

## *moses* conclusions

### I. The European context for Car-Sharing

1. The (European) city has a great **potential for sustainable development**. The proximity of functions, good networks of technical social and cultural infrastructure, and the concentration of know-how allow an urban lifestyle of lower consumption of resources and good access to all kinds of activities.
2. The **quality of urban life** is endangered. Economic activities became less harmful with the change from heavy industry to a service economy. Meanwhile, pollution and high noise levels are mainly due to the increasing level of transport.
3. Traffic is not only responsible for noise and pollution and congestion - with parking causing an increasing demand for **space**. With increasing level of car-ownership street space will become even more limited. Children, other pedestrians and cyclists have often not the necessary space to move around. As the flow of traffic and parked vehicles consume so much space, **the quality of public space suffers**: its functions as a social space – for encounters – and as a cultural environment – carrying historical and local meaning – are being eroded.
4. **Thoughtful solutions** are required to manage the competition for public space between transport functions on one side and social and ecological functions on the other. Here lies the challenge to **improve urban life quality** for children, for families, for elderly, for disabled – for the entire community. The problems of public space are not yet fully recognised and no strategies have been developed at the necessary levels.

### II. The opportunity

5. The modern service of **Car-Sharing** shows how to **use the car in a better way**. Car-Sharing gives access to a car – when required - in an easy way without the need to own one.  
The moses project has shown that Car-Sharing users can replace private cars and change their mobility patterns towards more use of environmentally friendly modes of transport. Important is the “pay as you drive” principle: since costs are directly related to how much you drive (variable costs).  
Overall, the new philosophy of using instead of owning a car is a key element for a new mobility culture.

6. In Bremen, about 700 private cars have already been replaced by the service of Car-Sharing.  
We see a big **potential for European cities**, where at least 500.000 private vehicles could be replaced<sup>1</sup> by customer orientated Car-Sharing services. Without restrictions for individual mobility we can then **regain public space** for social and ecological functions.
7. We can **reduce the costs** for providing parking facilities. Especially underground parking is quite expensive – it can easily cost about 10 - 15.000 € and more per parking space. With the provision of Car-Sharing, urban housing developments can become less costly as less parking space will need to be made available. The result is a better urban environment.

### III. The moses insights

8. The moses project has identified a **low awareness level** as one of the key obstacles for the further exploitation of the Car-Sharing potential. Even in Germany, together with Switzerland a country with more than 15 years experience with Car-Sharing, only about 19% of the population can explain the basic elements of modern Car-Sharing. Much more information and marketing action is required to make decision-makers, developers and as well potential users more aware. It is recommended that Car-Sharing and its options should be included in **local transport strategies, parking management policies, urban development plans and building codes**.
9. Car-Sharing is best understood as supplement to **Public Transport**. Car-Sharing customers use Public Transport more frequently. You'll find potential Car-Sharing customers especially in the group of regular Public Transport users. **Joint ticket offers** are an important element to increase the attractiveness of Public Transport and of Car-Sharing. Season tickets for PT may include the customership for Car-Sharing for a special attractive tariff. The examples of Zurich, Bremen, Aachen, Hanover and other cities show that the customer-relation will be improved, the car-sharer is using Public Transport more often (for example also more often in off-peak hours) – as PT becomes much more a basic mode of transport. Car-Sharers are more likely to use annual season tickets.  
And – of course – **further mobility services** could be integrated. Taxi and car-rentals are further elements of a more holistic mobility service provision and much imagination and entrepreneurship is needed to exploit all opportunities.
10. For **new housing developments**, the service of Car-Sharing opens up the possibility to reduce the conventional provision of car-parking. This innovative option allows the **reduction of construction costs** – especially in the case of underground parking – or to **set aside more public space** for social and ecological purposes. Until now, only few developers are aware about the **options for better planning solutions** with less costs but higher quality as it is less dependant on the provision of parking.  
Planning regulations (as in London) can directly integrate Car-Sharing into urban developments.

---

<sup>1</sup> Figure based on the already existing density of Car-Sharing in Switzerland – transferred to urban areas of EU 25.

11. Most **inner city areas** suffer from the high demand for parking. There is the highest potential for Car-Sharing in those areas with good Public Transport infrastructure. Active marketing for Car-Sharing in these neighbourhoods requires **Car-Sharing stations on legally dedicated street space**. So far, most of the national traffic regulations do not yet recognise the need for Car-Sharing spaces. The positive examples of Belgium, Italy, England and the Netherlands show how the potential of Car-Sharing can be better accessed with on-street Car-Sharing stations. In many other European countries, there are legal difficulties to implement on-street Car-Sharing stations. With changes to the traffic regulations, the options for Car-Sharing in densely built inner city areas can be improved drastically.
12. Car-Sharing is a **customer-oriented service**. The technological elements are just one element to achieve a cost-efficient and customer-friendly service.
13. There is no need to reinvent the wheel. Setting off quality indicators for services is essential. Operators in cities that have not yet Car-Sharing services can **build on the existing experience elsewhere**. The key technologies are developed for providing an effective service, but they can be further developed and integrated. There are European operators, which offer service elements for new providers. Within moses the transfer of technology and know-how from Bremen to Belgium has successfully taken place.
14. Substantial support is required to **get Car-Sharing out of its actual niche role and let it become mainstream**. That means a further development of the service (e.g. through extension of the network of stations and interregional use, etc.), more co-operation with Public Transport and better integration into urban development.
15. The main **environmental benefit** derives from the existence of car-sharing itself, since this consistently show a reduction in car-use and a shift to more environment-friendly modes. The primary strategy to increase this benefit is to stimulate the growth of car-sharing. In addition, alternatively fuelled clean vehicles can be offered.

#### IV. The decision levels

16. At the **local level**, Car-Sharing is a key element for **sustainable transport plans**. With Car-Sharing, there is a chance to reduce the number of cars without restricting individual mobility. The joint offer with Public Transport and the integration into urban development are key responsibilities at the local level.
17. The **national level** may develop a **support programme** (as in Italy) and set **quality standards** (as in Italy, Germany, Sweden and the Netherlands). Eco-labelling for Car-Sharing can help to set high standards. In a number of countries amendments to traffic regulations are necessary to allow on-street Car-Sharing stations.
18. At the **European level**, there is a strong need for enhanced awareness work. It is essential to **transfer the experience of Car-Sharing** at an appropriate detailed level – especially to **the new member states**. This is an issue of European policy. As Car-Sharing is a key point for sustainable development, European research and demonstration programmes, as well as structural funds related to **energy efficient transport** and **sustainable urban development** should include an element about Car-Sharing. There is also the need to develop cross-border access for Car-Sharing

customers.

## V. *moses* and the European Union

19. The participants of the Final *moses* conference wish to extend their gratitude for the support of the *moses* project within the Key Action "The City of Tomorrow and the cultural heritage" of the 5<sup>th</sup> Framework Programme, that has developed *moses* into a flagship project.
20. The participants of the final *moses* conference particularly welcomes the **European Commission** highlighting Car-Sharing within the **White Paper on Transport 2010** - and the fact that the **CIVITAS initiative** also sees Car-Sharing (alternatives to the ownership of cars) as one of the eight pillars of sustainable mobility.
21. It is considered that the expertise and knowledge gained as part of the *moses* project should be used to inform modal shift initiatives across the EU, particularly in the new member states and wherever possible "**best practice**" developed through *moses* be carried forward into existing and future European projects.
22. The results of the *moses* project clearly indicate, that Car-Sharing is a crucial element for sustainable transport plans – as described in the EU '**Thematic Strategy for the Urban Environment**'. In all related measures and programmes, the European Commission should consider Car-Sharing as an element for further research and demonstration activities.

[www.moses-europe.org](http://www.moses-europe.org)

[moses@umwelt.bremen.de](mailto:moses@umwelt.bremen.de)