STARS

Shared mobility opporTunities And
challenges foR European citieS

Research and Innovation action
H2020-MG-2016-2017

Report on Outcomes
of the Car Sharing Campout

Deliverable D7.7

Version n°2

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ABOUT STARS

STARS - Shared mobility opporTunities And challenges foR European citieS – aims to explore the diffusion of car sharing in Europe, its connections with technological and social innovations, as well as its impacts on other transport modes (private car, bike, walk, taxi, public transport...). The new aspect of STARS lies in the studies on the implications and impacts of car sharing, rather than on the implementation of the system itself, as it has been done before.

Led by the Politecnico di Torino, STARS gathers multidisciplinary car sharing experts in the fields of transport engineering, environmental psychology, and industrial economics. During 30 months, they will adopt a co-modality approach, considering the real effects of car sharing on other travel modes, the (new) travel demand, and the mobility needs of European citizens.

The final objective of STARS is to measure the benefits related to the diffusion of different car sharing services, in addition to comparing their costs. Moreover, a policy toolkit, including guidelines and recommendations, will be designed to provide European mobility stakeholders and policymakers with a support tool that will help them make the right decisions in developing the best strategies for implementing environment-friendly and cost-effective car sharing services.

More information: www.stars-h2020.eu

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SUMMARY

This deliverable outlines all the activities carried out before and during the Car sharing campout. The campout, organised on 14-15 October 2019, aimed at sharing the knowledge acquired in the project, supporting the growth of car sharing services, learning more about the shared mobility sector, and working with cities that are experiencing difficulties in implementing car-sharing services. This event, which took the form of an "Innovation Camp" gathered a wide range of stakeholders and cities. It was also an opportunity for different actors to meet and build ties to strengthen the community.

During two days, participants from industry, NGOs, the car-sharing business, academia, and the mobility sector gathered in Paris to learn, share and work together. Experiences, success stories, inspiring talks and working sessions were part of the programme. 22 speakers and 3 moderators took the floor to make the event a memorable experience.

The pictures included in this document were taken during the workshop with the explicit consent of all the participants.

KEY WORDS

STARS, car sharing, innovation camp, workshops, conferences, Paris

INTRODUCTION

The main purpose of this deliverable D7.3 is to describe the methodology and the course of action of this key event in the STARS project. The objectives, the venue and context details, the profiles of the participants, the presentation of the staff organisation and facilitators, as well as the results of all the different sessions and workshops are detailed in this document.

1. What is the Car Sharing Campout?

Today cities are facing an urgent demand to reduce the damaging impacts of transportation on both the environment and their citizens' health. As they grapple with improving air quality, expanding green areas and reducing traffic congestion, car sharing is becoming an ever-important part of city sustainability plans. The Car Sharing Campout aimed to tackle some of the challenges the mobility sector and cities are facing with regards to car sharing and shared mobility in general. Bringing together key automotive players, mobility researchers and organisations working to improve future challenges in mobility, the Car Sharing Campout included inspiring talks, knowledge sharing and state-of-the-art innovation workshops to help create breakthroughs for cities.

2. Venue and context details

The STARS Car Sharing Campout took place in Paris, from 14 –15 October 2019. The dates were chosen taking into consideration the organisation of the 2019 AUTONOMY & Urban Mobility Summit (16-17 October). Gathering professionals from Europe and beyond, the Car Sharing Campout brought together major actors in the mobility sector, as well as city representatives, policymakers, academics and experts interested in car sharing.

Nestled in the heart of Paris' 13th arrondissement, the Anticafé Olympiades was the perfect place to host the STARS Car Sharing Campout. With a focus on creative collaboration, the Anticafé Olympiades is a fun venue equipped with different-sized meeting rooms, a fablab, and a large terrace. Rooms were renamed to fit the car sharing topic and mobility lexicon:

- **The Garage:** main room to welcome participants and host plenary conferences and keynotes;
- **Mobility Accelerator:** smaller room to host workshops and the Camp itself;
- **Free-Floating Lab:** smaller room to host workshops.

Figure 1: Views of the room "The Garage"

Figure 2: Views of "The Mobility Accelerator" and "The Free-Floating Lab"

Figure 3: Views of the patio

3. Speakers and staff organisation

Speakers

Marco Diana, Associate professor transport engineering, Politecnico di Torino.

Marco Diana is associate professor of transport engineering and planning at Politecnico di Torino (Italy), specialising in the analysis of transport-related behaviours and in multimodality issues. He has 20 years of international research experience in this field, carried out in different research institutions both in Europe and overseas. He is presently coordinating the H2020 project STARS that deals with the study of car sharing services and has been actively involved in many others (METPEX, SUITS, TInnGO, SAGE, ecoFEV, COST 350, COST 355...). He is author of about 60 publications, many of which published in outstanding scholarly journals.

Julie Chrétien, Project manager, urban planning & transports, mobility trends & analysis at 6t.

Julie is a doctor in sociology (University of East Paris) and an engineer with a specialisation in urban planning and transports from the École Nationale des Ponts et Chaussées (ENPC), who analyses mobility behaviour using both qualitative and quantitative methods. With a focus on the relationships between individuals' time use and mobility constraints, she deals with questions of accessibility, as well as gender and inclusive cities. In parallel, she is working on the role of new digital tools in the making and the analysis of mobility.

Christophe Najdovski, Deputy-mayor of Paris for transports.

In charge of transport, mobility, roads and public space for the city of Paris, Christophe Najdovski is helping Paris to implement policies related to ecomobility. He is also President of the European Cyclists Federation (ECF), which aims to promote urban mobility by bicycle. Christophe Najdovski contributed to the creation of bus lanes, the weekly closure of the Seine's banks to cars, and the launch of Vélib, Paris' bike-share programme. He has taught economics and social policies in various schools in Paris and Bobigny, and he holds a DEA in Environmental Economics from Paris 1 Panthéon-Sorbonne University.

Vincent Chauvet, CEO & co-founder of LGI Consulting.

Vincent co-founded LGI Consulting in 2005 and is the current CEO of the company. He is involved as a managing consultant in several projects mostly in the energy, transport, IT and security sectors. Several years as a child in the US marked his first international experience. He started his career in the IT sector in Paris as analyst in geographical information systems (GIS) for urban planning applications. He then moved to Argentina in 1998 as a project manager in the environment industry, in the Suez group (now Engie). Since 2001 he is a business consultant and has been involved in dozens of consultancy assignments in several sectors.

Ross Douglas, President & founder of AUTONOMY & the Urban Mobility.

Ross Douglas is a South African entrepreneur who founded Autonomy Paris, the world's largest event uniquely dedicated to urban mobility and bringing innovators and policy makers together. The 4th edition of the annual event will be held in Paris on October 16th and 17th, 2019. Ross is also an expert speaker on New Mobility and participates in conferences around the world.

Jeffrey Matthijs, Director & coordinator of Autodelen.

Since 2008, Jeffrey Matthijs is the director of Autodelen.net and coinventor of the "'green deal shared mobility" and "shared mobility rocks!". He contributes to maximise the ecological, social and economic benefits from car sharing by combining and defending the interests of all car sharing providers and private car sharing groups, representing car sharing in front of (local) governments and installing innovative pilots to make car sharing accessible for as many target groups as possible, such as sharing governmental fleets, wheelchair friendly cars and projects of social inclusion and car sharing.

	Johannes Rodenbach, Policy manager at Autodelen. Johannes Rodenbach is policy manager and expert in supporting local governments in planning shared mobility for Autodelen.net. With Jeffrey Matthijs, director of Autodelen.net and coinventor of the "green deal shared mobility" and "shared mobility rocks!", they contribute to maximise the ecological, social and economic benefits from car sharing. They are working on this trough combining and defending the interests of all car sharing providers and private car sharing groups, representing car sharing in front of (local) governments and installing innovative pilots to make car sharing accessible for as many target groups as possible, such as sharing governmental fleets, wheelchair friendly cars and projects of social inclusion and car sharing.
	Michael Glotz-Richter, Sustainable mobility, City of Bremen. Michael Glotz-Richter is Senior Project Manager for sustainable Mobility for the City of Bremen. Michael holds a diploma in Urban and Regional Planning from the Technical University in Berlin (1984). After stations in Hamburg, Bonn, Berlin, Cologne, he has been responsible for more than 20 years in Bremen for many internationally recognised model projects on sustainable mobility – especially with car sharing as tool for car independent lifestyle and human-friendly street design.
	Cecilia J. Bergstad, Associate professor, University of Gothenburg. Cecilia Jakobsson Bergstad is an Associate professor at the Department of Psychology, University of Gothenburg Sweden, where she heads the research group, Environment Psychology Unit, works with teaching and as a director of studies. Her main research interests include the application of psychological knowledge to the area of sustainable transport, such as determinants of behavioural change, acceptance of environmental policies and well-being. Cecilia J. Bergstad has an extensive list of scientific publications and is a widely cited author within this area.

Marco Viviani, Vice-president strategic development at Communauto.

Marco Viviani is the Vice-President for strategic development of Communauto, the oldest car sharing organisation in North America and the most important service in Canada. The company serves 13 Canadian cities (among which Edmonton, Toronto, Ottawa, Montréal and Halifax) and Paris in France. After his studies in Physics at the University of Milan (Italy), he participated from 1997 in several national or European projects about sustainable mobility and car sharing. In 2003 he moved to Quebec, where he started collaborating with Communauto and contributed to the growth and the major achievements of the company. Among these the electrification of the fleet, the integration with public transport offer and the international expansion. He is one of the founders of the CarSharing Association, and he is the President of the French subsidiary of Communauto.

Gunnar Nehrke, German carsharing association.

Gunnar Nehrke is the managing director of the German CarSharing Association (bcs). He has been working for the association since 2015 and is the author and co-author of several studies on carsharing. The German CarSharing Association was founded in 1998.

Érika Martins S. Ramos, PhD candidate, University of Gothenburg.

Érika Martins Silva Ramos is a PhD candidate at the Department of Psychology, University of Gothenburg (Sweden). She is member of the research group "Environment Psychology Unit" at the same department, working with transport behaviour and environmental psychology. She is part of the STARS project, with main contributions for the Work Package 4. She is also working in an interdisciplinary project regarding autonomous vehicles within the Chalmers Area of advance Transport program. Her focus of investigation is on how technology implementation in the transport area can promote well-being and sustainability.

Julie Lannou, Urban sociologist & secretary general of Womenability.

Julie is an urban sociologist graduated from Sciences Po Paris. Her different experiences led her to explore new forms of space making and their impacts on users. She studied different mechanisms of public space appropriation and focused her work on gender issues. She joined Womenability in 2017 after a master thesis on gender and youth mobility. As Secretary General of the association, she coordinates research action projects on gender and cities and develops an intersectional spectrum. She also works as an urban planning and strategy consultant.

Marie-Xavière Wauquiez, President & founder of Femmes en movement.

Marie-Xavière joined in January 2020 the FUB (Federation of Bicycle Users) as business developer. From November 2018 to January 2020, she worked for the Tankyou startup as Development Director, in particular on the subject of refueling CNG. Previously, she created and managed the "Rolling Lab" incubator, dedicated to the mobility and urban logistics sectors at Paris&Co between 2015 and 2018. Marie Xaviere is one the founders of Femmes en Mouvement, the French professional female network for the transport of people and mobility, created in 2015.

Alejandro Parralejo, Associate at Eccocar.

Alejandro Parralejo works in eccocar as an Associate since 2017. He studied Pharmacy and Statistics in The Complutense University of Madrid and has always been passionate about digital solutions and new technologies which could solve problems and expand companies through new business models and new client-centric uses cases. He worked in the pharmaceutical industry looking for digitalisation and processes optimisation in a multi-modal department as the one of clinical trials is. However, since his first stage at Tuenti -a Spanish social network- as a teenager, he has continued having contact with the startup ecosystem and participated in several projects.
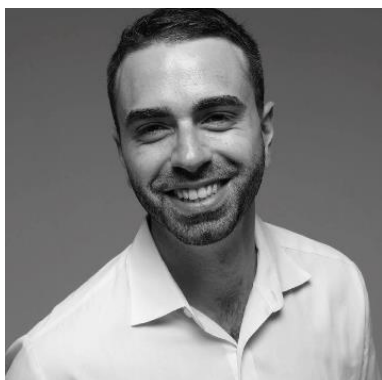
Quentin Chesnais, International business development manager at Vulog.

Quentin Chesnais is an International Business Development Manager at Vulog, a leading global technology provider of the shared mobility services, including free-floating, corporate, one-way station-based and round-trip car and scooter sharing. In 2018 Vulog's solution powered more that 19 million trips across 5 continents. From software turnkey solutions to consulting services for operators entering the mobility-as-a-service market, Vulog deploys today operator and user-centric mobility solutions maximizing success and profitability. Before Vulog, Quentin gained his experience in Technology and SaaS working in FinTech in NYC during 10 years within global financial institutions (Moody's, Société Générale, Kanerai). Quentin graduated from HEC Paris specialising in International Strategy.

Federico Galliano, Government relations manager General Motors Global Propulsion Systems - Torino.

Federico is an experienced Government Relations Manager with a demonstrated history of working in the automotive industry. He is skilled in Business Planning, International Relations, Corporate Communications and Management. Federico has a bachelor focused in International Politics from Università degli Studi di Torino.

Adrien Lancelot, Lead business developer Europe at Clem.

Adrien is the head of business development and European Affairs of CLEM, an eco-mobility services provider that has been operating with both industry and territorial actors since 2010. Founded by a team of experts in new technologies and the electromobility field, Clem' is so far the first French company running a platform 2.0 for car sharing and carpooling alongside with electric charging. Hence, registration, subscription, reservation and payment for each mobility service are managed through a unique platform administrated by Clem'.

Jean-Edern Rougagnou, CEO & founder Taxymatch.

Jean-Edern travelled around the world during his career as a real estate investor. Realising the problems of movement between airports and downtown and night travel downtown, he created a solution that would significantly reduce the presence of personal vehicles in cities, relying on the network of taxis, present worldwide. Sharing taxi, cost – Saving money, planet.

Adam Simkin, Head of business development Autofleet.

Adam Simkin is the Head of Business Development at Autofleet, the first Vehicle as a Service platform for fleets. Autofleet provides a fleet optimisation platform to improve efficiency of existing operations like rental and car sharing, launch new business models from the same shared fleet, and enable fleet owners to provide supply to any on-demand mobility platform. Before joining Autofleet, Adam was a Head of Analytics at the ride hailing company Gett.

Charlotte de Vilmorin, CEO & co-founder of Wheeliz.

Launched in 2015 by Charlotte de Vilmorin, Wheeliz is the first website to provide peer-to-peer wheelchair user adapted car rentals. The idea of creating in France a community of individual owners of a vehicle equipped with a ramp, or a car with an adapted driver's system to a wheelchair user who needs it, came to Charlotte having herself difficulties commuting ever day when you are disabled. Wheeliz was selected as the best social innovation project by the European Commission and has won multiple awards including the APAJH Trophy, the Moovjee Civic Engagement trophy, the Reporters of Hope Prize, the Startup & Handicap prize for their favorite project, the Handi-Entrepreneur trophy, and more.

László Sándor Kerényi, BKK centre for Budapest transport.

László holds an MSc in Civil Engineering (urban transport planning, 1998) and an MBA (absolutorium in 2007) and is a qualified technical supervisor of roads and bridges (2007). He is an expert in urban transport planning. He has been Head of Strategy at BKK since December 2010, a department that covers tasks and responsibilities that includes strategic planning, preparation of infrastructure projects, and participation in international research and development projects. Before that, he was Head of the Transport

	Department at the Mayor's Office of Municipality of the City of Budapest (2008-2010), where he was responsible for all transport related issues regarding the Hungarian Capital.
	Malcolm Stewart, CEO & co-founder of SPOPIN.
	Tsvetan Tsolov, Head of international projects department at the Sofia Urban Mobility Centre
	Laurent Howarth, Smart City Manager, Carouge, (Switzerland).

Moderators

	Eva Boo is Innovation Director at LGI. She has 11 years of experience in the environment, mobility and energy sectors working in different companies in Spain, France and the United States. During these years she has successfully achieved +50 assignments on strategy, marketing and design, with innovation at the heart of the projects. Eva holds a diploma in industrial engineering from UPV (Spain) and ESTP (France) and has a Master's in international business management from ICEX (Spain & US). She moderated two workshops and THE CAMP.
	Esti SANVICENTE is Innovation Strategyst at LGI. She has ten years of experience in the mobility and energy sectors working in different organisations in Spain, France and Australia. At LGI, she is in charge of R&I projects on the theme of sustainability and urban transformation, with a particular emphasis on gender and people's relationship with energy and transport. Esti holds a PhD in solar energy from INSA de Lyon – UNSW (France & Australia) and a diploma in industrial engineering from UNAV (Spain), majoring in renewable energy systems. She moderated two workshops and THE CAMP.
	As an innovation strategist, **Suzi TART** works on projects related to urban transitions, including mobility and the role of car sharing. Prior to coming to LGI, Suzi worked on sustainability projects at the OECD and UNCTAD, and spent several years before that as a journalist in China. She holds a Master of International Development from the University of Pittsburgh, and a Master of Business Administration for International Organisations from the University of Geneva. She received her BA from the University of North Carolina at Chapel Hill in Journalism and Mass Communication. She moderated the session dedicated to cities.

Chloe Chavardes is a Communications Specialist and is in charge of the STARS project communication activities. She is also a consultant and manages the Communications & Design business line at LGI, working closely with clients and partners to define, coordinate and implement corporate and project communication strategies, plans and activities. Her work covers online, print and multimedia communication as well as event management and planning.

She moderated the session dedicated to car sharing in the mobility ecosystem.

Marko Horvat, Sustainable mobility officer, ICLEI local governments for sustainability

Marko is a sustainable mobility officer within ICLEI European Secretariat, with the background in Environmental Science. He manages different types of mobility projects, especially in the areas of shared mobility, innovations in policymaking, public transport and new mobility concepts. Before working at ICLEI ES, Marko has in European Commissions' Joint Research Centre, on policy assessments, alternative fuel deployment infrastructure across member states in all transport modes, scenario assessment and modelling. He moderated THE CAMP.

4. Profiles of the participants

The Car Sharing Campout targeted European Car Sharing stakeholders from a broad perspective with the objective to generate interesting discussions all along the event. By inviting members from industry, research, public actors and citizens we ensured to have the market trends and expectations from different perspectives. A total of 92 participants registered for the car sharing campout, an analysis of the profile of participants is provided hereafter.

Participants' country

As the event was held in France, the country with highest number of participants was France, but we had 35 participants from other countries, with the main ones being: Belgium, Germany, Italy and the UK.
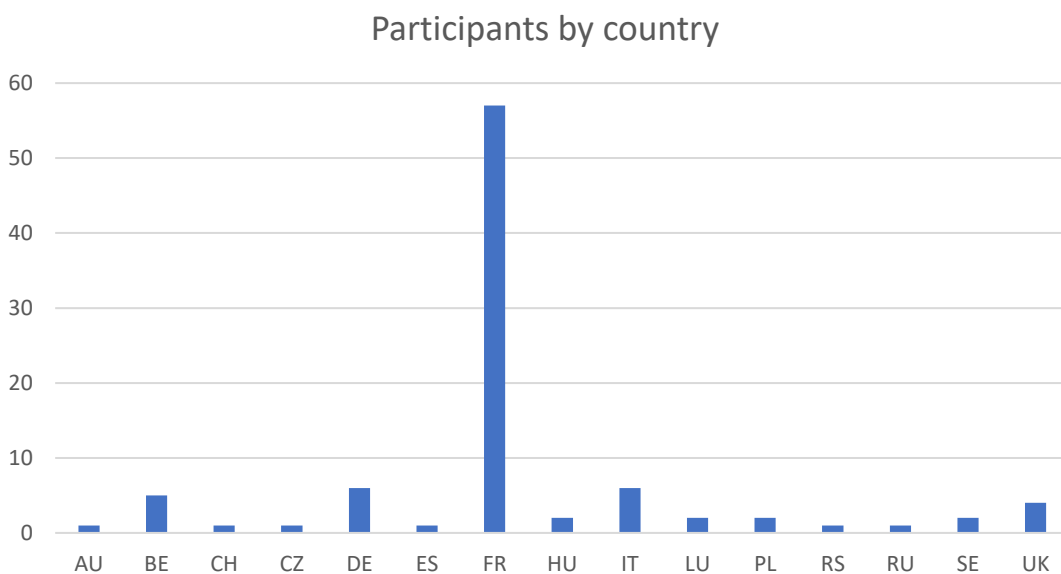
Figure 4: Number of participants by country

Participants' job position

There is a wide variety of job positions among the participants, with a high representativity of high profiles, as CEO, head of department, head of partnerships, regional director, sales director, etc.

Project managers were the job position that the campout attracted the most, followed closely by CEO.
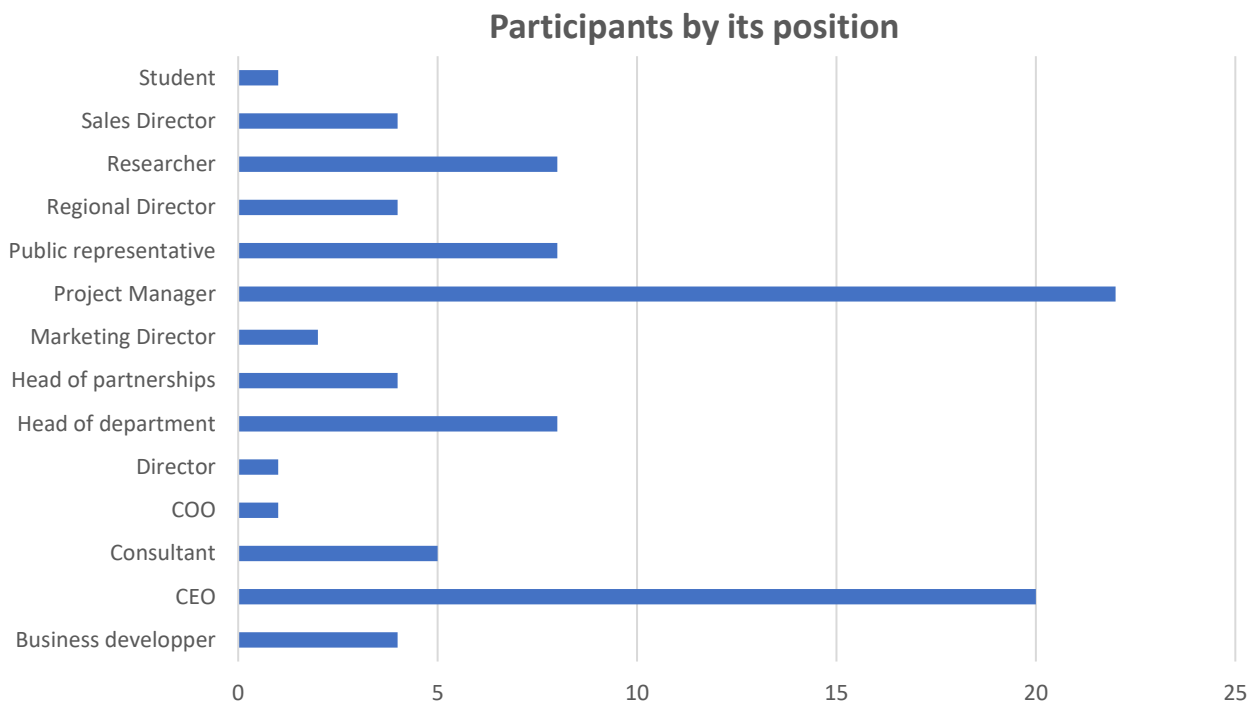
Figure 5: Number of participants by its job position

Participants' type of organisation

The type of organisation that had higher representativity in the campout were car sharing providers, cities, consultants and universities.
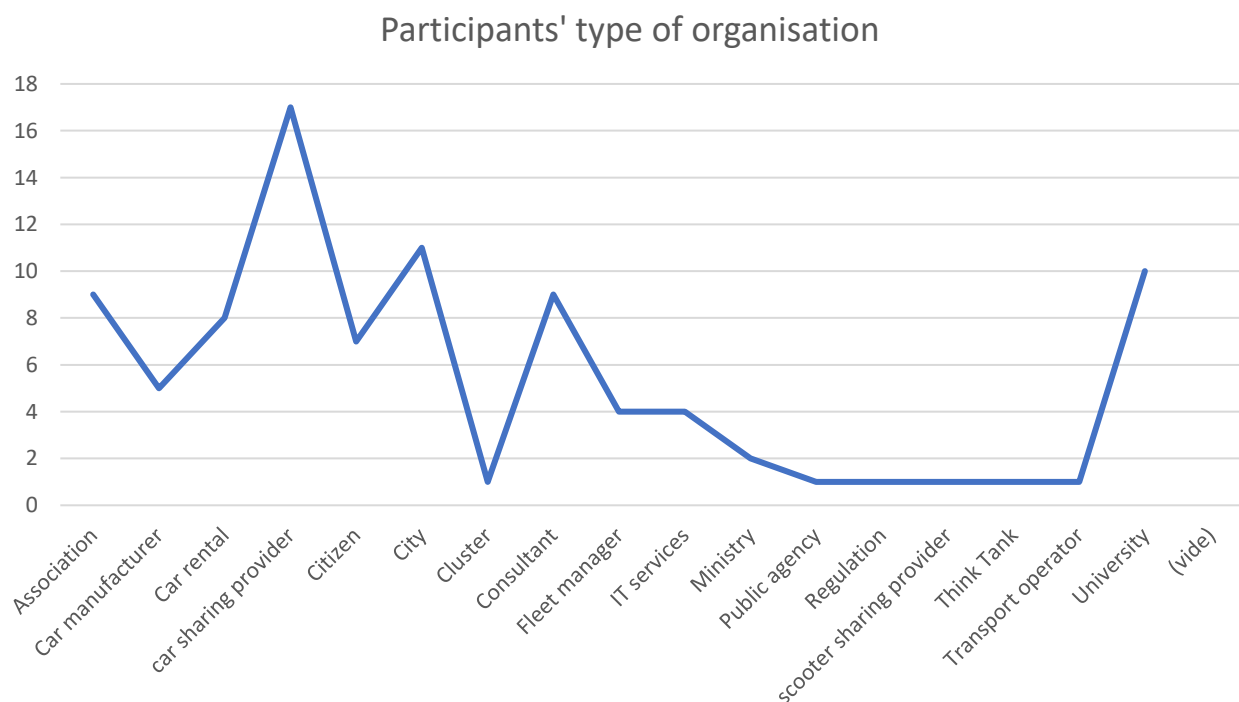

Figure 6: Number of participants by the type of organisation

5. Programme and activities

The agenda of the Campout and the workshop "The Camp" are described in the following sections:

5.1. Agenda and course of action

First day 14th October

★ **13h – 14h: Registration/coffee**

With an in-house barista and tailor-made music playlist, participants were encouraged to network and meet each other from the start. Upon entering the venue, the Car Sharing Campout team welcomed them at the registration desk. The welcome team helped to sign everyone in, providing them with a swag bag and allowing them to choose the workshops for which they wanted to participate in throughout the day. In addition to keeping track of the final number of participants, this method ensured a name was put to a face for proper GDPR protocol to be followed (i.e., if a participant did not want to have photos taken).

Where: The Garage

Figure 7: Registration Desk

★ **14h – 14h20: Bienvenue à Paris**

To give the Campout a strong start, Deputy Mayor of Paris for Transports and Public Space Christophe Najdovski gave a warm welcome to participants. Mr. Najdovski discussed Paris' strategy to overcome pollution from individual vehicles, focusing on its journey in providing a sustainable car sharing programme. Mr. Najdovski also highlighted future plans for the direction of the city's car sharing programme. As Paris has been an iconic leader in the world of car sharing, this provided an inspiring roadmap for the Campout's discussions.

Where: *The Garage*

Christophe Najdovski, Deputy Mayor of Paris

★ **14h20 - 14h505: Car sharing at a glance in Europe**

For the first session, STARS Coordinator Marco Diana, Associate Professor of Transport Engineering at Politecnico di Torino, presented an overview of the current state of the car sharing scene across Europe. Based on STARS research that includes an analysis of 186 cases from 25 countries, he reported on changing mobility choices and how car sharing operators believe the industry will continue to grow and merge with technology, integrating autonomous vehicles. Diana also discussed how different forms of car sharing are expected to co-exist with and complement public transport, luring people away from personal cars.

Where: *The Garage*

Keynote Marco Diana, Politecnico di Torino

★ **14h50 – 16h30: Sharing experiences of car sharing in cities**

Three unique case studies of car sharing (Bremen, Paris - Autolib, and Budapest) highlighted both the successes and failures of various types of programmes. This gave attendees from all city sizes a chance to reflect on which programme might work best in their city.

Where: *The Garage Cities*

Panel Moderator: Suzi Tart Maurice, LGI

★ **City of Bremen**: The City of Bremen-where every fourth trip is done by bike-is a European car sharing success story. Michael Glotz-Richter, a Senior Project Manager for Sustainable Mobility in Bremen, noted that the Bremen car sharing approach was recognised by the European CIVITAS Award – the highest European award for clean urban transport. The station-based service in Bremen allows a high level of reliability, something that cannot be achieved with free-floating services. This is reflected in high satisfaction levels for customer surveys. The City also provides on-street stations for the (privately-operated) car sharing service (mobil.punkt). It is being implemented by other cities both in Germany and across Europe.

★ **City of Paris**: Julie Chrétien, Project Manager at 6T for Urban Planning & Transport, Mobility Trends & Analysis, presented the pioneering initiative of Paris' Autolib. A key lesson learned by both cities and car sharing programmes alike was that being a public success does not guarantee economic balance for car sharing operators.

★ **City of Budapest**: László Sándor Kerényi, Head of Mobility Strategy at BKK Centre for Budapest Transport, presented the case for the City of Budapest. He remarked how shared mobility services are still in a forming-storming phase of operation, due to a lack of policy and legislation (largely a result of policy gaps and backdoors.) Obstacles for wide-scale deployment are the lack of parking and access policy and management, and the general public's perception of a personal car being as a means of freedom.

<p style="text-align: center;">__Parallel workshops__ **17h – 18h**</p>

★ Workshop 1: A new era in car sharing business models

New technologies and features are changing the car sharing scene, allowing drivers to have more tailored experiences for their desired trips. Meanwhile, competition is crowding out some business models. Suzi Tart Maurice, a consultant at LGI in Paris, presented some of the major business model trends in the car sharing world, as well as which ones are losing speed. Her presentation was complemented by Marco Viviani, VP Strategic Development for Communauto. Viviani discussed how the viability of a business model depends largely on the positioning of a service in the mobility ecosystem (as evidenced via Communauto). He also noted how there are many components of a business model that can make it sustainable. Having an ideological approach of what works and does not work is not correct – rather, it depends on key factors such as pricing, the service area, the size of the fleet, bad mistakes, etc.

Where: *The Garage*

Marco Viviani, Communauto & Suzi Tart Maurice, LGI

★ Workshop 2: Behaviour drivers & barriers in car sharing

As discussed in STARS WP4, human behaviours towards shared mobility are driven by individual, social, political, environmental, economic, technological and legal factors. Car sharing programmes must also adapt to meet the preferences of millennials, which are often different from previous generations. Cecilia J. Bergstad and Erika Martins from UGOT presented the underlying factors influencing behaviour change intention, highlighting major behaviour drivers and barriers. The five mobility styles identified in WP4 were also presented and discussed.

Two messages were highlighted in the workshop:

- Underlying factors influence behaviour change intention as both barriers (strong habits) and by strengthening the motivation (attitudes, environmental concern, norms, control).

- Perceived usefulness of car sharing influence behaviour control which has the strongest direct effect on intentions to use car sharing.

These different drivers and barriers generated discussions among the participants and triggered interesting ideas for the second part of the session a workshop to ideate solutions targeting behaviour change. These solutions could be proposed from four different axes:

- Policy recommendations
- Infrastructure
- Communication activities
- New services and business models

Participants were divided into three different groups. The ideation session was followed by an exchange session among groups and a wrap up.

Where: *Mobility Accelerator*

Cecilia J Bergstad & Erika Martins, Univ. Göteborg

★ **Workshop 3: Shared mobility in rural areas**

Talking about car sharing, rural areas are often seen as problematic. Some of the arguments used against shared mobility are: "People need a car (or more than one) because public transport is not sufficient in these areas, distances are too big, there's no viable business model for public transport in these areas or it rains all the time".

Car sharing has proven a success in dense urban areas, but the real test will be making it work for rural areas. There are different citizen movements and public initiatives that have proven success in promoting and implementing shared mobility in rural areas. These are listed hereafter:

1. Initiatives related to sharing private cars:
   a. Among neighbours: Costbased, long time contract and tailor made
   b. P2P carsharing: market price, contract per transaction and platform determining rules
2. Sharing local governments' fleet, outside office hours (30+ cities with less than 40k inhabitants)
3. Carsharing services with drivers and shopping services
4. Wheelchair friendly carsharing
5. Mobipunt, physical hub at local level with a offer of different shared mobility systems
6. Set up communication campaigns to inform and generate awareness

These different options generated discussions among the participants and triggered interesting ideas for the second part of the session a workshop to identify the pains and gains of the people living in rural areas and want to travel to the supermarket, school or city centre. The participants worked on different personas, parents of young kids and elder people to identify the differences among the profiles. The last exercise aimed at proposing solutions addressing the pains and gains identified in the previous exercise. Solutions could be proposed from different axes: political, economic, technical or communications.

Where: *Free Floating Lab*
Johannes Rodenbach & Jeffrey Matthijs, Autodelen
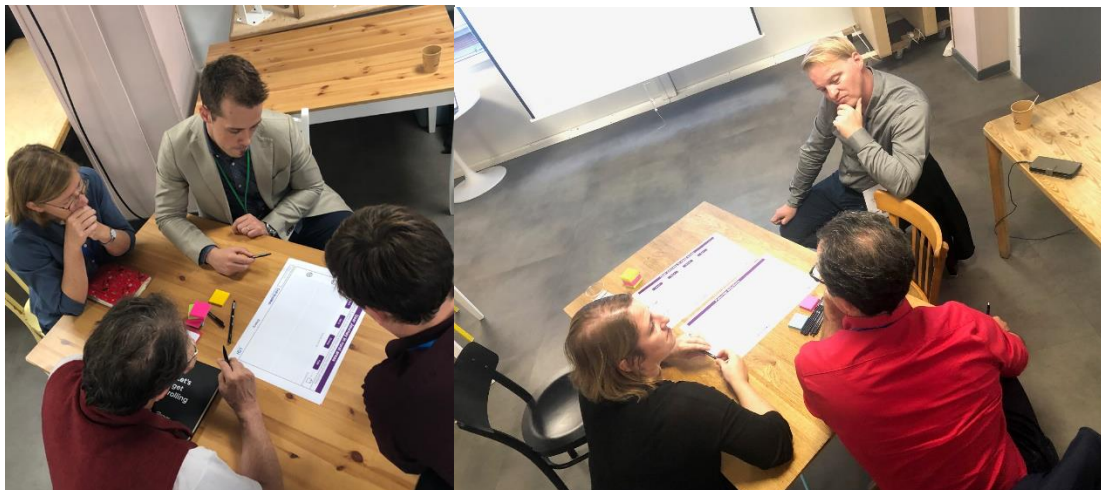
Figure 8: Design of user journey on mobility in rural areas

Cocktail LIVE MUSIC 18h – 20h30

Second day 15ᵗʰ October

★ **8h – 9h: Registration/coffee**

Participants had time to fill the registration form and were encouraged to network. As on day 1, upon entering the venue, the Car Sharing Campout team welcomed them at the registration desk.

★ **9h – 10h30: Car sharing in the mobility ecosystem**

As car sharing changes mobility patterns, automotive players of all types are taking part in the transition.

Where: *The Garage*

Panel Moderator: Chloé Chavardes, LGI

1. **The vision of General Motors** – Federico Galliano from General Motors highlighted the fact that the car industry is undergoing a significant transformation pushed by new technologies, reinforced environmental culture and demographics.

2. **The shared mobility universe** – Ross Douglas, President & Founder of Autonomy, evoked how car sharing must compete with car ownership. However, the last couple of years has seen the rise of a number of new shared solutions, such as free-floating electric scooters and ride hailing, which is taking a large part of the market share. Overall, we expect to see increasing pressure on car ownership which will be massively beneficial to car sharing .

3. **Digital platforms in the mobility sector** – Vincent Chauvet, CEO LGI, presented the results of a recent study for the Ministry of Environment on the economics & legal side of digital platforms in the transport sector. +300 transport platforms were characterised and identified. In the shared mobility ecosystem, platforms appear & disappear, merge & diversify their core business with new value propositions . The Ministry and cities are actors of this environment with open data initiatives and the creation of startups for the public sector.

Parallel workshops 11h – 12h

★ **Workshop 4: Towards inclusive transport**

This workshop was conducted in cooperation with the H2020 TInnGO project. TInnGO stands for Transport Innovation Gender observatory, and explores transport not just as a means of physically moving people from one point to another, but also as a potential means towards the creation of gender equality. The project is coordinated by the university of Coventry and brings together 20 partners from 13 different countries in Europe.

In the framework of this project, a close collaboration has been engaged with two associations based in Paris: *Femmes en Mouvement*, a network that brings together professionals and experts in transport and mobility to advance and promote women's positions in the sector, and *Womenability*, an association that aims to highlight and scale up solutions to rebalance gender equality in cities. A first common action with the two associations was carried out with the organisation of this workshop.

Key messages highlighted in this workshop:

- "Femmes en Mouvement" is also the network to promote the mobility of women because their vision, their experience and their feelings have rarely been taken into account in urban planning decision making processus.

- There are multiple challenges to better incorporating women into public mobility planning, but there are multiple solutions as well.

- The vision, experience and feelings of women are rarely taken into account in urban planning decisions. Promoting the mobility of women is promoting the mobility of all.

After the presentation of the work of both associations, a workshop exercise was moderated by Esti SANVICENTE from LGI. The exercise aimed at developing solutions that take into account the specific needs of female commuters. Participants were divided into four different groups in relation to a transport mode: Walking, Biking, Metro and car sharing.

This workshop was a great opportunity to communicate about the exciting research that is being performed by the TInnGO project. It not only allowed participants to better comprehend how transport modes and services can impact women but also opened up more general discussions on gender issues, which is great to raise awareness amongst different types of actors who can contribute to making transport smarter and more inclusive.

Figure 9: Exercice on inclusive transport

★ **Workshop 5: Impacts of the different forms of car sharing**

The workshop focused on the presentation of the results of a case study analysis in Frankfurt, Germany dealing with car ownership and mobility choices. It was presented by Gunnar Nehrke, from bcs (Bundesverband CarSharing). The aim of the study was to show the impact of car sharing from a user perspective: what car sharing membership(s) in households coincide with what mobility behaviour? In Frankfurt there are 2 roundtrip car sharing services (stadtmobil and Flinkster), 1 free-floating car sharing services (ShareNow) and 1 combined car sharing service (book-n-drive). The use patterns identified were different for both types:

- **Roundtrip & combined:** longer and planned trips (e.g. bulk shopping, trip out of town, visit friends in another town) Similar to classic use-cases for a car

- **Free-floating**: Spontaneous, short inner-city trips (e.g. dinner in a restaurant, shopping in the city). New use cases for a car, triggered by the ability to go one-way.

The user perception changes dramatically from one type to another, the strengths of roundtrip are the weaknesses of free-floating and vice versa:

- **Roundtrip**:
  - o Strengths: Reservation possible, the position is clear and low price
  - o Weaknesses: Planning ahead needed, no additional feature compared to private car
- **Free-floating:**
  - o Weaknesses**:** Reservations are not possible; the position is unclear and expensive.
  - o Strengths: Convenient, easy to use; more than a private car: just one-way trips

The conclusions were that both car sharing options are needed to replace private cars, as it is necessary to create a better offer than the total availability of the private car.

The workshop attracted a lot of participants and attention, there were a lot of questions and interaction with the participants on the use patterns of the different car sharing services and the user perception.

Figure 10: Presentation of car sharing options and user perceptions

- ★ **12h – 13h00: Tech Talks**

The Tech talks were conceived to present a glimpse of innovative technologies and startups that are revolutionising the car sharing industry. Speakers in this session had a maximum of 5-minutes to pitch their startup. They could focus their pitch among these topics:

- **Technology**: Introducing new functionalities/services based in blockchain, AI, AR, IoT…
- **User**: How to better understand and capture user needs & how to eliminate existing pain points
- **Scale Up**: Market segmentation at the city level, complexity of scaling up
- **Market**: disruptive trends observed in the shared mobility market.

The session was moderated by Eva Boo, LGI. The startups and its main messages were:

- ★ Ecoccar – Alejandro Parralejo, Country Manager France

The transformation of car rental companies to car sharing operators, an overview of this evolution

- ★ Vulog – Quentin Chesnais, International usiness Development

The benefits of multimodality: retaining a strong and loyal customer base, acquiring new users, becoming a single and unique MaaS point of entry for consumers, tapping into already existing operations & infrastructures

★ Spopin – Malcolm Stewart, CEO & co-founder

Sharing your own car, reducing costs and carbon footprint. A sort of mid-time rental, for commuting (Monday-Friday) or weekends & free time (Saturday-Sunday).

★ Taxymatch – Jean-Edern Rougagnou, Founder

Mobile application for sharing taxis between passengers travelling to the same destination

★ Autofleet – Adam Simkin, Head of business development

Creating the first truly sustainable vehicle as a service layer providing elastic supply of vehicles to serve any source of demand. The opportunity for re-balancing is to place vehicles closer to potential customers, increasing conversion rate, bookings, and utilization.

★ Clem – Adrien Lancelot, Lead Business Developer - Europe

"Mutualizing" fleets enables local authorities to create new mobility opportunities on their territory at little cost & to optimize the use of their existing infrastructure (charging stations as well as vehicles).

★ **13h – 14h: Networking lunch**

★ **14h – 17h30: The CAMP**

This session aimed to help 5 cities solve real challenges they were facing in implementing their car sharing programmes. Working in small groups, the cities will present their cases and we will use innovative techniques to devise creative solutions that meet their needs.

Facilitators : **Eva Boo, Chloé Chavardes, Esti Sanvicente, Suzi Tart Maurice, LGI**

★ **Budapest, Hungary (László Sándor Kerényi, Head of Mobility Strategy at BKK Centre for Budapest Transport)**

★ **Milan, Italy (Roberta Righini, Sustainable mobility – Direttore Area Pianificazione Mobilità)**

★ **Carouge, Switzerland (Laurent Howarth, Smart City Manager) – where: The Garage**

★ **Bremen, Germany (Michael Glotz-Richter, Senior Project Manager for Sustainable Mobility)**

★ **Sofia, Bulgaria (Tsvetan Tsolov, Head of International Projects Department – Sofia Urban Mobility Centre)**

★ **Cluj-Napoca**

All presentations used during the Campout are available online. The links to the presentations are provided below.

PRESENTATIONS OF THE CAMPOUT

Car sharing at a glance in Europe by Marco Diana (Associate Professor at Politecnico di Torino & STARS Coordinator)

Sharing experiences of car sharing in cities:

Car sharing: the case of Paris by Julie Chrétien (6T)

Shared mobility in Budapest by László Sándor Kerényi (BKK Centre for Budapest Transport)

A European car sharing success story by Michael Glotz-Richter (City of Bremen)

Car sharing in the mobility ecosystem:

The vision of General Motors : zero emission, zero crash, zero congestion by Federico Galliano (General Motors)

The shared mobility universe by Ross Douglas (AUTONOMY)

Digital platforms in the mobility sector by Vincent Chauvet (LGI)

Workshop n°1: A new era in car sharing business models

Workshop n°2: Behaviour drivers & barriers in car sharing

Workshop n°3: Shared mobility in rural areas

Workshop n°4: Towards inclusive transport

Workshop n°5: Impacts of the different forms of car sharing

5.2. The CAMP

The objective of the Camp was to solve real challenges in the implementation of car sharing in cities. As mentioned before, five cities participated in the CAMP: Budapest, Milan, Carouge, Sofia and Bremen.

The CAMP started with an ice breaker exercise and was then structured into three different sessions.

The methodology, designed by LGI, will now be presented. First, participants were split into five groups (1 group per city studied) and played the role of consultants/city advisors. Each group involved a city representative.

Session 1 - City context design: The aim of the first session was to clarify the city's main characteristics, drivers & barriers, and decision-making criteria when dealing with car sharing. The figure below shows an overview of the exercises conducted in the first session.
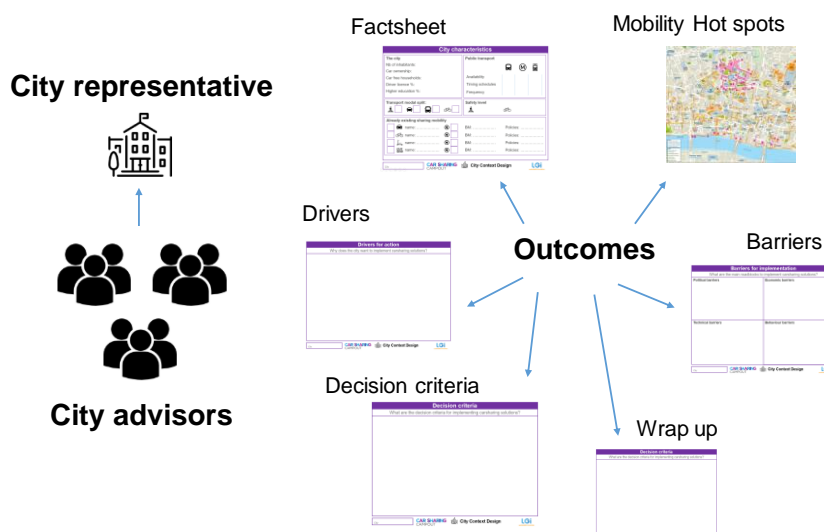
Figure 11: Elements of session 1 of the CAMP

In session 1, five different exercises were conducted:

★ <u>First exercise - City characteristics:</u> The city representative explained the context and the advisors filled in the template. They could then ask questions.
Typical topics addressed:

- Public transport offer: availability, timing schedules, night (bus, metro, tramway..)
- Safety – safe to walk and bike in the city
- Policy in parking used – parking solution for carsharing?
- Social level – high education, lower income (%)
- How many have a driver's licence?
- Map to localise the train/tram/bus stations – moby hub (shopping malls)

Figure 12: Template used to study the city characteristics

★ <u>Second exercise – Drivers: Why does the city want to implement car sharing solutions?</u>
Typical drivers discussed:
- Ease mobility options for citizens
- Decrease GHGs and reduce energy consumption
- Reduce car ownership and cars in the city
- Reinforce attractiveness for tourists
- Livability of neighbourghoods in cities
- Space consumption in cities (parking spaces)
- Deliver basic mobility to as many citizens as possible

★ <u>Third exercise – Barriers: What are the main barriers to implement car sharing solutions?</u>
Typical barriers discussed:
- Political barriers: lack of carsharing knowledge (policy makers) / lack of political will/push, strict heritage protection policies...
- Economic barriers: Lack of funding for CAPEX, lack of resources for OPEX
- Technical barriers: Global lack of carsharing expertise, lack of local data on the issue, lack of knowledge on solutions/BM, work in silos, lack ...
- Behaviour barriers

★ <u>Fourth exercise - Decision criteria: What is important for the decision making?</u>
Typical factors discussed:
- Cost-efficiency
- Low upfront costs
- Easy to install, operate and maintain
- Additional environmental benefits
- Additional social benefits
- Aesthetics
- Proven to last
- Political willingness

★ <u>Fifth exercise - City context wrap up:</u>
In each group a designer/drawer was identified. The designer of the group drew the main elements of the exercise while discussing; this served as a wrap up

Figure 13: Pictures of the first session

Session 2 – Strategy sprint: the aim of the second session was to design the "ideal" solution scenario integrating the most adapted initiatives to the city context:

The exercise of session 2 was conducted in three different steps:

★ **Step 1 - Think out of the box:** The aim of this first exercise was to propose initiatives & actions addressing the barriers, city characteristics and drivers for action discussed in session 1. In this first exercise of ideation, the city did not participate - it was an internal exercise between city advisors. Solutions could be proposed from different axes: Technology & Infrastructure, Legal & Policy, Business Models and Social & Public Awareness.

Figure 14: Templates used to ideate urban solutions

★ **Step 2 - Prioritise**: Looking at the decision criteria, each participant voted for the most adapted solutions using 5 stickers.

★ **Best solution scenario:** Design the best solution with the prioritised actions.

Figure 15: Templates used to design the best solution scenario

Session 3 – Action plan for the best-selected solution: The objective of this session was to transform the initiatives selected into actions and to place them in the timeline. For each action, the following elements were identified:

- ★ Name of the action
- ★ Department
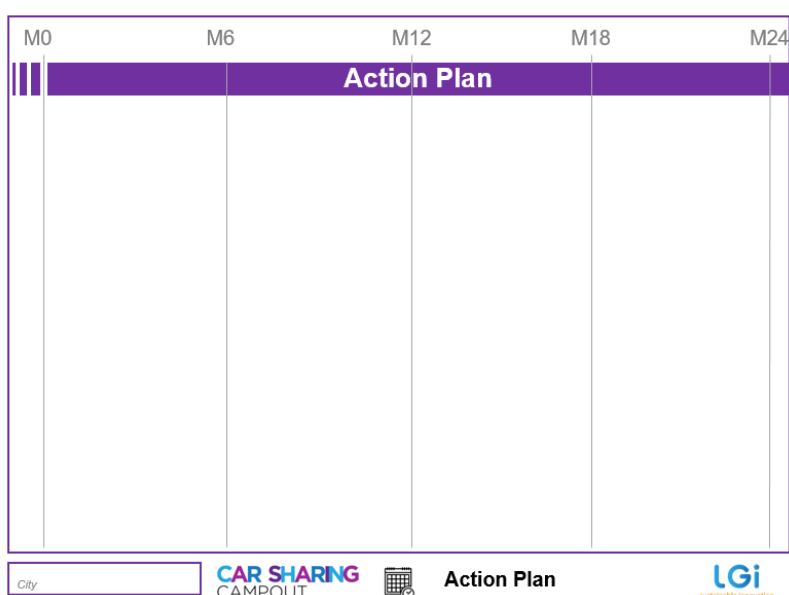- ★ Responsible
- ★ Budget
- ★ Duration

Figure 16: Template used for designing the action plan

End of the CAMP – the CAMP ends with one representative/city (from the consultant side) presenting the main points of the exercise. Very interesting discussions were triggered after the round of presentations.

Figure 17: Other pictures of the CAMP

Cities' immediate feedback from The Camp

★ All agreed that it was very interesting to discuss openly with stakeholders from the sector, and on potential solutions to be implemented to move forward with car sharing solutions.

★ Some cities particularly appreciated having "fresh ideas" from non-city representatives, not only regarding car sharing policies, but also regarding communication & awareness of car sharing to the public, as well as car sharing infrastructures.

★ Carouge: It was good to hear to very different ideas adapted to our city context, we will start with some quick wins, such as awareness campaigns on air quality with existing sensors.

★ Budapest: During the Camp we learnt useful recommendations about how to implement a station-based car-sharing system in our city, and how to combine it with the existing systems, utilising the various benefits of the different systems.

Follow-up: Six months after The Camp

City representatives and/or city advisors/consultants that participated in the exercise were contacted six months following the Campout, for an update on which policy recommendations had proved especially useful, and whether or not they had made progress in implementing the ideas presented. Unfortunately not all cities studied responded. The three that did, however, reported the following:

- ★ **Budapest:** *In Hungary there are not any opportunities for cities to regulate the car-sharing operators. But in one of our EU funded R&D projects (Cities-4-People), we developed four mobility stations with dedicated car sharing parking places. We also made a Cooperation Agreement and a Regulatory Code with the car-sharing operators to specify the usage of the mobility stations.*

- ★ **Carouge:** *It takes a lot of stockholders and time to implement a strategy. Furthermore, I am not the person in charge of this strategy.*

- ★ **Bremen:** *Carsharing in Bremen had been on a very good development path until we were all hit by the Corona impacts. Bremen as kind of mid-sized big city (580,000 inhabitants) had the focus on station-based car sharing. The high level of reliability is a key factor of the success of station-based car sharing. We expected to fulfil the targets of the 2009 car sharing action plan to quadruple the numbers of active car sharing users by June 2020 – to 20,000 users and even more important: to having taken at least 6,000 private cars off the roads (replacing car ownership by using car sharing). Unfortunately now the use of car sharing dropped extremely as no one is going to visit friends and family on the countryside or goes on vacation to the sea or even only few business trips are made.*

  The STARS project showed with the study carried out by BCS that only free floating car sharing has little impacts on car ownership. Station-based car sharing has strong impacts. Good impacts are also shown by station-based and some free floating add-on offered by one operator. Such a combination was planned in Bremen for summer 2020 – and announced beginning of March –just before being completely hit by the Corona crisis. – It will not be started in 2020 – due to Corona impacts.

  The role of awareness raising and image work was highlighted in the campout. Bremen will continue and probably even intensify such awareness work with its UDO campaign (use it – don't own it) see: https://www.youtube.com/watch?v=5seE_26FYFA

  As car sharing activities are commonly supported by (almost) all political parties, there are not much obstacles in that side. There was good growth rate (10- 18% annually) and growing interest for integration into new housing developments (instead of providing so much car parking...) etc. As contribution to the campout, you can say that information and awareness raising towards media and the political arena is a long-term investment that will pay off very well over time.

Each city came with very distinct characteristics and past experiences in regards to car sharing. As such, the ideas proposed during the workshop were very specific. However, one common theme emerged:

The role of communication and awareness in the success of car sharing programmes cannot be overlooked. This includes communication to the public, media and political arena. For some cities, this may mean investing in resources to carry out a specialised campaign with political actors; for others, this presents itself in the form of low-hanging fruit, such as using existing air quality infrastructure/data to create key messages that encourage the uptake of car sharing among the public.

Likewise, having followed up with the studied cities six months later, it became clear that **car sharing plans take time to implement and depend upon various actors** (i.e., public administration authorities, citizens, politicians) **and factors** (i.e., even Bremen, which has a strong car sharing history,

saw its car sharing programme impacted by COVID-19). Nonetheless, **cities that can provide support in the financial, political and/or regulatory realms, seem to secure greater success in their initiatives.**

6. Communication activities

6.1. Dedicated webpage

LGI designed a dedicated website to promote the STARS Car Sharing Campout: www.carsharingcampout.com, including its own visual identity, registration form, speakers' profiles, and agenda.

Figure 18: Campout logo

From the dedicated website, visitors had direct access to:

★ the dates and venue of the Camp
★ the agenda and speakers
★ the registration link
★ the travel itinerary to come to the Anticafé Olympiades
★ the STARS partners
★ the news and press releases related to the Camp

The Campout webpage was also directly accessible via the STARS website, by clicking on the "Car Sharing Campout" tab under the homepage header.

From 1st August to the end of October, the three "news" posts published on the STARS website plus the "event" post in the online calendar (see section 7.4) counted **321 views.** Overall during this period, the STARS website registered more than **5,6k page-views.**

6.2. Social media promotion

The STARS Car Sharing Campout was promoted on Twitter and LinkedIn through two dedicated campaigns:

★ promotion of the event itself
★ presentation of the speakers and agenda

Figure 19: Examples of visuals posted on social media to present the Campout speakers

Figure 20: Examples of visuals posted on social media to promote the Campout

In order to gain visibility and easily track content related to the Campout itself, the hashtag **#STARSCamp** was created to be used on social media, before, during and after the Campout. Other main hashtags used were:

★ #CarSharing
★ #Mobility
★ #SharedMobility
★ #Paris
★ #Transport
★ #Europe

During the Campout, around **43 posts** were published on the STARS Twitter account along with pictures and/or short videos. From 1st August to 17 October, the tweets published from the STARS account received **49,1k impressions** gaining an average of 630 impression per day and a total amount of **145 likes.**

During the 2-day event, **a Twitter wall** was projected on the main screen (the Garage). It included the latest tweets published from the STARS Twitter account, the retweets from other users and the tweets mentioning the Campout and/or the STARS project.

Figure 21: Top tweets published during the Campout (14-15 October)

To boost registration and to target specific audiences on LinkedIn, LGI ran a **LinkedIn ad campaign** from 2-24 September. The total amount of clicks for this campaign reached 95.

Figure 22: Screenshot of the Campout LinkedIn ad

6.3. Electronic invitations and thank you cards

Several electronic invitations were distributed in the lead-up to the Campout, starting in mid-July. An electronic mail thanking participants for joining was also sent out following the Campout, providing photos and summarizing key highlights of the event:

★ Mark your calendar (July 2019): 52 recipients and an open rate of 53,85%

★ Thank you for joining! (October 2019): 66 recipients and an open rate of 56,67%

In addition, LGI designed a banner to be used as email signatures and encouraged all STARS partners to use it in their emails to help spread word of the event.

Figure 23: Campout banner for email signatures

6.4. Press releases and posts

Two press releases were distributed and shared on the STARS website and social media accounts:

- ★ [Car Sharing Innovation Camp Jump-Start City Programmes](#) (17/07/2019)
- ★ [Mobility Speakers Announced for the STARS Car Sharing Campout](#) (07/09/2019)

LGI established a list of journalists and key social media influencers to send the Campout press releases to. Journalists selected (around 15) were mainly based in France (Paris, Lille, etc.), but also in Belgium, Denmark, and the USA. Journalists were targeted based on their specialisation in transport, mobility and/or shared mobility trends and topics. The social media influencers contacted (more than 25) included transportation planners, automotive manufacturers, car sharing operators or associations, and national or European representatives in charge of public transport.

In addition, LGI published on the STARS website **three "news" posts** related to the Campout, and **four blog posts related to mobility** on its company blog:

- ★ News post 1: [Come to the Car Sharing Campout!](#) (09/07/2019)
- ★ News post 2: [The Car Sharing Campout is over. Time for pictures!](#) (18/10/2019)
- ★ News post 3: [Car Sharing Campout in Paris](#) (22/10/2019)
- ★ Blog post 1: [Are taxes hindering car share programmes? Find out which EU country is driving reform](#) (27/08/2019)
- ★ Blog post 2: [Need to get to point B? See which car share programme is for you](#) (16/09/2019)
- ★ Blog post 3: [Are autonomous vehicles really a game changer in sustainable urban mobility?](#) (24/09/2019)
- ★ Blog post 4: [Four ICT-based innovations revolutionising car sharing](#) (07/10/2019)

6.5. Registration and venue materials

LGI used Evenium to manage registrations and generate badges for the participants, speakers and staff. Additionally, LGI designed a series of venue materials:

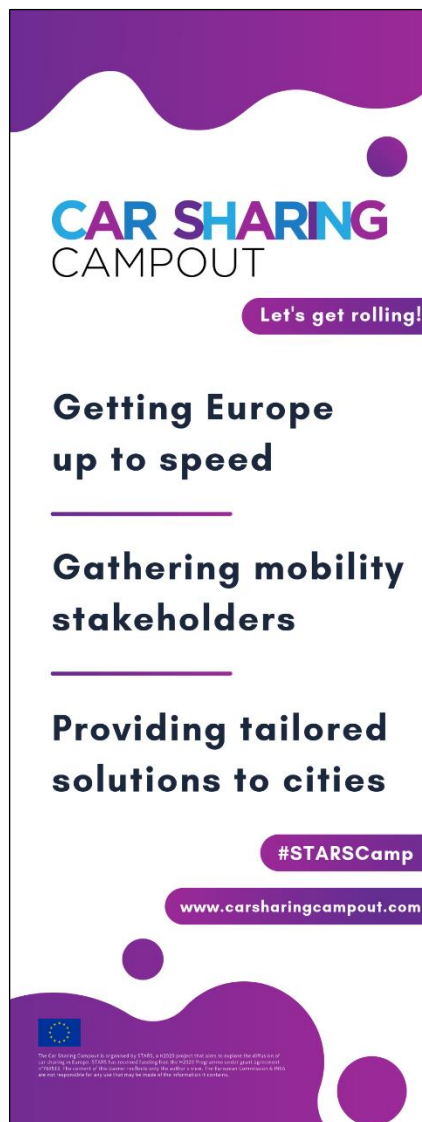- **A banner** to place close to the registration desk

Figure 24: Campout banner

- **Room names and sessions signs**

- **PowerPoint slides** to introduce each session, moderator and panellists

Figure 25: Campout power point slides

- **Goodies** for participants and invited speakers: notebooks, T-shirts, webcam covers, and Bluetooth speakers

Figure 26: Campout goodies

CONCLUSIONS & MAIN FINDINGS

The Car Sharing Campout allowed for the dissemination of the STARS project to a community that was keen to learn more on the work that has been done and that was not necessarily aware of European projects in the car sharing sector. It also helped to build ties and address real issues that cities are facing.

The following lessons were highlighted during the Campout:

★ The Bremen car sharing approach was recognised by the European CIVITAS Award – the highest European award for clean urban transport. The station-based service in Bremen allows a high level of reliability, something that cannot be achieved with free-floating services. This is reflected in high satisfaction levels for customer surveys. The City also provides on-street stations for the (privately-operated) car sharing service (mobil.punkt). It is being implemented by other cities both in Germany and across Europe.

★ A key lesson learned by cities and car sharing programmes that participated in the campout was that being a public success does not guarantee economic balance for car sharing operators.

★ In cities like Budapest, shared mobility services are still in a forming-storming phase of operation, due to a lack of policy and legislation (largely a result of policy gaps and backdoors.) Obstacles for wide-scale deployment are the lack of parking and access policy and management, and the general public's perception of a personal car serving as a means of freedom.

★ In relation to business models, it was noted that their viability depends largely on the positioning of a service in the mobility ecosystem (as evidenced via Communauto). There are also many components of a business model that can make it sustainable. Having an

ideological approach of what works, and does not work is not correct – rather, it depends on key factors such as pricing, the service area, the size of the fleet, bad mistakes, etc.)

★ Regarding behaviour change factors, it was noted that perceived usefulness of car sharing influence behaviour control, which has the strongest direct effect on intentions to use car sharing.

★ Car sharing in rural areas is often seen as problematic. Three of the arguments used against shared mobility are: 1) People need one or more cars because public transport is not sufficient in these areas; 2) Distances are too long, there's no viable business model for public transport in these areas; 3) It rains all the time. The real test will be making car sharing work for rural areas. There are different citizen movements and public initiatives that have proven successful in promoting and implementing shared mobility in rural areas. These are listed hereafter:

★ The last couple of years has seen the rise of a number of new shared solutions, such as free-floating electric scooters and ride hailing, which is taking a large part of the market share. Overall, we expect to see increasing pressure on car ownership, which will be massively beneficial to car sharing.

★ More than 300 transport platforms were characterised and identified. In the shared mobility ecosystem, platforms appear and disappear, merge and diversify their core business with new value propositions. The Ministry and cities are actors of this environment with open data initiatives and the creation of startups for the public sector.

★ The user perception changes dramatically from one type to another; the strengths of roundtrip are the weaknesses of free-floating and vice versa:

- **Roundtrip**:
  - Strengths: Reservation possible, the position is clear and low-priced
  - Weaknesses: Planning ahead needed, no additional feature compared to a private car

- **Free-floating**:
  - Weaknesses**:** Reservations are not possible; the position is unclear and expensive
  - Strengths: Convenient, easy to use; more than a private car: just one-way trips

★ Overall, it was concluded that both car sharing options are needed to replace private cars, as it is necessary to create a better offer than the total availability of the private car.

The feedback received at the end of the event was very positive and participants shared what they most liked about their experience of the campout. What came out was the quality of the sessions and presentations, the working sessions, and the opportunities to meet and exchange with interesting actors in the car sharing sector with whom they may not have exchanged otherwise.

The following messages were highlighted as well:

★ A successful shift from car ownership to car sharing will require opening the market to citizens that currently have little to no access, such as 18-year-olds and moms with young children in need of a car seat.

- ★ Local authorities are key to making car sharing work in both cities and rural areas, and they have the ability to tip the scales in favour for car sharing through push and pull measures, such as in parking privileges and restrictions.
- ★ Kick-scooters and other means of micro-mobility won't erode the car sharing market, they will complement it just the same as public transport does.
- ★ As evidenced in the US and China, MaaS platforms need scale in order to work well – a Europe-wide platform that prioritises the biggest social good over business relationships is needed.
- ★ Cities participating in the Camp heard fresh ideas from a range of stakeholders on ways to boost car sharing in their cities; some quick-wins that do not involve policy include communication and awareness campaigns based on existing infrastructure.

Following up with cities six months after the Campout, the following message became apparent:

- ★ Car sharing plans can take time to implement and depend upon various actors and factors. Cities that can provide support in the financial, political and/or regulatory realms seem to secure greater success in their initiatives.