

MOBIGOIN- ACTION NETWORK

European Start-ups, Small & Medium Companies with smart mobility solutions and competences.

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MobiGoln-Action is a European Strategic Cluster Partnership focused on Smart Mobility. It supports European SMEs in their internationalisation processes beyond Europe; also intensifing clusters and networks collaboration across borders.

MobiGoIn-Action's main focus regards a sustainable, smart and safe mobility in metropolitan areas, achieved through the implementation of solutions and systems for intelligent and cooperative transport, intermodal and sustainable mobility for the citizens and sustainable urban freight logistics.

THE MOBILITY GOES INTERNATIONAL- ACTION PROJECT IS PART OF THE EUROPEAN STRATEGIC CLUSTER PARTNERSHIP – GOING INTERNATIONAL (ESCP-4I) AWARDED BY THE EUROPEAN COMMISSION, DG GROWTH AND THE EXECUTIVE AGENCY FOR SMES OF THE EUROPEAN COMMISSION. THE ESCP-4I ARE TRANSNATIONAL CLUSTER PARTNERSHIPS THAT DEVELOP AND IMPLEMENT A JOINT INTERNATIONALISATION STRATEGY AND SUPPORT SME INTERNATIONALISATION TOWARDS THIRD COUNTRIES BEYOND EUROPE.

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VALUE SYSTEM

PRESENTED BY MOBIGION-ACTION

MobiGoIn-Action supports potential business partnerships and technological opportunities, in two World Regions (WRs): USA/Canada (WR1) and China/Singapore (WR2), aimed at initiating business collaborations for Small and Medium Enterprises (SMEs) in the field of smart mobility innovation.

For each WR, the participating SMEs are mapped and profiled according to their competences, skills and experiences regarding internationalisation. This graphic shows the value system for the MobiGoln Network for WR2, composed by Start-ups, Micro, Small and Medium companies that participated in the project's activities targeting the Automotive and Smart City (mobility) markets in China and Singapore.



The Value System shows the main areas of the MobiGoln Network organizations involved in the production and delivery of an offering to the smart mobility and automotive markets. It is divided in 3 main blocks related to mobility: (1) Manufacturing, (2) Service Providers, and (3) End Users.

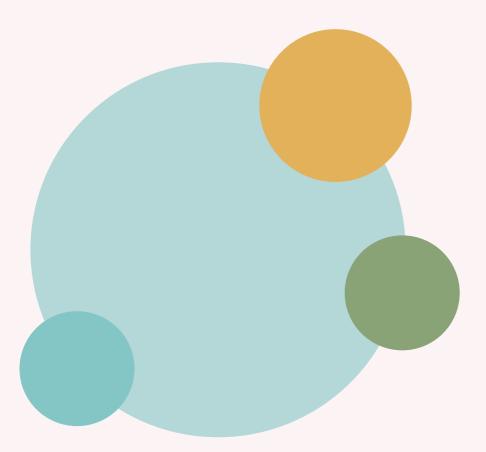
The Manufacturing Block is divided in 2 areas, one refers to solutions and products targeting the vehicles manufacturers that can be implemented to just one or several of the different combinations of nowadays vehicles: traditional, autonomous and electric. The other area refers to other products that can be linked to the vehicles in the enhancing of driving experience i.e battries and lightning.

The Service Providers Block is divided in 2 main areas: Logistics, which refers to Mobility Management, which comprises the different technologic solutions that can be adopted and required by the smart cities that want to optimize their processes and enhance their mobility services for the citizens. To the solutions related to the logistic processes and activities, for example Capte B.V.

The End User Block shows the different stakeholders that can interact with the companies and that could be their target customers: Public Administrations searching for solutions for mobility management, the Transport Operators searching for solutions to enhance their services and the B2C segment that represents the final customers of some solutions and products (mainly the citizens and people).

COMPANIES - TYPE OF SOLUTIONS

In the following pages, 21 companies from the MobiGoln Network for WR2, ready to present their products/services/ solutions in the China and Singapore market are described in terms of their competences, solutions and offering; competitive advantages and types of target customers. The circle shows the number of companies that represent a certain solution (one company could offer several solutions).







From France, Netherlands, Germany, Romania, Sweden, Spain and Italy.

All a part of MobiGoin-Action!



AtTrack GmbH are working with clean fuel and low emission vehicles: usage, management and integration of alternative green vehicles, such as electric cars and e-bikes. The company works with electric light weight vehicles, zero emission mobility, smart mobility and smart energy management in favour of a more sustainable traffic.

Competitive advantage:

- Electric drive.
- Excellent payload to weight ratio.
- Light weight vehicle.
- 3-seater with taxi capabilities.

Target customer:

- Citizens.
- Governmental and public administrations/municipalities.



Atsukè Cloud Ticketing Platform is a multi channel (SMS, app, chatbot, IoT), multi device and multi modal platform, which is used for all types of mobility services: public transportation, electric vehicle charging, self-service cars, bike sharing, or parking. It makes possible to everyone, anywhere, and with any device, to get a ticket in seconds.

Atsukè's mobile ticketing technology is a convenient and inclusive solution for the users and the communities. It improves users experience, encouraging public transportation use. For transport operators, it permits a significant fraud drop, a better service speed, and additional revenues (progressive end of paper ticket and).

Competitive advantage:

- Simple and efficient technology.
- Does not need the use of hardware (cloud technology).
- Does not need an adapted smartphone, with NFC technologies for instance (universal).
- Does not conduct to smartphone dependence (any device).

Target customer:

- Governmental and public administrations.
- Municipalities.
- Transportation operators.

www.attrack.de / www.attrack-mobility.de

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www.atsuke.com/ticketing/

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Driver performance assistant hardware and software solutions that provide constant and consistent real-time feedback to drivers.

CANbus Services for Android is a Cango component that runs in the background of the driver's telematics device without any user interaction or interface, except the one for configuring it. The service runs with a higher priority than inactive or invisible activities and therefore it is less likely that the Android system terminates them for resource management.

Using CANGO CANbus Service allows the device to act like a firewall, which is necessary to safeguard against hazards caused by interference with vehicle computer systems. Based on this service, other applications like taxi apps, car sharing apps and public transportation optimisation can be developed.

Competitive advantage:

- Technologies and services awarded by Frost & Sullivan.
- Online & on-site technical support and training.
- Customization.
- Easy to use & integrate API that delivers data to your applications.
- Free update and new vehicle implementation.
- Flexibility, control and transferability of licenses

Target customer:

- Big players in the automotive and smart city markets.
- Governmental and public administrations.
- Municipalities
- System-integrator

www.cango.ro

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IOT platform that includes in-house developed hardware, software and connectivity to solve transportation and logistics use cases.

CAPTE provides an integrated solution for tracking asset health, productivity and people operating it. It includes hardware, software and connectivity that provides an end-to-end solution without the need of an integrator. In transportation, they have devices installed in over 1100 vehicles streaming data about the buses, passengers and drivers for transport operators to analyze.

Competitive advantage:

- Embedded connectivity.
- Remote upgrade possibility.
- Universality, possibility to use in multiple verticals.

Target customer:

- Big players in the automotive and smart city markets.
- Governmental and public administrations.
- Municipalities
- System-integrator
- SMEs

www.capte.co

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Clem turns every charging point into a smart mobility station to develop innovative shared mobility services locally. Clem develops a clean mobility complementary to public transports and committed to energy transition.

Based on an integrated platform, the Clem application offers to itsour customers electric car sharing, charging management and, car- pooling, as well as other specialized mobility services for each community they serve.

Competitive advantage:

- A mature technology development with an advanced user experience.
- Backstage service and management provided to improve the whole service.
- A platform for other technological and energetic solutions.

Target customer:

- Big players in the automotive and smart city markets.
- Citizens.



From communication to weight issues – DEMS' experts use a "working synapse" process to deliver the best

"Working synapse" is a creative process where experts bring together the right solutions at the right time and at the right level of expertise to improve the development of mobility solutions.

DEMS' experts are doctors in human factors. The team consists of transport design senior managers, architect & pre-studies expert managers, UX designers, body vehicle specialists, vehicle chassis specialists, Industrial specialists, project managers, color & trim specialists, strategic design specialist

Competitive advantage:

solutions for their clients.

- Knowledge of rules and customers' requests through expertise of the European market.
- Independent company that brings a neutral and fair market analysis.

Target customer:

- Big players in the automotive and smart city markets.
- Governmental and public administrations/municipalities.
- System-integrator.

www.clem-e.com / https://cn.clem-e.com/

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Manage parking outside the city center with an intermodal base that customize the transport based on mobility study live.

The service is aimed at cities interested in adopting smart solutions for different sectors, such as urban mobility, transportation and citizen mobility services, to attain better standards of living, economic stability, optimal utilisation of energy, and advanced environmental protection depending on technologies.

Competitive advantage:

• Predicts city behaviour in a whole new way.

Target customer:

• Governmental and public administrations/municipalities.



France

Ultra fast and universal charging system for electric vehicles. Currently, there is only one way to charge batteries on today's market. Electric Loading is the only manufacturer to offer a universal, innovative and global charging method. Electric Loading, a young startup started in 2015, has developed a range of innovative charging systems which already exceed the current needs of a rapidly growing global market. Backed by a robust team of engineers passionate about their work, Electric Loading has now got together with major manufacturers to offer a full range of innovative high-tech products, ready to be rolled out in support of the energy transition across the world.

Competitive advantage:

- Ultra compact.
- Ultra fast 360 KW.
- Modularity.

Target customer:

- Big players in the automotive and smart city markets.
- Citizens.
- Governmental and public administrations.
- Municipalities.

www.vigilatuobra.com

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www.electric-loading.com

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Tier1 supplier of electronic control systems for prototype and low volume production. FAAR help their automotive, aeronautics, energy and robotics customers realize their innovations related to clean, connected and autonomous mobility.

Currently, FAAR works on a telecommunications control unit dedicated to connected and self-driving vehicles and on increasing the safety level of the actuating system of these vehicles to ASIL-D level with the aim to equip the first series produced autonomous vehicles with ASIL-D safety level. Their TCU is a platform for applications from partners. These applications will be related to fleet management, HD map updating, remote diagnostics, event data recording etc.

Competitive advantage:

- Our TCu is fully automotive grade and offers high bandwidth with continuity of service through the management of multichannel communication
- Robust positioning system for urban environments
- Multi-channel management using big data and a high degree of intelligence

Target customer:

- Big players in the automotive and smart city markets.
- System-integrators



Zoomht Ride Sharing use Kick Scooter and eBike with IoT, GPS, Bluetooth and 4G for rental ride sharing scooters, eBike and later on with EV cars.

Competitive advantage:

- Offering the first and last mile for every day workers, millenials, students and tourism for short distance.
- Offering different types of mobility.
- Daily, weekly or monthly subscription.
- Student and golden age discounts.

Target customer:

- Big players in the automotive and smart city markets
- Citizens.
- Governmental and public administrations.
- Municipalities.
- System-integrators.

www.faar-industry.com

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iCommunity is an ecosystem of services and tools of Blockchain technology, designed to meet the needs of companies and organizations, simplifying and saving costs in its implementation.

iCommunity works with demand management, modifying citizens' behaviour to adopt more sustainable and energy saving transport modes. The company also offers intermodal smart ticketing (smart cards, mobile tickets, etc).

Competitive advantage:

• In most cities, there are a few recharging points for electric cars and 90% of them are private. In addition, most of the existing recharging points are not connected to the Internet and, therefore, do not offer real time information about their status, nor offer an agile form of payment. iCommunity resolves all these problems. And in addition, get more value to all those resources (parking, workshops, public places) that currently do not make the most of their possibilities.

Target customer:

- Big players in the automotive and smart city markets.
- · Citizens.
- Governmental and public administrations/munici-
- · System-integrators.



Kisio Digital provides white label plan, booking, tickets and MaaS solutions to cities - more specifically, to public transport authorities and operators. They work with door-to-door mobility management, planning and optimization, combining transport solutions in an

eco-friendly way: sharing/changing different types of transportation, using collective/cooperative transportation and intermodal smart ticketing (smart cards, mobile tickets, etc).

Competitive advantage:

- 20 years of experience in deploying our solution (leader in the French market, operating in 4 out of the 5 largest cities in France).
- Fully integrated and modular solution. Technology that can handle billions of data points efficiently (in real-time) while using low energy (sustainable).
- Technology based on open source, open data and an open API platform.

Target customer:

• Governmental and public administrations/municipalities.

www.icommunity.io

Contact Miguel Ángel Pérez, maperez@icommunity.io

www.kisio.com

Contact Yasir Siddiqui, vasir.siddiqui@kisio.com



A new generation of connected motorcycle helmets.

Brake spot light for more visibility. Calling system in case of accident. Voice control to activate your GPS or your phone. No need to take the phone, so it's posible to stay focused on the road. All options are connected for a safer driving experience.

Competitive advantage:

- Cheaper than the competitors.
- All solutions in one device.
- Many business models.
- KSH can work with the city mobility project like sharing mopeds or sharing scooters to study the consumer behavior and encourage the user to use the helmets to reduce accidents.
- In the future, this solution can connect with the smart city.

Target customer:

- Big players in the automotive and smart city markets.
- Citizens.



Silicon-patented nanopowders for batteries and aluminium structure lightening.

Market demand is based on the requirement to improve the charging capacity and the lifetime of lithium-ion batteries in mobile devices (phones, tablets,) and electric cars.

Nanomakers' products make possible to increase the energy storage capacity of the battery (and thus the autonomy between two charges) with only small changes in the industrial tools of the existing battery manufacturing plants. Potential users are the manufacturers of Li-ion batteries and their suppliers (manufacturers of anode materials etc.)

Competitive advantage:

- Increasing the energy storage capacity of the anodes of Li-ion batteries up to 10 times compared to current technology and 2 to 3 times in the short term.
- Silicon-based nanopowders with a carbon coating formed during the synthesis.
- The narrowest and the best controlled particle size distribution for particles smaller than 150nm.
- Very high chemical purity.
- The feasibility of large-scale production demonstrated by a unique technology: laser pyrolysis.

Target customer:

• Big players in the automotive and smart city markets.

www.kosmos-helmets.com

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PinMeTo is a Location Knowledge Management (LKM) platform. Its mission is to give companies and Organizations control over their location data across the digital universe of maps, apps, search engines, voice assistants, and other intelligent services that drive consumer discovery, decision, and action.

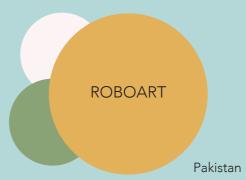
They do door-to-door mobility management, planning and optimization, by combining transport solutions in an eco-friendly way: sharing/changing different types of transportation, using collective/cooperative transportation, optimizing itinerary path and last mile logistics.

Competitive advantage:

 Using AI and machine learning to make sure location data is accurate on the largest search, maps and social media platforms.

Target customer:

- Big players in the automotive and smart city markets.
- Governmental and public administrations/municipalities



Mobokey is a platform that enables the sharing of cars using a device (installed in the car) and an app in your smartphone. Mobokey are providing a solution that enables car sharing companies with ease of sharing and tracking the time and cars. Mobokey are the world's first bluetooth based car sharing platform. Mobokey enables the access, security and sharing the car with a simple app. The owner can share their car for a specified time and make sure that the customer has access and the owner can make money while the car is shared.

Competitive advantage:

- No need of internet/GSM or recurring charges as the car is being tracked using the smartphone of the customer and the last location is updated when the car is disconnected.
- Cost effective and efficient for car sharing and rental companies as Mobokey allow sharing at a very small amount of money.
- Easier car sharing as Mobokey are eliminating car keys and enabling the sharing of the car using the smartphone.
- Additional security of the car as Mobokey secure the car as soon as the driver moves away from the car.

Target customer:

- Big players in the automotive and smart city markets.
- Citizens

www.pinmeto.com

Contact **Daniel Melkersson**, daniel@pinmeto.com

www.carchabi.com

Contact **Hammad Siddiqi**, hammad@roboart.io



Germany

Waste management solution that works with sensors and automated alert systems. Standard Development Smart Technology responds to the actual problems that more and more cities and businesses confronts to and helps them to achieve better efficiency. Our platform is thought to be a viable solution in various domains, like: environmental metering, waste management, smart parking and noise level monitoring. All these domains are in our attention and affect most of our personal lives on a profound level, that is why our solutions are very important nowadays. The solutions are very easy to use and to implement on any communication protocol; they use. Lora WAN protocol, considering the power level, but they can also use GPRS and WIFI. The platform was created as an answer to the actual problems that big cities face, therefore the solutions can be integrated all together, as a full package, or as a single one (waste, noise, parking) in the dedicated segment.

Competitive advantage:

- The platform is thought to be a useful answer for the actual problems what big cities and companies confronts to, that is why the solutions can be applied separately, or as a complete package.
- The platform is customizable, sends real time information and brings the exact business solutions and results our partners need.

Target customer:

- Big players in the automotive and smart city markets.
- Governmental and public administrations/municipalities.
- System-integrator.

www.s4bd.de



Italy

Tecnositaf designs, develops, manufactures, integrates, installs and manages systems, subsystems and equipment for the control of mobility and safety in the road sector (urban and rural), railway and industrial.

It offers a road management tool designed and developed internally with a deep experience in the Italian country, where RMT ANAS, the Italian land authority, manages all the Italian road network.

Competitive advantage:

- The solution is fully integrated and allows you to use the data in different ways to improve safety and information to the driver.
- The solution is scalable and can be applied in a small piece of road or in a big national road network with different levels of service.
- The solution will be easily integrated with all the devices present on the market.

Target customer:

- Big players in the automotive and smart city markets.
- Governmental and public administrations/municipalities.
- System-integrator.

www.tecnositaf.com

Contact **Giuseppe Celiamagno**, giuseppe.celiamagno@tecnositaf.it





Germany

TruPhysics AI Control is a backup software platform for autonomous driving assistance in cases of unknown situations.

If an autonomously driven car comes into a situation where artificial intelligence becomes unsure, TruPhysics AI control connects a remote navigator to stears the vehicle with an AI control manually to the destination.

TruPhysics builds up and certificate remote navigators community from all around the world through the simulation mode. After the certification, the navigators get instant connections to the vehicles and earn money for successful drives.

Competitive advantage:

- Normally, the autonomous driving vehicle concept only uses known or pre-trained driving situations (e.g. highways). Truphysics uses the intelligence of humans who are remotely connected to the car and navigate through unknown situations.
- To enable a fast and 24/7 access of remote navigators, TruPhysics built up a worldwide community.
- Currently the transport navigation is done by a human (e.g. taxi/Uber) With the remote navigation
 TruPhysics offers a much cheaper transport solution.

Target customer:

- Big players in the automotive and smart city markets.
- System-integrator.

France

uConekt is a security company whose mission is to create a secure environment for those who expose their personal identities, specifically in providing access controls, payments and personalization identity services.

uConekt's goal supports its vision by working to provide multi factor authentication (MFA) solutions using biometrics on tamper-resistant hardware devices so businesses can protect the personal identity of their customers with all the benefits of seamless frictionless transactions.

Competitive advantage:

- Biometric authentication of fingerprint and voice using a tamper-resistant hardware device the size of a postage stamp.
- Approved common criteria evaluation assurance level (EAL) 6+
- Combing access control with keyless solutions to deliver personalized identity services including payments.

Target customer:

- Big players in the automotive and smart city markets
- Governmental and public administrations/municipalities.
- System-integrator.

www.truphysics.com

Contact **Albert Groz**, Groz@truphysics.com www.uConekt.com

Contact **Vincent Ramoutar**, vramoutar@uConekt.com





France

Offer predictive systems that would report to the driver, garage, mechanic and manufacturer if trend leading to problem is detected so that every stakeholder could plan and undertake their most rational actions.

In a world where fridges place orders to supermarkets, cars still cannot predict failures. One has to go to the mechanic, then technicians make checks and order spare parts. It takes additional resources and time. And the customer experiences serious inconvenience. WH Monitoring believes that cars should be equipped with fault predictive systems that would report to the contact of reference if trend leading to problem is detected, this should be part of the overall connected platform.

Competitive advantage:

- Solution good for monitoring and fault prediction of any mechanical object starting with elevator or washing machine and ending with water pumps or gas turbines. Also good for monitoring buildings in seismic areas.
- All known fault predictive solutions are based either on large number of sensors or on statistical approach.
 This concept is based on multiaxial measurement and wave-field analysis. Unlike others, our approach requires only few sensors and analysis, based on real physics. Main attention paid to comparison of simulation with real stress-strain and other physical parameters.
 This makes the solution affordable and very reliable.

Target customer:

Big players in the automotive and smart city markets

www.whmonitoring.com

https://wattandwell.com

Contact **Raul Iglesias**, raul.iglesias@wattandwell.com

France

Grid-tied bidirectional power supply designed for smart grid (Vehicle to Grid - V2G, Vehicle to Home - V2H) applications. Typical applications include EVSEs (Electric Vehicle Supply Equipment systems) and ESS (Energy Storage System).

Competitive advantage:

- New revenue source for EV owners from the vehicle battery (V2G, V2H, etc).
- Modular design capable of parallel operation.
- Adjustable active and reactive power.
- Rugged solution: reinforced isolation, no neutral required, etc. Can also be mounted on board for testing purposes.

Target customer:

- Big players in the automotive and smart city markets.
- System-integrator.

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MobiGoIn-Action Consortium aims to promote and enhance collaborations among European Smart Mobility SMEs working on complementary innovative solutions, developing competitiveness and pursuing a cross-sectorial approach, and to support concrete potential technological and business partnerships and opportunities in the two targeted World Regions 1. USA-Canada and 2. China-Singapore, through an acceleration program and International missions.

This tips and tricks document was developed in the hopes that it will help European SMEs and other organisations interested in approaching the markets of China and Singapore.

For more information please visit www.mobigoin.com and contact us at theteam@mobigoin.eu

MobiGoln-Action European Strategic Cluster Partnership (ESCP) is composed by 4 European Clusters:



TORINO WIRELESS (Coordinator)

- Innovation and technological Cluster focused on ICT and Smart Cities and Communities.
- Network of 1000+ companies within ICT, around 100 SMEs with experience in the Mobility solutions.





bwcon

- Technological Cluster focused on ICT: automotive and mechanical engineering, aimed at stimulating innovation and strengthening competitiveness in Baden-Württemberg's region.
 - Network of 600+ members, mostly SMEs.





MOV'EO

- Mobility R&D competitiveness cluster.
- 350 members, from which circa 180 SMEs.





Media Evolution

- Media cluster and member organization that works to strengthen innovation and growth within southern Sweden's media industries.
 - Around 350 of its members are SMEs.

