Carsharing in France: Past, present and future

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CARSHARING IN FRANCE: PAST, PRESENT AND FUTURE

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CARSHARING IN FRANCE: PAST, PRESENT AND FUTURE

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ABSTRACT

Carsharing schemes are pay-as-you drive clubs that offer members access to a vehicle without ownership. Beneficial to users because they can increase access to cars for non car owners, access to a wide range of vehicle types and cost savings in some cases, they are also attractive to policy makers because they can enhance mobility for the less well off while cutting car use and resulting environmental and economic impacts.

Yet while carsharing schemes have become relatively popular in some countries such as Switzerland, the Netherlands, Canada and the USA since the late 1980s, there was very little activity that occurred in France until relatively recently. The purpose of this paper then, is to look at how carsharing has developed in France so far, and how it is likely to evolve in the future.

Keywords: carsharing, car clubs, transport demand management, mobility management, transport policy, transit
(1) INTRODUCTION

Carsharing schemes (or car clubs in the UK) can be defined as being a ‘pay-as-you-drive’ club, that offers members access to a vehicle without ownership (1), and could almost be described as fulfilling the role of a short term car rental scheme. From a user perspective, such schemes are attractive for a number of reasons. For instance, Bonsall (2) reports that perceived member advantages include:

- greater access to cars for non car owners;
- cost savings for previous car owners who did not often drive;
- increased status due to access to nice and new vehicles;
- access to a wide range of vehicle types;
- freedom from maintaining, insuring and accommodating a car;
- no need to own a second car; and
- an enhanced sense of community.

For policy makers too, there are a number of benefits from carsharing. For instance, Shaheen et al (3) reports that carsharing can promote the use of existing public transport systems; enhance mobility for the less well off; encourage higher density development; reduce energy use and emission levels from the transport sector; reduce the need for additional highway and parking capacity.

Yet despite these numerous advantages, carsharing remains a relatively marginal mode of transport in many countries. Thus, while Markusson (4) notes that the first large scale scheme began operating in Switzerland in 1987, as of 2006 Shaheen and Cohen (5) estimates that worldwide there were still only roughly 350,000 members with 11,700 vehicles in 600 cities in 18 countries (although the trend does appear to be increasing exponentially).

One country that is a relative latecomer to carsharing is France, where the first mainstream carsharing operations did not really begin until 1999 (see later for further details). The purpose of this paper then is to try and determine why this is so through an investigation of carsharing in France. Accordingly the paper is structured so as to:

- identify the factors influencing the development of carsharing schemes worldwide (sections 2 and 3);
- report the current position of carsharing schemes in France (section 5);
- examine the reasons behind the current position of carsharing schemes in France thus far (section 6); and
- explore the future direction of carsharing in France (section 7).

Details of the method adopted are described in section 4, and conclusions are reported in section 8.
(2) WHERE CARSHPARING WORKS, AND HOW WELL

The purpose of this section is to investigate the market niches where carsharing works currently, and to report its impacts. This will primarily focus on research from across the world due to the very limited information produced so far in France (a gap which this paper aims to help fill). First, in a table looking at the ‘literature consensus regarding typical characteristics of carsharing members’, TCRP (6, pp3.9) reports these to be:

- Age: Mid 30s to mid 40s;
- Income: Upper middle class (though real variations here);
- Education: Upper levels (college degree(s));
- Household size: Smaller than average;
- Car ownership: Half own one vehicle;
- Gender: Slightly more males.

Meanwhile Shaheen et al (7) finds that in the USA some 81.7% of trips are ‘neighbourhood’, 12.3% are business, 0.1% are commuter and 4.6% are college. The paper also reports 1.3% of trips as being ‘low income’. By contrast in Canada the corresponding figures are 96.0% for neighbourhood trips, 3.2% business, and 0.4% each for low income and college. It is also evident that carsharing operations tend to be located in large metropolitan areas.

Finally, the results of a French example. In a survey of members of the Paris carsharing scheme Mairie de Paris (8) reports that more than half are either “against private car” or “for soft modes”. More than the half use the service between one and three times a month, and public transport almost every day, while almost 50% cycle at least two times a week and the majority use private car less than once a month. Regarding journey purpose, leisure (week end and evenings) was most prominent, followed equally by visiting friends and shopping. Users most value the proximity of vehicles, the easiness of booking and the high rate of availability of vehicles as measures of service quality. In terms of the impact of carsharing on the members, 45% use the car less, 45% rent a car less often and a significant proportion use public transport, walk and cycle more since joining the carsharing schemes. Meanwhile the proportion of households having no car having increased by 30% on joining a carsharing scheme such that they represent 90% of the membership.

In summary, the main market currently for carsharing schemes worldwide seems to be dominated by comfortably off, educated, middle aged people living in small households in metropolitan areas, half of whom have a car, and half of whom do not, who use carsharing vehicles to make trips around the local neighbourhood.
(3) FACTORS AFFECTING THE GROWTH OF CARSHARING WORLDWIDE

In terms of factors affecting the growth of carsharing worldwide, Vuchic (9), in one of the earlier references to car clubs suggests that ‘physical and operational problems… [together with issues to do with] maintenance, supervision of use and legal responsibilities’. Expanding these, TCRP (6) identifies a series of external barriers for carsharing operators. These include: how best to work with a partner organisation; the lack of knowledge about what carsharing is (among decision makers and the public); the lack of available data about carsharing; financial barriers (including lack of grants, insurance and tax barriers); regulatory barriers; parking issues; and geographic and cultural barriers. It also points out that there will often be ‘internal’ barriers for the carsharing operator to do with operational and technology issues.

In addressing these barriers, Bonsall (2) reports that carsharing schemes require the existence of a committed organiser, a receptive local population (e.g. middle class with interest in social and environmental issues), well located parking stations, a suitable type of area (ideally densely populated with limited parking), reliable technology and effective marketing. In addition, it notes that carsharing was more successful in Germany and Switzerland than in the UK because of better public transport provision, the effective integration of car clubs with public transport and other modes and a different cultural attitude to car ownership.

Finally, approaching the issue from the policy maker’s perspective, Enoch and Taylor (10) suggests that such barriers could be overcome through a range of ‘support activities’ by Government that can be grouped into three core areas, namely:

- Information – in the form of intellectual backing, political support and links with public transport operators;
- Regulation – through the provision of ‘usable’ parking spaces or alterations to the planning code; and
- Fiscal mechanisms – e.g. funds to help the club buy and run vehicles, financial and organisational help to market schemes effectively, and tax breaks for car club users and/or operators.

Overall then, carsharing schemes appear to benefit when various information, regulation and fiscal barriers no longer exist, although it should also be noted that numerous schemes (particularly in North America) have continued to develop without such help.

(4) METHOD

The paper is based on a study undertaken to better understand the current status of carsharing services in France and to create a database on these services which is to be used by CERTU to help dissemination activities and to produce a tool helping local authorities and potential operators to implement carsharing services. CERTU also sees the survey results as being complementary to studies looking at business models,
technology issues and studies assessing the market potential of carsharing which have already been made in The National Research Program on Surface Transport.

To do this, services were initially identified through the Reseau France Autopartage internet site (11), together with information through various networks of local authorities (e.g. MACIF). From this, 19 carsharing operations were identified across the country, and an email and telephone survey was then carried out between 1 March and 30 May 2008. Overall the response rate varied between 17/19 and 19/19 depending on the questions asked. The structure of the interview was semi-structured, and the questions focused on:

- basic information such as: name of service, location, contact details, set up date and judicial status, membership of France Carsharing Network;

- design information such as: sources of financing, ticketing issues (including the degree of integrated ticketing with other modes), fee structures and levels, communication methods used, technology used;

- performance data such as: usage data, number of employees, number and types of vehicles, number and type of carsharing stations, number and type of members, difficulties met.

In addition, in-depth interviews with Lyon operator LPA Autopartage and Bordeaux one Autocomm were conducted to ascertain further understanding of the issues involved.

(5) CARSHTARING IN FRANCE SO FAR

The first carsharing scheme in France was trialled in 1971, by Procotep in Montpellier. This experience failed because of legal barriers, and because a lack of quality control and efficient management did not provide a sufficiently good quality of service (11). This was followed by Praxitèle in Saint-Quentin-En-Yvelines (12), which was an experiment using electric cars that ran from October 1997 to July 1999. It aimed at testing the self-service electric car concept (prototype) and analyzing the size and organization of the resources, the challenge facing the management and organization of service provision. It concluded that the concept of shared cars was mature for local use and widely differentiated clientele. However, it also encountered difficulties in accurately forecasting demand levels and faced fixed costs that were too high.

More successfully, the first surviving services were implemented in La Rochelle (Liselec) with electric cars, and Paris (Caisse Commune) both in 1999. Subsequently, schemes have been established in Clermont-Ferrand (Club ma voiture, 2000), Strasbourg (Auto'etrement, 2001), Bordeaux (Autocomm, 2001), Marseille (Autopartage-Provence, 2002), Rennes (CityRoul, 2002), Lyon (Autolib, 2003), Grenoble (AlpesAutopartage, 2005), Montpellier and Nimes (Modulauto, 2005), Paris (Carbox, 2006), Lille (Lilas, 2007), Paris (Mobizen and Okigo, 2007), Antibes (CitéVu, 2007), Nantes (Marguerite, 2008), Narbonne (Librauto, 2008), Poitiers (Otolis, 2008), and Toulouse (Mobilib', 2008). One further point to note is the formation of the France Autopartage network. This sought to develop the carsharing
activities on a national scale to allow interoperability between services and put in common some means (a national call centre, a common computer management system, etc) and was set up on the initiative of operators in Strasbourg, Marseille, and Lyon in 2001. Currently, eleven out of the 19 existing services are members.

Overall, most of the carsharing schemes across France are located in the larger urban centres (see Figure 1).
Clearly the year 2007 has been the most important year so far with more than nine schemes established. Most of these operate between ten and 30 vehicles, while the more established schemes in Strasbourg, Paris and La Rochelle have more than 50 vehicles. The Caisse Commune in Paris now has over 100 vehicles. In line with these figures, the majority of schemes have between one and 15 carsharing stations (with the largest in this group having between ten and 15 stations). The exceptions are in Strasbourg and Paris which have more than 20 stations. Typically across France, each station houses between one and four vehicles. Interestingly, the survey found that some 11% of vehicles are electric and 4% run on CNG, while the remainder are petrol and diesel.

Altogether the survey found that there were 8,750 members of carsharing schemes in France (i.e. between ten and 30 members per vehicle). Of these, the Caisse Commune in Paris has 3,100 members and Autotrement in Strasbourg has 1,200. Meanwhile the well established provincial schemes (more than five years old) have memberships of between 350 and 600, while the most recent networks typically exhibit between 100 and 250 members. Typical carsharing members are aged between 30 and 45 years old, and half of users are from professional or white collar backgrounds.

From the operator perspective, twelve of the schemes are privately operated (designated SAS, SARL, SA) with the local authority is a facilitator/supporter. Four schemes are SCIC – a public/private structure first designated in 2001 whereby the organisation pulls together wage-earners, users, volunteers, and local authorities within a territory to provide goods and/or services to respond to collective needs, and
so create a social utility which is recognised by the Prefect and thus able to benefit from public assistance (e.g. grants from local authorities). Here, the local authority tends to be the initiator of the carsharing operation. One example is in Lille where the operator Lilas is a SCIC composed by Keolis, the Municipality of Lille, firms from the socially responsible economy, Caisse Commune (Parisian carsharing firm operator), wage-earners, and users. The other three schemes are as follows:

- In Lyon, the parking management company Lyon Parc Auto operates carsharing and is a SEM – i.e. a firm where the capital is held in majority by one or several local authorities.

- The scheme in Poitiers is operated by Otolis which is an EPIC – a public structure which provides an industrial and commercial service that cannot be fulfilled commercially by private firms.

- Alpes Autopartage in Grenoble is an association with a not for profit structure. Here, the local authority is a facilitator and supporter.

In terms of pricing structures, all of the schemes (apart from Mobizen in Paris which has only hourly-fees) have ‘fares’ based on monthly fees (on average 10.50 euros), plus a time-based fee (3.20 euros/hour) and a distance fee (0.28 euros/km).

Eleven of the 19 schemes are members of the France Autopartage network. This is a private organisation that was created in 2000 which aims to facilitate the development of carsharing in cities across France by providing technical assistance to operators and standardising some operational elements (13). This allows:

- A common system of information management: membership databases, reservation planning software, Smart Card vehicle access systems, and automatic billing;

- A national call centre for booking and assistance 24 hours a day, seven days a week, 365 days of the year;

- Joint member services: allowing interoperability, preferential rates, etc.

A summary of the survey results is provided in Table 1.
<table>
<thead>
<tr>
<th>Operator</th>
<th>Date set up</th>
<th>Location</th>
<th>Municipal population</th>
<th>Operator Status</th>
<th>Number of vehicles</th>
<th>Number of stations</th>
<th>Number of members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto'trement</td>
<td>2001</td>
<td>Strasbourg</td>
<td>272500</td>
<td>SCIC</td>
<td>54</td>
<td>24</td>
<td>1200</td>
</tr>
<tr>
<td>Autopartage-Provence</td>
<td>2002</td>
<td>Marseille</td>
<td>826700</td>
<td>SARL</td>
<td>27</td>
<td>11</td>
<td>414</td>
</tr>
<tr>
<td>Autolib'</td>
<td>2003</td>
<td>Lyon</td>
<td>467400</td>
<td>SEM</td>
<td>24</td>
<td>8</td>
<td>350</td>
</tr>
<tr>
<td>Lilas</td>
<td>2007</td>
<td>Lille</td>
<td>224900</td>
<td>SCIC</td>
<td>16</td>
<td>9</td>
<td>500</td>
</tr>
<tr>
<td>City'Roul</td>
<td>2002</td>
<td>Rennes</td>
<td>210500</td>
<td>SARL</td>
<td>11</td>
<td>4</td>
<td>150</td>
</tr>
<tr>
<td>AutoComm</td>
<td>2001</td>
<td>Bordeaux</td>
<td>229500</td>
<td>SCIC</td>
<td>11</td>
<td>9</td>
<td>100</td>
</tr>
<tr>
<td>Alpes-Autopartage</td>
<td>2005</td>
<td>Grenoble</td>
<td>155100</td>
<td>Association Loi 1901</td>
<td>18</td>
<td>14</td>
<td>260</td>
</tr>
<tr>
<td>Modulauto</td>
<td>2005</td>
<td>Montpellier</td>
<td>248 000</td>
<td>SAS</td>
<td>10</td>
<td>10</td>
<td>180</td>
</tr>
<tr>
<td>Modulauto</td>
<td>2005</td>
<td>Nimes</td>
<td>144 000</td>
<td>SAS</td>
<td>7</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Caisse Commune</td>
<td>1999</td>
<td>Paris</td>
<td>2166200</td>
<td>SAS</td>
<td>130</td>
<td>36</td>
<td>3100</td>
</tr>
<tr>
<td>Mobizen</td>
<td>2007</td>
<td>Paris</td>
<td>2166200</td>
<td>SAS</td>
<td>45</td>
<td>29</td>
<td>2000</td>
</tr>
<tr>
<td>Okigo</td>
<td>2007</td>
<td>Paris</td>
<td>2166200</td>
<td>SAS</td>
<td>89</td>
<td>28</td>
<td>550</td>
</tr>
<tr>
<td>Okigo</td>
<td>2007</td>
<td>Rouen</td>
<td>108300</td>
<td>SAS</td>
<td>6</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>Club ma voiture</td>
<td>2000</td>
<td>Clermont-Ferrand</td>
<td>139300</td>
<td>SA</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Liselec</td>
<td>1999</td>
<td>La Rochelle</td>
<td>77300</td>
<td>SA</td>
<td>53</td>
<td>7</td>
<td>400</td>
</tr>
<tr>
<td>CitéVu</td>
<td>2007</td>
<td>Antibes</td>
<td>75000</td>
<td>SAS</td>
<td>7</td>
<td>0 (zonal)</td>
<td>50</td>
</tr>
<tr>
<td>Otolis</td>
<td>2008</td>
<td>Poitiers</td>
<td>89200</td>
<td>EPIC</td>
<td>10</td>
<td>4</td>
<td>Too recent</td>
</tr>
<tr>
<td>Mobilib</td>
<td>2008</td>
<td>Toulouse</td>
<td>437100</td>
<td>SCIC</td>
<td>5</td>
<td>Not yet defined</td>
<td>50</td>
</tr>
<tr>
<td>Marguerite</td>
<td>2008</td>
<td>Nantes</td>
<td>281800</td>
<td>SA</td>
<td>12</td>
<td>10</td>
<td>In creation</td>
</tr>
<tr>
<td>Librauto</td>
<td>2008</td>
<td>Narbonne</td>
<td>51300</td>
<td>SA</td>
<td>10</td>
<td>3</td>
<td>In creation</td>
</tr>
<tr>
<td>Carbox</td>
<td>2008</td>
<td>Paris</td>
<td>2166200</td>
<td>SAS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 1 Summary of Survey Results**
(6) REASONS FOR THE CURRENT POSITION

The survey demonstrates that carsharing in France remains at a relatively low level by the standards of several other European countries (in particular Switzerland, Netherlands, Germany and even the UK). This would appear to be for several reasons, which can be classified following the framework mentioned earlier: i.e: informational, regulatory and fiscal (10).

In terms of informational issues there are two levels where this is problematic. First, there is the user level. Basically for the moment in France carsharing very much remains a niche mode with little wider public recognition. Thus even in Paris where carsharing has been in place for a decade, a survey found that 60% of people did not know the definition of carsharing while 28% confused carsharing with carpooling. This would suggest that marketing efforts need to be stepped up significantly (14).

Second, at the institutional level there has often been an absence of political support for carsharing (once again at least partly caused by ignorance about what carsharing is, or what it can achieve). One exception is in Paris. Here, the need to promote carsharing has been recognised since 2000 with the publication of the Urban Transport Plan (15). This has led to the three Parisian operators (Caisse Commune, Mobizen, Okigo) signing up to a national charter on carsharing supported by GART and ADEME in 2005 which provides a carsharing label or standard (16). In practice, the criteria of the label concern the flexibility of the service. Thus, the operator must guarantee at least 80% of the reservations; provide easily accessible vehicles (i.e. establish a minimum reservation time of 15 minutes); base its fare structure on both trip time and trip distance; develop solutions to encourage the use of public transport and soft modes through combined ticketing; and use environmentally friendly vehicles (<140g CO2/km in 2007 and <120g in 2010). In addition, in 2007 the municipality changed its regulations to allow the allocation of reserved on-street parking spaces (8). So far though, the label only exists in Paris. As yet there is no national label because the law has not yet been adopted by the National Assembly).

One informational area where there has been progress in France is in cooperative working practices. Thus, car rental company AVIS and parking manager VINCI have cooperated in Paris by creating the private carsharing operator Okigo in 2007, which has already 600 adherents and 95 vehicles, showing the potential of quick development of this kind of structure whereby the vehicle infrastructure providers work together. Similarly in Lyon, parking provider Lyon Parc Auto has displaced the association AutoLib since 2007 for the managing of the service and a quick evolution is planned with the goal to double number of stations and vehicles in 2008. Meanwhile insurance companies such as MACIF have recently developed attractive insurance products for eco friendly transport modes (e.g. carpooling, clean vehicles, etc) and particularly carsharing vehicles. In addition, so far half of the carsharing schemes have developed joint ticketing partnerships with operators or local public transport services.

One other point to note here is that the lack of a clear definition of what carsharing is has dissuaded local authorities from supporting the mode and has led to a series of regulatory issues. These regulatory issues are as follows:
There is a question as to whether carsharing is a form of public transport or not;

There are issues to do with carsharing competes with taxis and rental cars;

There are issues to do with how local authorities can offer incentives; and

There are issues to do with whether carsharing vehicles can be allocated on-street and/or publicly owned off-street parking spaces.

Accordingly, in May 2006 the Senate adopted a proposition of law made by Senator Roland Ries "aimed at promoting carsharing" (though as of July 2008 this proposition has yet to be adopted by the National Assembly) (17). In detail, it seeks to create a legal definition of what carsharing is by creating a label and thus make it possible to create parking spaces reserved for carsharing on the public highway. It also aims to develop a financial incentive to encourage carsharing operators to launch schemes that comply with the label. In addition, in the summer of 2007 a national governmental initiative, the ‘Grenelle de l'Environnement’ announced the need to develop carsharing as a means of responding to environmental concerns by ‘breaking’ the legal barriers seemingly preventing its adoption (18).

The final category concerns operational issues. In France, with the exception of the issue of local authorities offering incentives mentioned earlier, these seem mainly to relate the direct economics of operating a car club and the wider transport market than with the national/local government structures (such as the tax or subsidy regimes for example). Thus, one problem is that so far nearly all of the schemes so far in France are too small to benefit from economies of scale and this has so far impacted on their economic viability (19).

Related to this, so far relatively little effort has been aimed at encouraging businesses to join in with carsharing operations. Then there are wider issues for carsharing schemes not taking off. Most importantly, the level of parking provision is perceived as being generous – CERTU (20) reports that French cities typically offer four to five times more parking spaces than Swiss cities making carsharing and public transport – an important element of the ‘support package’ needed for potential car sharers – relatively less attractive options.

(7) THE FUTURE OF CARSHARING IN FRANCE

For the future of carsharing in France, it is useful to consider the reasons for such limited progress thus far that were listed in the previous section.

From an information perspective, it is clear that more effort needs to be made to ‘spread the word’ about carsharing schemes at both at the user and the institutional levels. This would need to be done by individual schemes at the local level, but also in the form of awareness raising through advertising, news items, promotional events, and through policy guidance notes nationally. Such an approach would be helped by the moves to properly define what carsharing is (see later). The approach could also benefit from some form of tie in with the huge impact made since 2005 by the shared bicycle scheme concept that seemed to suddenly spring up in cities all across France (e.g. Velib in Paris and Velo'v in Lyon) (Ville and Transports, 2007).
A judicial analysis in 2007 shows that carsharing can correspond to the criteria of general interest: “carsharing activities respond to the criteria of general interest because they contribute to the protection of the environment, encourage the right of transport for everybody, and they are a complement to the public transport service” (19). However, to be considered as a public service – which is not the case for the moment in France – a carsharing service would need to be organized by the public authority which can run the service by itself or delegate the activity. In the last case every operator would be able to respond to the bid for offer, providing it had the professional and financial capabilities.

It also seems likely that partnership working between car rental companies and parking providers will continue to develop, while the links to mobility agencies, public transport operators and shared bicycle operations remain to be exploited in terms of service integration e.g. combined ticketing arrangements, and physical positioning at public spaces at key transport interchange points. It may also be sensible for carsharing operators to work with local employers (see later) as one way of increasing the use of the vehicles during working hours – typically a period when use by residents for example is fairly low.

To address the regulatory issues, the Urban and Suburban Transports operational committee from Le Grenelle de l'Environnement (18) has set out a series of actions based on the Roland Ries proposition that aims to clarify the regulatory context facing carsharing. These include:

- Defining the activity of ‘carsharing’;
- Creating a ‘carsharing label’ to identify the vehicles concerned;
- Modifying the General Code of Local Authorities to allow/encourage local authorities to allocate parking spaces on the road (public surface) for carsharing vehicles;
- Suggesting to local authorities that they consider carsharing when developing their Urban Travel Plan.

Such a package of measures is intended to create a favourable context for the development of carsharing as a credible alternative of transport.

Related to this, one further development is that there is a shift now taking place towards integration and cooperation between Transport Authorities so as to ensure that the final user has a convenient multimodal transport offer. For example, the Syndicats Mixtes loi SRU (21) sets cooperation structures between different kinds of local authorities that have some obligatory attributes (e.g. integrated ticketing, multimodal information) and optional ones. New modes like carsharing could be part of optional attributions. Taking this further, Le Grenelle de l'Environnement (18) advances the notion of a Sustainable Mobility Authority to replace the Transport Authorities, which would incorporate new flexible urban transport services including not only carsharing, but also carpooling, bike stations, etc – a notion which has actually raised awareness of the need for change to occur.
Overall, such an approach suggests that carsharing services should not be considered in isolation. Instead they need to be integrated with the rest of the transport system so as to complement both the private car and public transport in terms of the use of modes (e.g. public transport plus carsharing), and also in terms of partnerships (for ticketing, information etc). From this, it will also be necessary to develop new methods of evaluation for new modes like carsharing so as to better inform local authorities of circumstances where investing in such schemes would be worthwhile.

When considering financial ways forward, one way of overcoming the viability of ‘small scale schemes’ is to encourage operators to look at cooperating at a national scale to allow economies of scale to be generated for back office functions and for buying vehicles, insurance and so on. Meanwhile companies would continue to develop services in large cities as now. This is in response to experience in Switzerland where carsharing did not become viable for several years and where currently there is only one company that operates on a national scale (22).

As noted earlier, attracting employer organisations as clients represents a means of increasing vehicle usage throughout the day. Benefits for the employer include: reduced need for a pool car fleet, reduced parking problems and an improved environmental image.

More broadly, for carsharing operators there is the ‘problem’ that using alternatives to carsharing (in particular the private car, but also public transport) is relatively straightforward in France. Thus, there is often no shortage of parking spaces, relatively little congestion and good quality yet inexpensive bus and rail systems, and this means that many of the ‘push’ factors present elsewhere for establishing such schemes tend to be less evident, and ultimately it may have been this that has so far limited the take up of carsharing in France.

(8) CONCLUSIONS

The main factors necessary for the successful development of a carsharing scheme would seem to be the existence of a sufficiently large potential market of carsharers coupled with the non-existence of a series of informational, regulatory and fiscal barriers.

To summarise the current position of carsharing schemes in France, there are 19 schemes of which seven were initiated in 2007. Altogether, these tend to exist in the larger cities and consist of 8,750 members, almost 550 vehicles and 211 stations. This equates to around 16 users per vehicle. Carsharing operators are generally either private or public/private companies.

Such figures indicate that carsharing in France remains relatively undeveloped when compared with some other European countries such as Switzerland, Netherlands and Germany, and this is for a number of reasons – mostly related to the relative ‘newness’ of the concept. These are to do with an ignorance about carsharing, a lack of political support, legal issues to do with the lack of a definition of what carsharing is, and operational reasons – predominantly that most carsharing schemes currently in France are still to small to be commercially viable.
As for the future, it does now seem that with the recent political backing for the concept together with the proposed legal changes that some of the major barriers preventing the mainstreaming of carsharing in France have been removed and that the rapid growth in the numbers of operators, members, stations and vehicles is set to continue. It remains to be seen whether this growth will continue on its current apparently exponential path or fall away again to follow a steadier more incremental evolution.

(9) ACKNOWLEDGEMENTS

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(10) REFERENCES


(4) Markusson P, Personal communication, Advice Carsharing, Environment, Gothenburg, Sweden, 19 September.


(21) CERTU, Plan de Déplacements Urbains et Loi Solidarité et Renouvellement Urbains, CERTU, Lyon, France, 2 June 2003. Visit
(22) Muheim, P., Mobility Carsharing Switzerland – The unconventional approach, MOSES (Mobility Services for Urban Sustainability) Final Conference, Keys to Car-Sharing: Moving the City of Tomorrow, Brussels, Belgium, 27-28 January 2005.