is operated by technical experts of the energy agency.

**Target groups:** No, all the citizens and the ECHO ACTION families.

**Commercial or non-commercial?** Non profit. However, AGIRE and the City of Venice will develop a standard tariff system to be used (now it's operated with private agreement between people involved).

## Expectations of the car pooling/car sharing system

### BOLOGNA

Practices already used: The car pooling for the employees of the municipality of Bologna and some good practice in several companies in Bologna. Car sharing with ATC (public transport service of Bologna). The service is active in Bologna since 2003, and is managed from ATC on behalf of the Municipality. We forecast to participate to the experimentation of a car pooling internet/web project with Bologna Province and ATC with the use of specific software that concurs to plan in dynamics way the crews. Last but not least we are preparing materials and suggestions to promote the use of public transport.

### BOURGAS

We expect to raise the awareness of the participating families, the students and general public on car sharing system and to distribute the good European practices in Bulgaria.

### KARLSTAD

Generally Karlstad has low expectations of implementing car pooling and car sharing in ECHO ACTION due to bad experiences with these kinds of activities. Car pooling has low priority due to earlier bad expectations and results on tried activities. The limiting factor of car sharing is the lack of commercial car sharing companies.

Karlstad argues that other measures within Mobility Management, such as ecodriving, plan your travelling, use the bike instead of the car to work, use public transport, be a test-traveller and so on will give better results and more response (see MM checklist for further examples).

### **London (ENSOL + Carbon Descent)**

We expect all participating households to make enquiries regarding the system, and possibly at least 20 percent (depending on needs and findings from the transport survey) actively taking part in the system. We also expect members of the public and other business/ organisations to enquire and possibly support and become involved with system if possible.

### **SINTRA**

In the ECHO ACTION project we see a possibility to learn and to see how other countries work in this issue. Then we will create a well structuralized platform for car pooling/car sharing for the ECHO ACTION families and later for all citizens.

### **VENICE + AGIRE**

The system already available has not obtained a very high success. Basically this was due to the important work it requires to be managed properly, and the mobility office had not a great time available for improving it. Now the main goal is to boost it with the ECHO ACTION families and effectively start it.

## **Use of Mobility Management activities from to the checklist**

Below is a summary of the ongoing Mobility Management activities in ECHO ACTION, besides car pooling and car sharing. See Appendix 4 for a complete version of MM checklist. For many partners (for example Sintra, Bulgaria) the Mobility Management issue is a new topic and the partners don't have much experience working neither with car pooling/car sharing nor other MM activities. KREA, ALLER/Comune of Caparoni and AGIRE/City of Venice didn't answer the question.

### **Bicycle**

In many partner cities bike activities are one already functioning MM activity.

Karlstad for example try to make more people to leave the car at home and instead bike to work.

In Bulgaria, people ride bikes mainly in the leisure time and therefore they will work to promote the benefits to travel by bike (health, time, costs and environmental).

London arranges bicycle maintenance workshops, cycle training and linked events to other national and local transport activities such as the national car free day or bike week.

Bologna will promote the advantages of riding a bike in the project.

Berlin has "Call a bike" – a special service of Deutsche Bahn AG (German railway organisation): a whole fleet of bikes is at service in the city around the clock. The "Call a Bike" principle is very simple: the CallBikes can be hired and returned at all major crossroads by making a telephone call. Each CallBike is protected by an electronic lock that can be opened with a numerical code. To obtain the valid code for the CallBike, simply dial the telephone number in the red circle on the cover of the lock and enter the code in the lock display. To return the bike, take it to the nearest major crossing within the core area and lock it to a fixed object.

[www.callabike-interaktiv.de](http://www.callabike-interaktiv.de)

### **Public transport**

Public transport is also an activity that some partner cities promote, mostly through providing general information on public transport. For example, Berlin promotes the benefits of travelling by public transport (costs and environmental).

### **Car**

Karlstad and Berlin have most experience from working with mobility management regarding cars.

Both countries work with "Eco Driving", "promote and awareness the use of clean vehicles" and "parking fee and parking scheme". In Bulgaria, the Helpdesk will provide information about good European practices on car sharing system. The staff efforts will be directed to promote and raise the awareness for the use of clean vehicles and environmental and economic benefits of uses of diesel driven cars.

## Appendix 7. Ten years towards sustainable mobility in Karlstad

### Experiences, conclusions and examples of activities.

The municipality in Karlstad has worked over ten years with sustainable mobility issues. Karlstad was the first city in Sweden to set up a mobility management office called the Transport Advisory service (TAS). The overall aim of TAS is to argue for changes in individual attitudes and behaviour in traffic and environmental matters in Karlstad. TA also strives to achieve a better use of the existing infrastructure through Mobility Management (MM) issues. The MM activities are important tools and contribute to a higher use of alternatives to the car and thereby reach a modal shift.

### The goal of the TAS is to support voluntary, environmentally conscious travel, which involves

- Providing information regarding the need for travel-related environmental adaptations
- Encouraging the individual to make a contribution to these environmental adaptations
- Illustrating the possibilities for improving travel and transport on an individual basis by employing a “how to” approach
- Providing guidance and encouragement towards the acceptance of all legislative proposals involving environmental improvements
- Initiating and assisting in co-operative efforts among work-places, the general public, public transportation companies etc.

### Organisation and location

#### Mobility Manager/ Transport Advisor (TA)

Mobility Manager, called Transport Advisor (TA) in Karlstad, works with individuals and enterprises trying to adjust the transport demand in a more environment friendly way. TA works with communication and advice as the major tool, and has individuals as well as companies as target groups. Broad activities of mobility management and different campaigns are the main content of the work. See example of activities below.

The TA has an important coordinating function. Good connections and partnership with companies, schools, university, municipality’s administrations etc is maintaining. TA gives input and support in the municipality planning processes, such as community planning and long-term planning. The basic starting point is how we can plan to reach a demand of individual car travel and to give priority to pedestrians, cycle traffic and public transport.

#### Mobility Centre/ Advice Bureau

TAS is located in Karlstad’s Mobility centre, Advice Bureau (Rådrummet in Swedish), located by the Main Square in the heart of the city. Many different types of advisors work in Rådrummet: Consumer advisers, energy advisers, agenda 21-coordinators, waste disposal advisers and transport advisers (TA). In total they are twelve officials who are working with improving the dialogue with the inhabitants of our municipality. Rådrummet is part of the Environmental administration and are financed by the municipality and the national government. Rådrummet is open for the public Monday to Friday and is a place where the public can get guidance in different questions, receive answers to questions they may have, obtain information material, view current exhibitions etc.

### Example of activities from TAS

#### 1. Transport strategy (mobility plan).

The Transport Strategy for the Municipality of Karlstad was adopted by the Municipal Council on 21 June 2006. A large number of towns and cities in Europe are in the process of working out municipal transport strategies. Among those that are already finished is Karlstad. Our aim is to create a sustainable solution for our transportation, and at the same time to secure our position as an attractive city. Karlstad’s strategy harmonises with the comprehensive plan and describes how transport in the future will be organised to create a quality of life without injury to people or damage to the environment. The two first steps in the work are: Spread knowledge on the transport strategy and what it involves and second to express the transport strategy in concrete terms.

## **2. Mobility Management (MM) in companies and administrations.**

Companies and administrations as employers are among the most important clients of MM. Very few companies and administrations have the competence and the structures to develop and implement a company MM scheme. For the companies, there are several positive consequences by a change in the mobility behaviour of their employees:

- Cost reduction: MM can save money for businesses, e.g. by reducing costs for construction and maintenance of parking premises or by reducing the budget for travel indemnities
- Better accessibility: MM can achieve better accessibility to the company for employees, freight and visitors.
- Health and safety: MM can improve the health and the fitness of the employees.
- Image: MM can help companies to communicate their commitments to society and to show their environmentally and ethical business practises.

### Mobility Management at the Karlstad regional hospital.

The central hospital of Karlstad was facing heavy parking problems and additionally extension plans. A mobility management process was initiated by TA to reorganise the mobility of the hospital towards sustainable transportation solutions.

Many new measures were introduced:

- New parking scheme with charges regulated by electronic equipment: Smart card.
- Information and mobility management activities: Appointing a mobility management officer.
- Discounted public transports tickets paid on a monthly basis through employees' salary.
- New policy for staff journeys during work hours and web based system for on-duty car booking and priority for car pooling.
- New bicycles for short staff journeys, company bicycle facilities: Better parking conditions, bicycle service station.
- Information through hospital including: Intranet, leaflets, campaigns.
- The measures helped to reduce CO2 emissions by at least 30 ton/year.

### The project "TRIPP- Smarter communication for companies in Karlstad"

The aim of the project "TRIPP" is to develop ways of motivating businesses to consider their current transport and travel situations and to encourage them to work on improving efficiency. TRIPP works among other things with the following: Meetings with the company's management staff, questionnaire in order to get an overview of the employees' mobility behaviour, offers for cyclists and public transport passengers, improve the bus- and bicycle-service, public transport season tickets, bike to work-campaign, training in Eco driving, car sharing service and green vehicles.

### Ice hockey by bus

Karlstad is the hometown for an elite ice-hockey team, which draw spectators from the whole county and also outside the country border. The ice hockey arena, The Löfbergs Purple Arena, is situated 3 km north of the city centre and has nearly doubled its capacity from 4 200 spectators to 7 500. There are only two roads leading to the Arena and the capacity of those roads is limited. More than 80 percent of the spectators travelled to the games by car and only 13 percent travelled by bus. Traffic congestion was ordinary status when the team played or when other big events were carried out.

TAS managed to get different actors/partners to the table at the same time. The objective with the MM work was to create a new bus organisation to reach a change in transport modes when visiting the Arena. Travel modes were investigated and new non-stop bus routes were organized and marketed. After two months of new transportation alternatives to the Arena, our monitored results showed that the ice hockey bus routes' had been successful. The number of bus travellers had increased from 13 to 20 percent and car users had decreased from 81 to 70 percent.

### 3. Information, marketing and campaigns

Information, marketing and campaigns are the core services of MM: This is an important way of making people aware, and get knowledge, of how to use other modes of transport than just the car.

#### Information

Example of MM information: information of public transport and cycling (routes and facilities), walking (routes and safety), car sharing, car-pooling, etc. Some more examples from Karlstad are:

- Bicycle map and bicycle newspaper
- Nature guides and culture guides for bicycle tours around Karlstad
- Newsletter and pamphlet with message about “sustainable mobility”
- Exhibition from Rådrummet.

#### Marketing

Since mobility management services should be voluntary for the user, marketing of all services is crucial for Mobility management. Some examples of long-term local marketing:

- Participate in different local arrangement
- Broad cooperation with local media
- Develop the web side
- Individual marketing to visitors in Rådrummet
- Regular articles in the municipality Magazine “Vi i Karlstad”

#### Campaigns

Awareness campaigns to promote the use of sustainable transports. Example of campaigns:

- Annual “Bike to work campaign” for companies and organisations.
- Participate in the European Unions’ “Mobility Week” and “In town without my car”.
- TravelSmart, is an individualised travel marketing campaign, which aims to generate greater interest in walking and cycling and helps to promote the use of public transport as an alternative to the car.
- ECHO ACTION Driving. A campaign where drivers with an economical way of driving can reduce fuel consumption and the emission of carbon dioxide. There is also an ECHO ACTION Driving course which includes driving habit test and theory lessons. The average savings, among those who have taken the course, have been 12 – 15 percent.
- Car pooling. An internet based campaign in Karlstad to help finding partners for daily car travel to work (or to the university). Car pooling is the sharing of rides in a private vehicle among two or more individuals.
- MM-activities to students and staffs at the university and to the regional hospital

### 4. Car sharing and Clean vehicles

Car sharing and Clean vehicles can be seen as an effective measure for reducing the burden of automobile traffic on the environment. Car sharing and Clean vehicles also represent an important complement to other types of environmentally friendly forms of traffic such as pedestrian traffic, bicycle traffic and public transportation. Car sharing means that a number of persons share the use of one or more cars. The use of a car is booked in beforehand and the user is paying a fee based on the distance and/or time. Clean vehicles are cars powered by alternative fuels such as ethanol, Compressed Natural Gas (CNG) or electric hybrids. Some conventional petrol- and diesel-powered automobiles with very low fuel consumption are also included.

Example of activities:

- Using car sharing and clean vehicles to help solving the transportation needs of The Municipal departments in Karlstad.
- Establishing an internal car sharing scheme within The Municipality of Karlstad, which is shared by employee’s through the use of an IT-based booking system?
- Establishing and organising a cooperative car sharing organisation for the public.
- The Municipality of Karlstad shall have at least three car sharing organisations covering all departments by the end of 2010. The Clean vehicles within the municipal organisation should grow to at least 75 percent by the end of 2008, and 80 percent of the fuel consumption in clean vehicles shall be comprised of renewable fuels by the end of 2008.

- Spreading information and knowledge in order to stimulate interest in Car sharing and Clean vehicle, both for businesses and private persons.
- Training of persons, responsible for transportation or environmental matters at the municipal level, in how car sharing and eco cars work and how such activities can be encouraged.
- Decision of free parking in the city for Clean vehicles

## 5. Evaluation

Evaluating the results of a Mobility Management project is very important, but often difficult. Perhaps because of the lack of time and small resources. Here are some evaluation examples from Karlstad:

- Annual Environmental report with results from MM activities
- Travel survey and Bicycle survey.
- Counsel for public

### Some concluding findings of our project:

- Society must take responsibility for the common consideration paid to the environment and traffic safety and stimulate individuals and businesses to employ more environmentally conscious travel methods.
- Attitude and behaviour modification of lifestyle bound habits is a slow process requiring patience.
- It is essential to conduct a dialogue with all partners involved
- Changes in mobility behaviour have to be based on a push and pull concept
- Advice regarding travel issues requires political support in order to be more effective and accomplish faster results
- People require continuous support in order to amend their habits, but also to continue using environmentally conscious travel methods.
- Most people are prepared to do modal shift if a good alternative based on conclusive argument is available.
- MM is a team effort demanding personal support and continuous training.
- Knowledge about monitoring and evaluation is essential when site development activities will be started. One important condition to reach positive results is to investigate travel mode in the site. This is also essential to get a clear view of the effect from different activities.
- Goodwill is one benefit for companies Through MM activities companies reached a lot of goodwill. If you can combine companies' activities with environmental, health- and economical concerns by using MM you will get added values to everyday life.
- MM early in the municipality planning process, such as community- and long-term planning
- Information and marketing is easily done when several partners are involved. Together with other actors there will raise synergy effects due to advertising and other marketing activities.



## **Appendix 9. Protocols or other tools to document the families' MM work**

Bologna and Karlstad.