Parking *trend*

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Dear colleagues,

Roland F. Cracco

in this beginning of 2022, I am very glad to confirm to you that the Belgian Car Park Federation will be hosting the first post-covid European Parking Association Congress in Brussels, the Heart of Europe, and this from September 12 to September 14, 2022.

This 20th EPA Congress will have as theme the "EU Green Deal and the future of car parking" and therefore will also be the first CO_2 neutral EPA Congress ever.

To achieve this CO_2 neutrality, all venues of the Congress will be at short walking distance from one another i.e., The Square Congress Center where the exhibitions and the congress will be taking place, the Brussels City Hall on the famous Grand Place Square where the Mayor will be welcoming all delegates and participants during our congress kick-off cocktail (please be quick to book as only the first 200 will be able to take part due to the constraints of this outstanding and magnificent gothic City Hall!) and the Parking Grand Place "Cathedral" where the seated Congress Gala Dinner will be taking place.

Furthermore all delegates and exhibitors will have the opportunity to off-set their trip related CO_2 emissions.

The CO_2 reduction measures implemented in the context of the Congress will also be effectively monitored & certified by a third party certification instance CO_2 Logic and this so as to guarantee its CO_2 neutrality .

The Belgian Car Parking Federation is therefore very proud to have been chosen by the EPA to host this most prestigious and important event as well as the more

than 500 delegates, 50 expert speakers and very many exhibitors originating from more than 30 countries.

During this 20th EPA Congress, the topics to be debated will be split in five major themes:

- Management of Urban Space
- Urban Attractiveness
- New Business Models'
- Parking & Technology
- Influencing Behavior

Finally the Congress will present the famous EPA Award ceremony which will be awarded for excellence in various aspects of car parking operations, products and services.

We therefore very much look forward to be meeting you in Brussels in September so as to debate together about these so important challenges and work together for a much better mobility and car parking world!

My very best regards,

Roland F. Cracco
President of the Belgian Parking Federation

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Title photo: Scheidt & Bachmann

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easyPARK

Managing Director Giuliano Caldo awarded CEO of the year in Italy

Giuliano Caldo, Managing Director of EasyPark Italy, has been named CEO of the Year 2021 in the Mobility category by Forbes Italia. The nomination is based on Giuliano Caldo's leadership in driving EasyPark's business in Italy, strengthening the company's competitiveness and improving the workplace.

Organized by Forbes Italia in collaboration with Business International and Fiera Milano Media, the CEO Italian Awards 2021 honors leaders and industries in Italy. It is a recognition for those who have succeeded in consolidating the competitiveness of their companies with tenacity and vision, making the workplace better and more attentive to people's needs.

"I am honored to receive Forbes Magazine's CEO award 2021. At EasyPark, we are revolutionizing mobility and parking, improving people's lives and making cities more livable. I'm proud to give my personal contribution every day to make the world a better place through digitalization", says Giuliano Caldo, the Managing Director Easy-Park Italy since 2019. He is one of 20 awarded executives 2021.

During his time as Managing Director, EasyPark Italy has grown considerably as a market, expanding by more than 200 additional cities and 200 percent more users. Giuliano Caldo and EasyPark represented the mobility category in this year's CEO Italian Awards. ∎

© EasyPark

Managing Director Giuliano Caldo (r.) was awarded CEO of the Year.

SCHEIDT&BACHMANN (SB)   **IKEA**®

The cooperation continues

Scheidt & Bachmann Parking Solutions, France has signed a new contract with the IKEA Group for the equipment of the 2000 parking spaces of the new shop in Nice Saint Isodore.

Customers will benefit from the latest solutions offered by Scheidt & Bachmann Parking Solutions – Hybrid Ticketless, Validation of free parking based on the reading of QR codes printed on the tickets, remote centralization of all equipment. ∎

© Scheidt & Bachmann

Scheidt & Bachmann and IKEA continue their cooperation.

evopark ⓟ ParkMan

Further expansion of mobility CONNECT in Finland

The software-as-a-service provider evopark and the mobility provider ParkMan are launching a cooperation. It enables the technical connection of the ParkMan app to already existing parking systems in Finland equipped with technology from Scheidt & Bachmann GmbH.

Users of the ParkMan app will get more opportunities to use their registration in car parks in Finland. Locally, the project is supported by PARKTECH Finland Oy and is scheduled to go live at various locations later this year. mobility CONNECT is a vendor-independent mobility platform that acts as an interface between mobility providers and car park operators. By connecting these mobility providers to the platform, the cooperation partners benefit from the proven technology, which is already in use in nine countries. The aim of evopark is to enable a homogeneous and scalable platform for connecting mobility concepts to the existing car park infrastructure.

"The cooperation with ParkMan is another important step to support operators in Finland and PARKTECH's partners in their digitization strategy. With the connection to ParkMan, we achieve a significant coverage of app users in Finland, who can now also park in off-street parking garages. We are pleased to welcome ParkMan to our platform," says Christian Grzona, Director Sales & Marketing at evopark GmbH.

Mikko Väisänen, Sales & Marketing Director of ParkMan Oy adds: "ParkMan's strategy is to cooperate openly with all stakeholders in the parking industry. The modern and current customer experience is achieved through cooperation. Consumers, landlords, and parking operators all benefit from SaaS platforms and payment operators that are willing to work together to create the best possible customer experience." ∎

© ParkMan

Mobility provider ParkMan started a cooperation with evopark.

Q-Park expands presence

Q-Park has opened its 32nd car park in Amsterdam. It has 375 parking spaces spread over three underground levels. The car park is also part of Valley on the Zuidas and is open around the clock. Eye-catcher is the high green content of the design and an interior garden.

Valley contributes to the council's desire to develop Zuidas into a mixed-use neighbourhood for living, working and leisure. From the ground floor to the seventh floor are offices and spaces for culture, retail and restaurants. On the eighth floor, the residential floors begin. In Q-Park Valley, 56 parking spaces are reserved for residents. There are also ten disabled parking spaces and ten public charging stations, as well as four charging stations for residents.

"We are proud to contribute to this special, high-quality service development by EDGE in Amsterdam," says Fred Wilkes, Director Business Development Q-Park Netherlands. "It is a desirable, central location. It's a beautiful environment that invites people to stay."

In addition to the car park in Amsterdam, Q-Park has also opened a new car park in The Hague. The Q-Park Spui was closed for five years and has been extensively renovated by Q-Park. It has 206 parking spaces, ten of which are equipped with charging stations for e-cars. It is located under the recently opened concert hall Amare, a flagship of the city of The Hague.

Fred Wilkes is pleased with the renovation: "We have invested a lot in its quality and appearance with an extensive renovation. It has really become a very attractive car park."

Next step towards a mobility hub

Through the partner GO Sharing, electric cars have been offered at four Q-Park car parks in the Netherlands since December 2021. Previously, e-scooters and e-bikes had already been offered at these locations. This is the next step in Q-Park's efforts to develop its car parks into mobility hubs.

The electric cars are available at Q-Park Laakhaven in The Hague, Q-Park Schiecentrale in Rotterdam, Q-Park Arena in Den Bosch and Q-Park Bijenkorf in Eindhoven.

"With the e-scooters and e-bikes, we already offered the possibility for visitors who park on the outskirts of the city, for example, to quickly and easily continue from there to their destination in the city centre," says Fred Wilkes. "With this next step in our collaboration with GO Sharing, we are also offering a sustainable solution to residents near our car parks who don't have a car. This all fits in with the transformation of our sites into mobility hubs with charging stations, logistics services and access to shared and public transport. Mobility is increasingly a question of cleverly combining options. Our sites play an important role in this."

"Six shared cars will be available at each of the four locations. They are thus at the forefront of our mission to replace vehicle ownership with holistic shared mobility," adds Raymon Pouwels, CEO of GO Sharing. ■

© Q-Park

The new car park of Q-Park in Amsterdam is part of the Valley on the Zuidas.

Personal change at APCOA

APCOA Parking Holdings GmbH has announced that Sam Groves will assume the role of Group Chief Financial Officer. He succeeds Steffen Bätjer, who has been Chief Financial Officer of the Group since March 2016.

Sam Groves was most recently the Group's Interim Chief Financial Officer and joined APCOA in 2019 to lead the Group's M&A and corporate development activities. He has more than 20 years of international financial leadership and cross-border M&A experience in listed and private equity-backed companies.

The new Chief Financial Officer will play a key role in implementing APCOA's growth strategy. His primary focus will be on financial partner relations, contractual discipline with customers and suppliers, and the company's M&A activities. ■

© APCOA

Sam Groves, new Chief Financial Officer of APCOA

Flowbird Announces a Licensing Agreement with Concar

In partnership with Concar's vehicle data marketplace, Flowbird is launching Yellowbrick Connected, a new parking solution that automatically starts and stops parking operations to solve one of the biggest mobile parking problems for businesses and fleets.

Jeffrey Wolvekamp, CEO of Yellowbrick: "Yellowbrick Connected removes the biggest pain point in mobile parking, saving time and money. The technology has proven to be more accurate than GPS solutions available today. We also have access to the largest network of track and trace providers in the world."

Yellowbrick Connected works with a vehicle's built-in track and trace system to automatically start and end a parking process. Based on the data from the connected vehicle, the solution automatically starts and ends a parking process. The solution allows businesses to stop paying excessive parking fees for unfinished parking, and employees no longer have to worry about forgetting to start a parking process while they are at work.

With 52 percent of mobile parking app users regularly forgetting to stop their parking sessions, and 48 percent of users forgetting to start their sessions on time, Yellowbrick's solution could be a problem-solver for modern businesses.

But not just small businesses benefit from the advantages of an automated parking solution. Research shows that even larger fleets can save up to 20 per cent on their parking costs with an automated start-stop parking solution. In addition, administrative efficiencies are increased as employees of businesses using Yellowbrick Connected spend significantly less time tracking, verifying and paying for multiple parking transactions involving different vehicles. With an online dashboard and streamlined invoicing for parking transactions, fleet management is further simplified. ■

Yellowbrick Connected is a new seamless parking solution from Flowbird in cooperation with Concar.

Easelink secures 8.3 million Euros in financing round

With Matrix Charging, the Austrian company Easelink offers a fully automatic charging solution for e-cars that eliminates the need to manually plug in the charging cable. The Matrix Charging system consists of a unit in the

Matrix Charging by Easelink automatically connects with the charging station

vehicle underbody (connector) and a charging plate (pad) in the surface of the parking space. As soon as the vehicle is parked in the parking space above the charging pad, the connector automatically lowers from the vehicle underbody and connects to the charging pad. The charging system is compatible with most major e-car platforms and is being rolled out as a retrofit version as well as factory-installed equipment for new vehicles. As one of the most cost-effective and energy-efficient solutions on the market, Matrix Charging taps into the volume segment for automated charging technology in addition to the premium segment, Easelink said.

The funding will be used to further expand Easelink's product team, deepen col-

laborations with the automotive and infrastructure industries and continue the implementation of a global charging standard. Matrix Charging is already in use with strategic partners in several pilot projects, such as the eTaxi Austria project for automated charging of taxi fleets in Vienna and Graz.

"In addition to our strong automotive partners, we are pleased to welcome our new investors who bring in-depth experience in e-vehicle charging infrastructure and the energy sector. This supports our goal to further develop Matrix Charging technology into a global standard," explains Hermann Stockinger, founder and CEO of Easelink. ■

EPA Awards 2021/2022

The entries – part IV

The European Parking Award has been established by the European Parking Association as a biannual award for excellence in parking. A prize can be awarded in five categories. The objective of the awards is to promote qualitative improvements in public car parking both on- and off-street. The contributions of the parking operation to parking policy, to sustainable urban mobility plans and to urban development are important factors. In particular the awards seek to promote improvements in services provided to the customers and effective and sustainable management of the facilities. The awards also promote the development of good working practices in on-street parking.

Initially the EPA Award was supposed to be given out in the year 2021 during the 20th EPA Congress & Exhibition which was planned to take place in October 2021 in Brussels, Belgium. Due to the Coronavirus-pandemic the event was postponed to

12th-14th September, 2022 and thus the EPA Award ceremony was postponed to the year 2022 as well.

Depending on the category of entry two different procedures were implemented.

For categories 1, 2 and 3 the submission deadline was extended to 17th January, 2022 and new submissions were accepted in the competition in addition to the entries which have been submitted before the initial deadline on 18th January, 2021.

Category 4 and 5 subdivided into EPA Award 2021 and EPA Award 2022

For the categories 4 and 5 the deadline for the EPA Award 2021 was not extended. Instead, a separate competition for the year 2022 was opened and this means that category 4 and 5 will be subdivided into EPA Award 2021 and EPA Award 2022.

Both of the groups of finalists for each category will receive the EPA Awards during the ceremony at the 20th EPA Congress

in Brussels in 2022. It was decided to open a separate competition with a deadline in January 2022, because the fields of the categories "Innovation" and "Marketing" are very dynamic.

The winner in each category will be presented in a special ceremony during the 20th EPA Congress in Brussels, on September 13, 2022. ∎

EPA Award 2022

More information about the EPA Award 2021/2022 on the EPA website:

www.europeanparking.eu/en/awards/epa-awards-20212022

cat	project name	city	project address	application by	p.
1	Hofbraeuhaus Parkgarage	Munich (GER)	Thomas-Wimmer-Ring	Woehr + Bauer GmbH	14
1	Handelsbeurs	Antwerp (BEL)	Sint Katelijnevest 55	Q-Park Belgium	
1	Interparking Boulevard	The Hague (NL)	Strandweg 179	Interparking Nederland	11
1	P+R CERIA-COOVI	Anderlecht (BEL)	Boulevard Josse Leemans 110 – R0 exit 16, follow N6	parking.brussels	15
1	Novedades	Barcelona (ESP)	C/Caspe 1-13	Interparking Hispania SA	
1	University of Brighton, Watts House	Brighton (UK)	Lewes Road / University of Brighton's Moulsecoomb Campus	Stripe Consulting	13
1	Parking Confluence	Namur (BEL)	Rue du Grognon	Interparking SA	
1	Parking ROOSEVELT	Montauban (FR)	Place Franklin Roosevelt	Interparking France	
1	Dr.-Sieber-Halle Car Park	Sinsheim (GER)	Schwimmbadweg 4	HIB Huber Integral Bau GmbH	
1	Lower Kings Road Car Park	Berkhamsted (UK)	High Street 230	Huber Car Park Systems International GmbH	
1	Parking Termini Train Station	Rome (IT)	Via Marsala 53	Grandi Stazioni Rail S.p.A.	12
2	Inovil	Lausanne (CH)	12 Place de la Riponne	Inovil SA	16
2	Conversion in Chartres	Chatres (FR)	27 Rue Danièle Casanova	Q-Park France	

cat	project name	city	project address	application by	p.
2	Toulon - Peiresc Marché - a global city concept	Toulon (FR)	3 Rue de Lorgues	Q-Park France	
3	Milan: Parking and Mobility Eco System	Milan (IT)	Zones B, C, ZPRU	Azienda Transporti Milanesi S.p.A.	17
4	The lung in the city	Namur (BEL)	Parking Beffroi (Interparking), Place d'Armes	Interparking SA	
4	TELPARK - From parking to mobility	Madrid (ESP)	Avd. General Peron 36, Planta 1	EMPARK	
4	ScanScooter	Opatija (CRO)	Stubiste Lipovica 3	Opatija 21 d.o.o.	
4	Falcon Eye	Belgrade (SRB)	Kneza Viseslava Street 27	Parking Servis Belgrade	
4	Partnerships – digital innovative mobility solutions	Zaventem (BEL)	Belgicastraat 3 bus 6	Q-Park Belgium	
4	Jauna Teika	Riga (LVA)	Gustava Zemgala Street	UAB Softra	
4	First in-car parking app for Android Automotive by EasyPark for Polestar	Stockholm (SVE)	n/a	EasyPark AB	
4	Bicycle parking Bourse - Grand-Place	Brussels (BEL)	Place de la Bourse	parking.brussels	
4	P+R CERIA-COOVI	Anderlecht (BEL)	Boulevard Josse Leemans 110 – R0 exit 16, follow N6	parking.brussels	
4	Automated Valet Parking (AVP) at Airport Stuttgart	Stuttgart (GER)	Stuttgart Airport, car park P6, Flughafenstraße 43	APCOA PARKING Holdings GmbH	
4	Automatic Parking in Europe by Flowbird & Concar	N/A	www.flowbird.group	Flowbird and Concar NV	
4	Meters for Trees	N/A	https://park.paybyphone.com/metersfortrees/	Indaba Communications	
4	Connect Parking as a Service to Mobility	Madrid (ESP)	https://letmepark.app/	LetMePark S.L.	
4	Mon-Marche.fr logistics hubs in INDIGO underground car parks	Paris (FR)	2 Avenue de la Porte de Saint-Cloud	Indigo Park	
4	London North Eastern Railway (LNER) Car Parks	York (UK)	East Coast House 25	Hub Parking Technology	18
4	Q-Park Park Lane Mobility Hub	London (UK)	Park Lane	Q-Park Limited	
4	Real-time availability in Barcelona's car parks	Barcelona (ESP)	N/A	Barcelona de Serveis Municipals, S.A.	
4	SPK Zero KM Service by Came Parkare	Barcelona (ESP)	N/A	Came Parkare Group S.L.	
4	Cargo Bike	Brussels (BEL)	Place de la Justice 16	Interparking SA	
5	Nos van a Falta Horas	Madrid (ESP)	Avd. General Peron 36, Planta 1	EMPARK	
5	Mutti Advertising Concept by Easypark	Stockholm (SVE)	Hangövägen 20	EasyPark AB	
5	Car Park Magic	Madrid (ESP)	https://www.youtube.com/channel/UCYadBFPLTEqSWIhFkgOpj4A	ASESGA	
5	LiveSommer2020	Stuttgart (GER)	Car park 'P0' at Airport Stuttgart	APCOA PARKING Holdings GmbH	
5	The City Reunites	Stuttgart (GER)	n/a	APCOA PARKING Holdings GmbH	
5	MUVIN: Urban Mobility Solution	Corciano (IT)	https://cabras.sis. City/	S.I.S. Segnaletica Industriala Stradale S.r.l.	
5	INDIGO Group Sustainable development brochure 2021	Puteaux/La Défense (FR)	https://www.group-indigo.com/en/sustainable-developement-brochure-2021/	INDIGO Park	

Grandi Stazioni Rail

Roma Termini station parking

The new Roma Termini Parking has been built above the platforms of Roma Termini railway station, one of the most important railway stations in Europe; the aim of the intervention is to improve the modal shift between cars, trains and other transport systems following a strategic vision in partnership with the municipality.

The works, which will create 1392 car parking spaces and 74 motorbike parking spaces, were co-financed by the Italian Ministry of Transport and mark the completion of Termini station's strategic infrastructure programme.

A specific part of the parking spaces is dedicated to sustainable mobility: some areas are equipped with electric charging stations and car sharing facilities.

1,392 parking spaes on three different floors

The construction phase began in July 2012 with an investment of 95 million euros. 79 million euros were contributed by the Italian Ministry of Transport and the remaining 16 million euros came from Grandi Stazioni Rail S.p.A., the Italian railway group.

The building construction consists of 10,000 tonnes of steel structure on three dif-ferent floors built above the platforms. During the construction of the car park, trains continued to pass under the site; each deck was constructed on site and later pushed into its specific position. The structure is 150 metres long in the longitudinal axis and 110 metres in the transverse axis. The 3 floors are connected by internal ramps. The parking area is 45,000 square metres.

Of the 1,392 parking spaces, 29 are reserved for the disabled and 18 for pregnant women. The first floor with 460 parking spaces is for sharing mobility services such as car rental, corporate fleets and e-hailing. The second floor has 454 parking spaces. Here the focus is on short-term parking, while the third floor with its 31 spaces is reserved for car sharing and other short-term parkers.

The new parking infrastructure promotes alternative sustainable mobility systems thanks to dedicated areas on each floor equipped with electric charging stations. There are currently 24 spaces dedicated to charging electric cars. There are also plans for a photovoltaic system on the roof that can support the power supply.

The entrances and exits are located in Via Marsala in the centre of Rome. The pedestrian entrances are on each platform. There is also a special staircase that connects customers outside the station without passing through the platforms. This measure gives other customers the opportunity to use the parking infrastructure, such as residents, business customers and tourists. In addition to this new staircase, there is a project for another pedestrian connection on the Via Marsala side. The new entrance on Via Marsala will also include a dedicated area for bicycle parking with approximately 100 spaces. ∎

© Grandi Stazioni Rail

category *1*
New Parking Structure

The new car park at the Roma Termini train station features 24 charging spaces for electric vehicles.

Stripe Consulting

A colourful and sustainable car park

The University of Brighton has a new car park. The new Watts house car park costs 10,5 million pounds and is a seven-level multi-storey car park located on Lewes Road, Moulsecoomb, Brighton. It serves staff, students, visitors and out of hours public parking at Brighton University Moulsecoomb Campus.

The car park has space for 550 cars. There is also a separate area for motorbike parking on the ground floor and an extra bicycle room. A high-wire system for the green wall allows climbing plants to "green" the building.

A different way of traffic management

The car park's traffic management system is a Vertical Circulation. It provides good visibility and clarity for pedestrians and vehicles. There are two one-way streets running through the car park, one going up and one going down. The corridors are one-way with a common central ramp that has two vertical fire cores. Access to the car park is via a new driveway from Lewes Road, with vehicle entry and exit located on the south side of the building.

Car park fitout

The surface of the car park has been treated with a resin deck coating with epoxy used for lining and road marking where applicable. Signing is clear and concise, and the signage is in accordance with local site-specific requirements. Each level is colour coded, providing clear distinction between levels to make wayfinding easier.

The parking bays themselves are designed as "parking pads". This was chosen to encourage "orderly parking" and to avoid the need to re-surface the parking pads with white on a regular basis. The colours used to identify the levels in the car park are designed to match the Pride flag, which we believe is a unique feature of this car park.

The payment sceme is run by the University of Brighton and is based on a permit scheme linked to the ANPR system.

Brighton University's Vice Chancellor Debra Humphris said: "We're delighted with the quality and functionality of our new

Each level of the new Watts House car park in Brighton has a different colour to make it easier to find your way around.

© Stripe Consulting

parking facility. As well as providing a high-quality solution for our staff and students who need to drive to the campus, the extensive secure cycle parking and facilities, alongside the PV solar panels and electric vehicle charging points provide us with a solid platform from which to pursue our far-reaching sustainability goals."

LEDs and photovoltaic panels

The entire car park is lit with LED lights that are wirelessly controlled with sun, motion and time sensors. In addition, 450 m² of photovoltaic panels were installed on the roof to provide electricity to maximise sustainable energy use. A rainwater harvesting system was installed to provide irrigation for the green wall planting.

With the exception of occupied areas such as changing rooms and offices, a natu-

ral ventilation strategy was implemented. This results in a significant cost saving over mechanical ventilation in terms of installation and maintenance, as well as minimising the building's energy demand. Ventilation was achieved through openings in the perforated metal panels of the façade, which provide the necessary air flow. ∎

category *1*
New Parking
Structure

WÖHR + BAUER

An underground car park for Munich

The Hofbräuhaus multi-storey car park was built in Munich. WÖHR + BAUER became aware of the Europe-wide tender for the project in 2009. Under the project name TOM & HILDE, the firm developed a concept to find the best possible answers to the circumstances. In doing so, it was clear to them that the underground car park could also fulfil several purposes at the same time.

© WÖHR + BAUER

category **1**
New Parking Structure

The new Hofbräuhaus underground car park in Munich.

The basic idea was to move parking spaces out of Munich's old town to the old town border under the Altstadtring main circular road that runs around it. The rationale hereby was to reduce the number of cars coming into the old town and to handle the parking traffic directly on the ring road surrounding the area.

A new mobility hotspot

The new Hofbräuhaus underground car park replaces an ageing multi-storey garage in the centre of the historic old town between Maximilianstraße and Tal, not far from the famous Hofbräuhaus. The space created there will be used with the construction of two new townhouses and for an extension of the Mandarin Oriental hotel.

The Hofbräuhaus car park is designed as a mobility hotspot. In the Hofbräuhaus car park, motorists will find a wide range of mobility options to cover the last mile to the old town comfortably and emission-free. In addition to the nearby public transport with central tram, bus and S-Bahn lines, sharing offers for bicycles, eBikes and eScooters are also available. Here, cars can disappear into an underground structure while above-ground parking space can be transformed

Furthermore, the "Altstadtradlring", whose implementation was decided in 2019, has been integrated into the surface planning as a main circular cycleway, and thus ensures safe and comfortable riding in the greater garage area.

The construction method demanded a lot from those involved in the project, as the six-

lane old town bypass had to be routed over and through the construction site with at least four lanes during the entire construction period. A modified cover construction method was used on the west side of the construction site. After the first floor was excavated, a ceiling slab was installed. While traffic rolled over several lanes above, the construction workers dug underground using mining methods.

According to WÖHR + BAUER, the Hofbräuhaus multi-storey car park is more than just a car park: It is innovative and a blueprint for a sustainable infrastructure project that has understood how to integrate the goals of politics, the considerations of the city administration, the impulses of an urban society and the factual circumstances and challenges into an effective concept. ∎

parking.brussels

A big step for sustainability in Brussels

Over 1,500 motorists, motorcyclists and cyclists can park in the Park & Ride in Brussels and reach the city centre in no time. P+R Ceria is a 20-minute drive from Brussels. In order to convince commuters to park their vehicle at that city gate, parking.brussels has deployed a sustainable car park. Reconciling comfort with proximity, choosing a tailored mode of transport and caring for the environment are key to the construction of the car park.

The location was chosen statically: directly accessible from the Brussels ring road, along a popular cycle route, close to the new Ceria train station and adjacent to the subway station.

Before, there was an old open-air car park with only 200 parking spaces. Research showed that most car journeys in the Brussels rush hour come from the neighboring suburbs. The drivers who are most inclined to travel by car, live 2 to 40 kilometers from the Ceria car park, which has space for 1,263 cars and 300 bicycles.

Ceria was inaugurated in 2019 and is part of the political will to tackle modern problems like the reduction of pollution and congestion, the contribution to sustainable mobility and the optimization of the use of urban spaces. All these things shall lead to a more attractive city.

Access to the new car park is granted by ANPR technology via automatic number plate recognition by cameras. The P+R's business model is based on differential pricing. Parking in combination with the use of public transport entitles you to preferential rates. Data on the use of public transport is integrated into the parking facilities. This integration takes place via an intelligent card reader and system logic.

Sustainable car park

The Brussels-based architectural firm DDS+ designed the complex with a total surface area of 30,000 m². Safety and clear organization were essential in the development. The building has been designed to avoid crossovers between different types of users. A deliberate choice was made for a separate area for (classical) passenger cars upstairs and a multimodal area for motorcycles, bicycles and alternative or sustainable cars on the ground floor. This multimodal zone includes parking spaces reserved exclusively for shared cars and electric cars. In order to further encourage the use of these more sustainable transport methods, they are prominently positioned. There is also a secure bicycle parking area with direct connection to the adjoining cycle path.

With a high-quality urban planning approach and the environment in mind, parking.brussels aims to keep its ecological footprint as low as possible. The building has a plant side that serves as an acoustic screen against noise nuisance from the ring road. The plants not only serve as "climate soldiers", capturing particles and thus providing cooling, they also decorate the site. Vegetation has been chosen to serve as a food source for local biological organisms.

Rainwater management ensures smooth water infiltration directly on the site's grounds.

The project also houses a storm basin. ■

The new car park has a noise cancelling screen to reduce the sound from the ring road.

category *1*
New Parking Structure

Interparking

Parking in style on Scheveningen beach

One of the most sustainable and innovative car parks in the Netherlands has been realised in Scheveningen, a popular seaside resort on the Dutch coast. Interparking Boulevard is located directly on the beach and offers direct access to the boulevard and other attractions. After a two-year demolition and construction process, the 700 space car park was officially opened in August 2019. The car park was awarded an ESPA Gold Award in 2020.

The car park is part of the redevelopment of the northern part of Scheveningen Boulevard. The main goal of this redevelopment is to improve the quality of the peripheral area. For example, the development of this project has eliminated dozens of on-street parking spaces and created more space for pedestrians.

Rolf Oostendorp, CEO of Interparking Nederland, says: "With this environmentally- and customer-friendly parking facility, we offer people who want to visit the beach, Boulevard and other attractions in Scheveningen a first-class entrance."

A design with focus on comfort & experience

In the Boulevard multi-storey car park, everything is geared towards offering visitors a comfortable parking experience. The column-free construction with one-way traffic, angled parking spaces and 4.88 m wide lanes offers optimal parking comfort. The car park is designed to guide users along the shortest route to a free parking space via the parking guidance system, which is displayed immediately after entry. Via the two separate spiral ramps, they can drive one level higher or lower without the risk of oncoming traffic.

Due to its direct location on the beach, the car park can get very crowded in the summer months. This circumstance was taken into account with the installation of an alternating entry lane, so that a third entry or exit can be created at any time. The pedestrian crossings and separate signage for pedestrians and motorists ensure clear routing. The pedestrian entrance is recognisable with glass walls, a transparent, spacious design, a terrazzo floor and a unique shell tile design on the walls, complementing the beach and sea outside.

Leading the way in smart mobility and sustainability

The 12,325 sqm roof garden will create a natural transition to the surrounding dune landscape. The green roof helps to promote biodiversity and make the area more attractive to visitors and residents, he said, and is also equipped with 290 solar panels. 80 percent of the electricity generated by the solar cells is used for the car park. The main electricity consumers are the LED lighting, the ventilation system and the 25 electric charging stations. The facility can be expanded to 75 charging stations in the future.

Digital parking products are used to anticipate local parking needs. With products like the Pcard+ and online reservation, users benefit from more payment convenience. Users can enter and exit the car park by scanning their Pcard+ or by licence plate recognition if they have made a booking online. The innovative touchless concept allows users to get a parking ticket with a simple wave. Upon return, the "find my car" feature helps users quickly locate their vehicle. ∎

© Interparking Netherlands

The 700 space car park is located directly on the beach of Scheveningen.

category **1**
New Parking Structure

Inovil SA

An eye-catching car park in Lausanne

Inovil SA has recently renovated the biggest underground parking facility in Lausanne, Switzerland, built in 1970-72, with 1,198 spaces. The construction phase started in 2019 and was finished in December 2020. While under construction, the parking lot always remained open for business and service was uninterrupted.

Inovil SA wanted the Lausanne project to go beyond a simple renovation. According to Inovil SA, this was the most momentous work the car park has seen since its creation almost fifty years ago.

A whole new parking complex
One of the new features in the park complex is a reception area with an integrated café for customers.

The wall visible to the public square was redesigned with Swiss wood and plants were placed at the entrance to give the building a more natural aspect. Pastel colours were chosen for the new concept and solvent-free resins and paints were used. In the future, the entire complex will also be lit with LED lights, as they are environmentally friendly and bright.
The pedestrian crossings and lanes have also been revised to optimise the space at the entrance to the park. All advertisements have been removed from the walls of the car park and replaced with digital screens. These are located in the stairwells as Inovil SA believes it is better for customers to view the advertisements on foot rather than while driving.

The Louve, a river important to the heritage of the city of Lausanne, flows under the car park, where an exhibition area shows the canal that carries the Louve under the city. On the same level, an illuminated screen hangs above the ceiling showing the Mermet forest where the Louve rises. These exhibitions are intended to emphasise the natural character of the renovation project.

Optimised parking spaces
The layout of the parking spaces has been optimised during the renovation to reduce the time motorists spend looking for a parking space. By widening the lanes, accessibility for vehicles was improved, while

© Inovil SA

LED lights should guarantee an friendly environment in the modernised car park facility by Inovil SA in Lausanne.

accessibility for pedestrians was enhanced by ramps and clear markings. This, he said, makes entering the park complex much easier and saves time.

For customers who have a monthly pass, the number plates are automatically scanned at the entrance and exit so that they have to spend less time in circulation.

To encourage the use of electric cars, there are four new high-performance charging stations as well as numerous new parking spaces reserved for the Mobility carsharing service. These are located directly at the entrance. This is to make customers aware of this aspect when they enter the building. It is also planned to build a parking area of bicycles.

Inovil is situated next to a metro station and bus stop, encouraging our clients to

'park and ride'. Also, the company created a delivery service for the goods of the customers. They are directly delivered to their car. ∎

category *2*
Renovated
Structure

ATM

Parking and mobility ecosystem in Milan

The "2030 Agenda for Sustainable Development" contains a number of goals, including "make cities and human settlements inclusive, safe, durable and sustainable". Milan has therefore promoted a number of measures such as sustainable mobility or environmental quality. To address these challenges, ATM has created a mobility management system for parking control and access regulation and management.

Mobility is changing. A comparison between 2012 and 2021 illustrates this: there is a decrease in transit trips from 90,000 in 2012 to 81,000 in 2021. The role of electric vehicles (EVs) is also becoming more important: while the share was 0.1 percent in 2012, it will be 2.7 percent in 2021. Regulated parking, access regulation and pricing are the strategies adopted which play an essential role in guiding mobility choices, regulation, and use of public space.

Two areas for specific car types

Area C, created in 2012 to reduce traffic in the central area, is a "No Carbon Zone" and the first Italian toll experience with rehabilitation measures to protect public transport and "soft mobility". It covers an area of eight square metres (4.5 percent of the city area) and is controlled by 43 gates with cameras. The most polluting vehicles and vehicles longer than 7.5 metres are not allowed to enter. Access is free for motorbikes, electric and hybrid vehicles, but all other vehicles must pay a fee.

Area B, established in 2019 to reduce access and circulation of the most polluting vehicles in most of the urban area and to control heavy vehicles and those transporting hazardous goods, is the first experience of a Low Emission Zone in Italy and one of the largest in Europe. It covers an area of 129 sqm and is controlled by 188 gates with cameras. The most polluting vehicles, vehicles longer than twelve metres and vehicles carrying explosive goods cannot enter.

To highlight the role of parking as a fundamental element for the management and redevelopment of urban space and for regulating access to internal areas, ATM has implemented some main actions like:

- increasing the supply of parking spaces in public transport interchange car parks.
- reservation of parking capacity for residents and introduction of a different fare scheme and time regulation with progressive activation of metered parking for city users.
- increasing the supply of on-street parking for loading and unloading goods.

The dematerialisation of parking tickets has enabled the introduction of digital control systems based on the number plate, which develop control with mobile devices (used by parking attendants and local police) and with road control cameras for the issuing of the fine; the service also enables the immediate transmission of the fine to the addressee via an App.

The system in Milan is based on ANPR, which allows the digital and integrated management of all operations in real time. Each vehicle is tracked from entry to exit, providing the operator and the administration with data to optimise and constantly update operational decisions. ∎

category3
On-Street Parking Project

© ATM

Areas B and C are the first "Low Emission" and "No Carbon" zones in Italy

Parking space in Milan

The total number of parking bays in Milan is 424,988, of which:

- Off-street 124,450 (public and private)

- On-street 300,538:
  - → Free parking 144,455
  - → Regulated parking 156,083:
    - → Resident 54,999;
    - → Payment 101,084

smou

Real-time availability in Barcelona's car parks

The project consists of providing information from off-street car parks of different operators in a single urban mobility application: smou. The main objective is to provide relevant real-time data to the users, obtaining urban benefits such as reducing parking search traffic and stimulating off-street parking.

category **4**
Innovative Scheme

The smou application has more than 490,000 users and integrates different modes of transport. Related to the off-street parking, smou provides information and an access+payment system to BSM car parks. With 45 car parks, BSM is one of the biggest operators in Barcelona. The implementation of this project includes real-time information of the car parks of 39 other operators. In the future, it is planned to implement the access+payment system to as many car parks as possible.

The availability of the car parks is shown on the map in three colors: green indicates many parking spaces on stock; orange indicates medium availability and red indicates low availability. By clicking on the parking point on the map, the main data are detailed: address, free spaces, total spaces, rates, services, and limitations.

This development of small and local car parks was carried out at the initiative of the Barcelona City Council and in collaboration with the Barcelona Car Park Association. An agreement was reached between several operators to integrate the different data and offer the result in a single area. The car parks integrated in the application are located in the Barcelona urban area, mainly in the city of Barcelona.

A web service and an operator back office have been developed to manage this data, adapting to the largest possible number of operators and providing more information to the user. Some operators can share real-time availability data through the web service, but others do not have sufficient tools to know and share this information. They can introduce static information instead of the web service or send regular files to the back office to be displayed in the app.

The project is being developed as part of the smou urban mobility application, which

© BSM

With 45 car parks, BSM is one of the biggest operators in Barcelona.

aims to combine the greatest possible number of services and information related to mobility in a single app. The services offered by the application include payment for on-street parking, access and payment for off-street BSM parking, access and payment for electric vehicle charging stations, and access to Barcelona's public bike-sharing by users with a registered service. Smou offers also layers of information on the map for both of the aforementioned services and other bike-

sharing, moto-sharing and car-sharing operators. Also, it has a notification service for users in case the municipal tow truck removes their vehicle from the public road.

In conclusion, the project provides multiple benefits to the smou users and indirectly to the cities, offering real-time data on 114 car parks with more than 45,000 spaces. In addition, the project simply requires an investment in digital development and no infrastructure. ∎

CAME Parkare

New service concept for car parks

CAME Parkare, a brand of the Treviso-based CAME Group, is a brand specializing in sustainable urban mobility. The brand operates within the Group as a provider of complete solutions for the control and management of car parks.

One of the greatest challenges of modern society is dealing with mobility. Therefore, technical solutions are needed that are not only innovative, but also meet the real needs of customers and contribute to the sustainability of the environment in which we live.

Even before the Covid-19 crisis, parking management was undergoing a profound transformation driven by digitalisation. For years, all parking stakeholders have been focused on changing the hardware vs. software paradigm, but nothing has changed in the way the service is delivered, says CAME. If a fault occurs in a car park, a service provider still has to be called to send a qualified technician to the site, he says. Moreover, this method of service delivery carries an inherent risk that can affect business continuity, with the well-known consequences for both the profit and loss account (P&L) and the customer experience.

So, the question is whether there is a smarter way to reduce human intervention to correct faults in parking systems.

For CAME, the real innovation for everyone would be able to count on a revolutionary and self-sufficient system that can meet new needs, new rules and new technologies. Digitalisation allows a paradigm shift to take place, software is becoming increasingly more important than hardware, and the service of the future will always have a central position but will be provided in a totally different way.

category **4**
Innovative Scheme

CAME Parkare is a brand of the CAME Group and specialized on control and management of car parks.

© CAME Parkare

Redefinition of service and assistance

The goal of "Zero KM Service" is to reduce the time and cost of human intervention in preventive and corrective maintenance, improve asset performance and ensure complete service management through smart devices with new, innovative digital native technologies.

With "Zero KM Service", CAME aims to redefine the service and assistance model in parking management to ensure business continuity, improve the customer experience and have a strong impact on the operating margin of operators in the sector, he said.

The system is based on three pillars. One is a complete redesign of the hardware with devices developed in robust modular kits to allow rapid intervention by unskilled personnel on site. The second is new SMART software capable of sending data and messages in real time to inform and guide staff to act autonomously in both preventive and corrective maintenance. And finally, the application of new cutting-edge technologies to create a modular and intuitive structure supported by artificial intelligence algorithms to avoid errors.

The "Zero KM Service" concept is available with the new SPK parking system line. Now any member of the car park operator's staff can independently and quickly put the system back into operation, guided by the new intelligent software, which also automatically reconfigures and restores the system in real time. ∎

SIS Parking

New tool for mobility in cities

In 1987, SIS was a Company specializing in industrial road signs and had already been in business for 15 years. Today SIS is the largest private Italian player in the sector street parking management. Their new solution Muvin launched in 2021 and is an online portal, which is adaptable to each individual city, according to SIS.

The Corona Pandemic was the indicator for SIS to launch a deep reflection on its market and the profound changes that were taking place. The conclusion was that parking service alone was not the key to facing the future. SIS has therefore changed its baseline from "Parking Service System" to "Mobility Solution". Such a statement needs to be supported by tools that allow us to realize this promise. The tool that SIS developed is Muvin.

Adaptable to each city

Muvin is an Online Portal that acts like an app, customizable, starting from the web address to the range of services illustrated and offered, for each distinct city.

This tool is adaptable to each individual city: a personalized solution through which the Administration can provide citizens with services and useful information on mobility, from private mobility to the public transport system, scheduled events and regulation of every sector of daily life.

The web portal is designed to facilitate user adoption and loyalty to the service. Its fully customizable and configurable system provides total control over the data, says SIS.

Overall, Muvin provides a clear, fast, and readable way for all necessary information and above all automatically updated information such as new parking areas, rates, extraordinary prohibitions for road closures or events. A communication channel that is always active and can be constantly updated according to new needs that have developed over time.

Muvin allows drivers to find complementary and alternative options to their use of cars: public transportation, mobile staircases escalators, elevators, cable cars. And also spots for car and bike sharing, shuttle services, and electric charging stations.

On-street parking is often concentrated in the Downtown area. Muvin offers the information drivers need to choose how to experience the city. This is through information on parking area locations, rates, and multi-modal transportation options

Muvin can integrate different thematic portals already available in the Municipality. Information on tourist routes, guided tours, links to institutional portals, public transport, links to trains, cabs and naval transport.

Good results so far

The results of the launch showed 25 percent of the subscribers used Muvin for their Service requests, with a constant involvement of the customer service online to help with the procedures.

Six more cities adopted the solution in 2021 summing up more than 1500 service requests and counting. In the latest installation in San Donato Milanese currently 60 percent of services requests are being carried out by Muvin. ∎

© SIS
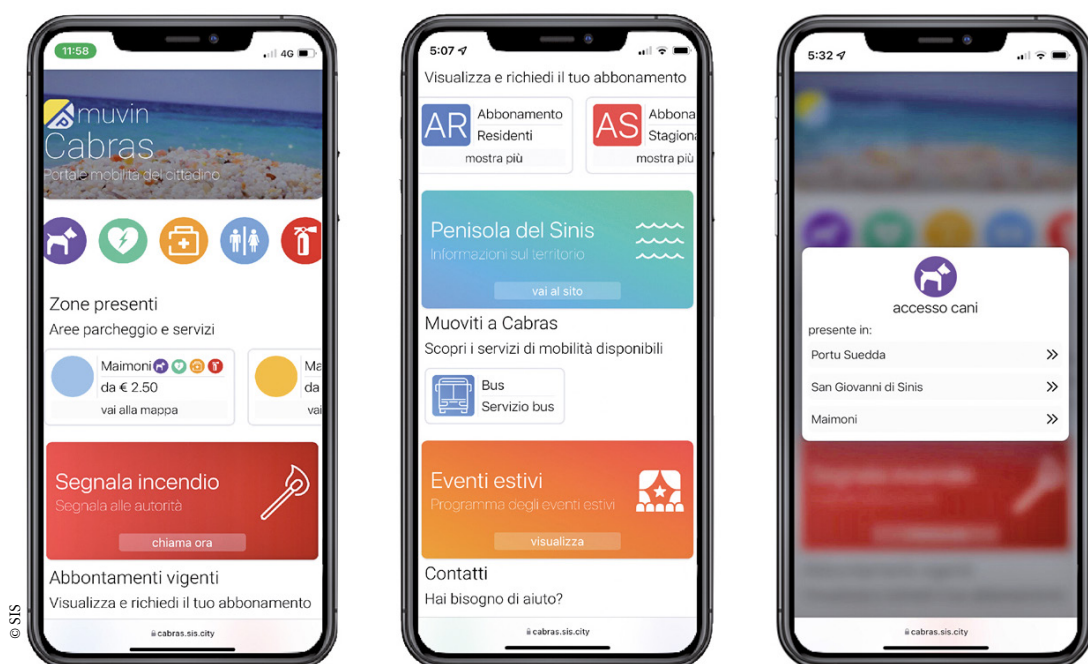
category 5
Marketing & Communication

With Muvin, cities can offer customers different mobility services.

The venue of the 20th EPA Congress & Exhibition

© Lorelei Photo/Shutterstock

20th EPA Congress & Exhibition 2022

First CO$_2$ neutral congress

EPA Congress and Exhibition, created by the European Parking Association and hosted by the Belgian Parking Federation, has a three-day programme in the heart of Europe and welcomes all individuals involved in the parking industry to take part in this year's theme: "The EU Green Deal and the Future of Parking – Integrated solutions for Dynamic Urban Management."

Since 1983, the European Parking Association (EPA) has been working to solve problems related to sustainable mobility, reducing congestion and pollution, and improving accessibility. Its efforts focus on developing cost-effective integrated parking systems that help improve the quality of life in cities. Over the years, the EPA has grown to represent the national associations of 21 countries with their 41 million on- and off-street parking spaces. Every two years, industry professionals and exhibitors come together for an event to discuss the current situation of parking and urban mobility in Europe and to address urban mobility issues as well as detailed parking issues. This event is usually a highlight for the parking industry as around 500 delegates, 50 expert speakers and 70 exhibitors from 32 countries make new contacts, develop new solutions for parking management and contribute to sustainable urban planning.

In 2020, when Covid-19 swept the world, it had a big influence on events like this. The EPA Board and the Belgian Parking Association postponed the 20th edition. While the challenges Covid brought are easy to get over, they allowed the EPA Board to re-evaluate and revolutionise its event programme. The 20th edition is set for September 2022 in Brussels, Belgium, and is likely to be the most exciting Congress yet. The EPA is proud to announce this as its first CO$_2$-neutral event and welcomes all participants interested in transforming parking management.

Theme and Programme Plan

This year's theme is "The EU Green Deal and the Future of Parking – Integrated Solutions for Dynamic Urban Management". It will cover various topics addressed by well-

known experts from academia, politics and industry in presentations and panel discussions that will encourage new solutions and networking. A Scientific and Technical Committee (STC) has divided the range of topics into five main themes: Managing Urban Space, Urban Attractiveness, New Business Models, Parking and Technology, and Influencing Behaviour.

1. Management of Urban Space
- Role of parking in mobility after the Covid-crisis
- Urban space management – parking demand of logistic operators is quite different from parking demand of visitors
- Curbside management
- Managing urban space
- Health and vitality – Other modes of transport (cycling and walking)
- Proper use of urban space
- Individual vs collective transport

2. Urban Attractiveness
- Economic strategies for urban recovery (Post-Covid)
- Parking and economic attractiveness of cities (retail, e-commerce)
- Decline of retail activities in cities /urban attractiveness
- A New Normal (Post-Covid)

3. New Business Models
- New business models for transport operators
- Future-proof infrastructure – what kind of infrastructure do we need to build?
- How can we use existing infrastructure differently?
- New business models for parking (both private and public sector)
- Logistic facilities in parking structures (garages, P&R, …)
- Mobility hubs
- New business models for urban mobility
- Future of parking infrastructure – what other functions can they have?
- New role of (off-street) parking in urban areas
- EV's charging infrastructure

4. Parking and Technology
- MaaS
- Technology

- Pre-booking and reservation in parking
- Parking and Automatization
- Technology and Digitalization
- Data Standardization

5. Influencing Behavior
- Understanding and influencing customer behaviour

Registration and Accommodation
Registration is open and available on our website for delegates, students, POLIS members and local authorities, as well as exhibitors. Those who sign up by 25th March get an early bird discount. As an added benefit, delegates can take advantage of discounted room rates in several hotels from Saturday 10th September till Thursday 15th September 2022. These rates are guaranteed until 1st August 2022.

Sponsorship Opportunities
The EPA recognizes that companies have an opportunity to showcase their products and services to a large group of people with like-minded values, which is why they've implemented several packages and options to tailor to their needs. Exhibitors can choose between a Standard, Bronze, Silver, Golden or Platinum Exhibition Stand Package to determine their booth sizes. Other options include supporting the Wi-Fi, Conference mobile app, coffee breaks, the welcome reception and gala dinner,

and much more. Companies interested in sponsorship and exhibition can utilize the early bird deal by 25th March and save up to 1000 EUR.

The European Parking Award
EPA is proud to continue its biyearly tradition of presenting European Parking Awards for excellence in parking. These awards are featured in five categories and acknowledge qualitative improvements in public car parking, parking operation and policies contributions, sustainable urban mobility plans, and urban development. Winners of each category will be announced in the event's closing ceremony.

The EPA is looking forward to reconnecting with members and transforming the parking industry together. For more information, visit www.epacongress.eu ■
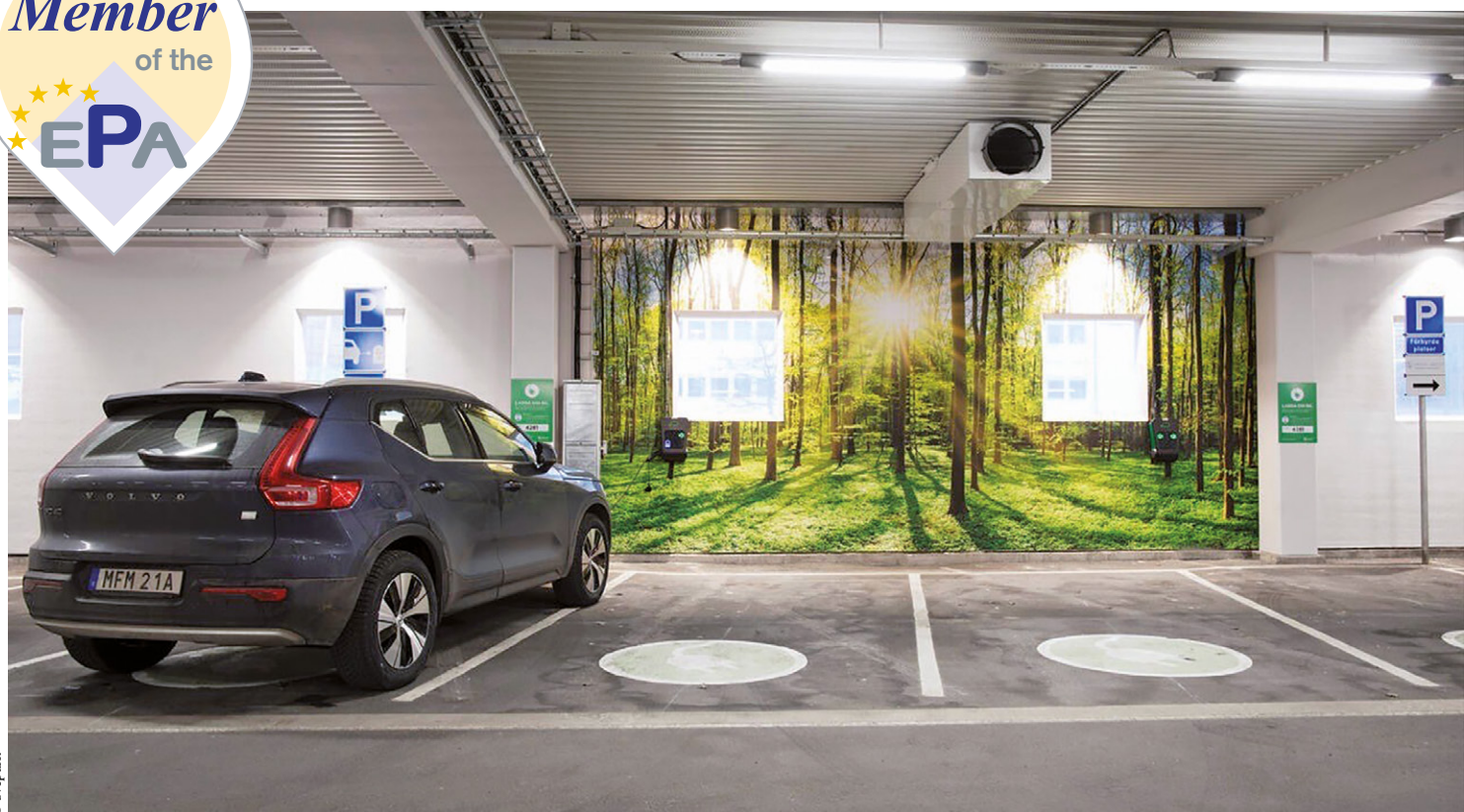
Key Dates:
12th to 14th September 2022
Square Brussels Convention Center, Belgium

Early Bird Registration Deadline: 25th March
Standard Rate Registration Deadline: 25th July 2022

© Square

Member of the
EPA

© Svepark

Charging station in a Swedish parking facility.

Introducing the EPA members

Svepark – Swedish Parking Association

Svepark was founded in the mid-1970s and started as an association for municipal parking managers. After a few years, it became an association for all parking managers, cities and others who have parking spaces, such as property owners.

We are an association with members and partners, i.e. organisations that offer products and services for parking management. Currently we have 62 members, 40 percent of which are cities and 33 percent are municipal parking companies, the rest are private parking companies and property owners, counties and others. Currently there are 50 partners, digital payment and other payment system companies, construction companies, electric charging systems and other providers.

We have an annual meeting where we elect a board. The annual meeting is for the members. The board has nine members, Stephan Carlbaum from the Municipal Parking Company in Gävle is now the chairman of the board.

At the same time as the general meeting, we are also holding a conference and an exhibition. We invite everyone who wants to join us, but members and partners have some advantages, such as lower prices and some get a better stand during the exhibition. Usually our conference and exhibition have 300-350 participants and 25 exhibitors.

Svepark Conference 2022 in Gävle
This year the conference will be held in Gävle from 30th May to 1st June. The theme of the conference is: ELECTRIFICATION – DIGITALISATION AND THE LATEST TECHNICAL SYSTEMS FOR PARKING BUSINESS.

Our member association also includes a company, Svepark Service AB, which takes care of all activities, such as our training, workshops and conferences. We offer a variety of training and courses for our members, partners and others. We have the largest education programme for people in the parking industry in Sweden. We offer training for parking attendants on on-street parking and off-street parking, as well as training on the different rules and regulations for parking in Sweden. We also offer various courses for managers and administrators in car parks and cities. For example, how to run a parking organisation?

We are currently planning other topics such as mobility and the construction of good parking and mobility facilities. We also work with shorter workshops and seminars that address current issues. Last year,

around 250 people attended our courses and around 150 people attended our workshops and seminars.

The biggest challenges we have had in the last two years with the Corona pandemic have been the courses and seminars that are usually held in Stockholm or another city at different meeting places. Almost all the training has taken place in digital form. In 2021 we have not reached the same number of participants as before the Corona pandemic. Before the pandemic, we had 400 participants in our trainings. We are really happy that we have managed to convert the meetings and training to digital forms. We will probably continue to hold some of our meetings and trainings in digital form in the future.

Service and lobbying for parking management

We also offer different types of help and support to our members if they have problems and need help in introducing or changing their rules for parking and planning the construction of parking facilities. In Sweden we have different rules and regulations for on-street and off-street parking, Svepark has asked the government and authorities to change this. We now have a discussion about what we need to do.

Currently the most important subjects on our agenda are

- Parking is an important part of good urban mobility.
- Many other vehicles such as bicycles, motorbikes, electric bikes and electric scooters also need organised parking. Our goal is to include these vehicles in our parking options and to take them into account when planning new parking spaces in cities.
- Electrification of cars and creating good charging facilities. We support our members and other businesses in the parking sector to install different types of charging systems and also work with charging system providers, most of whom are partners of Svepark. Parking is the most important place to charge electric vehicles.
- How to build sustainability. In 2021 we had a big project for some of our members in southern Sweden, supported by Svepark. How to build carbon neutral? It was a very good project funded by the builder's development foundation. We have learned a lot from this project and hope to transfer it to the rest of Europe.
- We continue to make it easier for drivers to pay for parking.
- The shift of the main parking spaces from the streets to off-street parking will continue. This has the advantage of making public streets and squares in cities better and more beautiful for all citizens.

We work together with the Norwegian parking association NORPARK. Last year, cooperation was somewhat limited due to the pandemic. We attend our annual meetings and meet in Olso or Stockholm for various discussions on important issues in Northern Europe.

Our office is currently located in Stockholm and is run by two people: Lena Karlsson as CEO and our administrator Tilda Rydberg. ■

Contact to Swedish Parking Association:
lena.karlsson@svepark.se

Lena Karlsson, CEO of Svepark

Stefan Carlbaum Jonsson, chairman of the board

© Marianne Pernbro & Parkering Malmö

New parking facility in Malmö's SEGE park: Sweden's largest wooden car park, six storeys high, offers space for 621 cars and a bicycle garage. The building has many unique solutions – from innovative rainwater management to a photovoltaic system for sustainable power.

EPA/ Erasmus University Rotterdam
Expandation of scientific researches

The EPA recognizes the importance of scientific research to stimulate the development of the parking sector in Europe. On September 22, 2017 the European Parking Association has agreed a Memorandum of Understanding with three Academic Institutions:

- Erasmus Centre for Urban, Port and Transport Economics – Erasmus University Rotterdam (Erasmus UPT)
- Universita' degli Studi di ROMA "La Sapienza" – Dipartimento di Ingeneria Civile, Edile e Ambientale (UNIROMA1)
- Cracow University of Technology – Institute of Road and Railway Engineering (PK)

In case of the Erasmus UPT, the EPA asked the part of the University of Rotterdam to conduct a new research project on charging infrastructure for electric vehicles (EVs).

In the past years, there has been a dramatic increase in the sale of EVs in Europe. This pattern is likely to continue in the future. This will most probably lead to an increase in problems associated with EVs, such as charging stations availability, profitability, safety, grid performance, and more. This charging aspect of EVs is exactly what this research will specifically focus on.

The main goal of this project is to map out the strengths and weaknesses of the European charging system. Additionally, the potential role of parking is explored.

Charging infrastructure is one part of the development of the parking sector.

The research will be carried out in the coming months and the results are expected for June 2022. EPA members will be asked to play an active role in this research by filling in an online survey set up by the researchers. Stay alert! ∎

Online guide of the Austrian Parking association (WKO)
E-vehicles also have to stand still sometimes

The conversion of the fleet is in full swing and this also requires the appropriate charging infrastructure. With this cooperation, the Viennese garage industry is making a major contribution to ensuring that companies can increasingly rely on e-mobility in the future.

The fleet conversion to e-vehicles is coming to the fore for more and more companies. At the beginning of the year, 75 percent of the Viennese entrepreneurs surveyed said they wanted to convert their fleet to electric drive by 2023. The economy is moving forward in the mobility transition and also needs the infrastructure to do so.

The Vienna Chamber of Commerce has addressed the unanswered questions of businesses and now offers an online guide to help them make the switch. 70 percent of Viennese companies with e-vehicles park and charge in public spaces, i.e. they do not

have the possibility to do so at their own company site. Therefore, garages play an important role when it comes to recharging the vehicles. The Viennese garage industry has found a solution and offers entrepreneurs the necessary support.

In the course of the creation and the initiative "E-Mobility for Viennese Entrepreneurs", it was possible to create cooperations with garage operators in Vienna. With the "charging and parking" package, companies now have their own solution. At the moment there are already 81 locations throughout Vienna where companies can charge their e-vehicles in their own garage spaces.

This makes fleet conversion possible even for companies that might have considered it impossible until now. Once companies have found the perfect garage for them, they can already submit an enquiry to the respective garage operator in the interactive map. Simply enter the number and type of e-vehicles, provide the company contact details and the

operator can check whether there are still enough of the coveted spaces. If there is a large demand, it is still advisable to contact the operator directly in advance. ∎
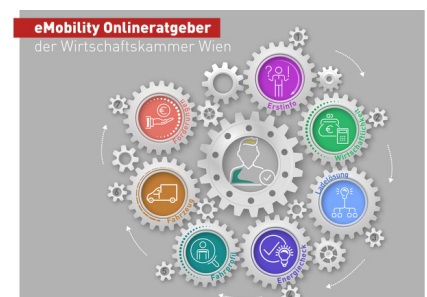
Contact:
wko.at/emobilitaet
parken.at/flottenumstellung
Andrea Faast
Head of the Department for Location and Infrastructure Policy, WK Wien
Mail request: emobilitaet@wkw.at

Associate Members of the European Parking Association

1. **AeroParker & MetroParker**
www.aeroparker.com

2. **Amano**
www.amano.eu

3. **Arvato**
www. finance.arvato.com

4. **Automated Systems**
www.automatic-systems.com

5. **CAME Parkare**
www.cameparkare.com

6. **CCV**
www.ccv.ne

7. **Commend**
www.commend.com

8. **Designa**
www.designa.com

9. **EasyPark**
www.easyparkgroup.com

10. **Empark**
www.empark.com

11. **EPCplc**
www.epcplc.com

12. **evopark**
www.evopark.de

13. **fair parken**
www.fairparken.com

14. **Flowbird Group**
www.flowbird.group

15. **GART**
www.gart.org

16. **Genetec**
www.genetec.com

17. **Hectronic**
www.hectronic.com

18. **HUB Parking Technology**
www.hubparking.com

19. **Innovativ Parken**
www.innovativparken.de

20. **Ispark**
ispark.instanbul

21. **Metric Group**
www.metricgroup.co.uk/

22. **mycicero**
www.mycicero.eu

23. **Nagels**
www.nagels.com

24. **Orbility**
www.orbility.com

25. **ParkTrade**
www.parktrade.com

26. **PARKUNLOAD**
www.parkunload.com

27. **Planet**
www.Planetpayment.com

28. **SCANaCAR**
www.scanacar.com

29. **Scheidt&Bachmann**
www.scheidt-bachmann.de

30. **Skidata**
www.skidata.com

31. **UNIP**
www.unip.biz

32. **White Label RAP**
www.wl-rap.com

33. **Worldline**
worldline.com/en/home.html

Ambitious goal of the German government: By 2030, there should be one million publicly accessible charging points in Germany.

© BMDV

Charging infrastructure

"Electromobility can no longer be stopped"

Electromobility is growing dynamically and is increasingly becoming an issue for car park operators. After all, battery-powered vehicles should also be able to charge where they park. Marcus Fendt, managing director of The Mobility House, knows all about this. Parking trend spoke to the specialist for intelligent charging solutions.

Parking spaces are the natural location for charging stations. However, there is no blanket answer to what exactly is possible, according to Marcus Fendt, Managing Director of The Mobility House, which says it is the market leader in intelligent charging and energy solutions. For example, at the airport or in an employee car park, one can assume long standing times, while the cars in a public car park in the city centre often only stay for a short time.

Five charging columns always go

Such factors influence the planning of charging infrastructure just as much as the available connected load of the power grid. "I don't want to promise everything," says the expert with regard to the maximum number of charging columns. "The first five always work," says Fendt. It becomes more challenging with a larger number of charging stations. As a guideline for power distribution, Marcus Fendt says around 10 to 30 charging points

per distribution cabinet and design. In order to realise larger systems, one would have to "sacrifice" a parking space for a larger distribution room if necessary.

A limiting factor is usually the maximum connected load that energy suppliers provide at the respective connection point. In order to charge several electric cars simultaneously despite limited power, the magic word is dynamic load management. Special software uses a local controller integrated

into the power grid to ensure the best possible power distribution among the electric cars and reacts situationally to load changes when other consumers in the building demand power, for example a ventilation system that kicks in.

The car as a power plant: "Vehicle to grid"

The managing director of The Mobility House explains an exciting vision on the sidelines of our in-depth background discussion: In principle, it is even possible to earn money by operating electric cars. The technical prerequisite is that the electric cars are designed to be bidirectional, i.e. that they can not only be charged but also discharged. Experts like Marcus Fendt see enormous potential in this for the energy transition, as the electric cars in their entirety could represent a gigantic buffer battery for the volatile power grid. In technical jargon, this is called "vehicle to grid". Fendt describes a scenario: electric cars in an employee car park are charged with environmentally friendly electricity from a photovoltaic system. Spread over several hours, this is possible even with low power. After work, the commuters bring the

Marcus Fendt, CEO of The Mobility House

green electricity home with them. The vehicle batteries have enough charge to power the electrical appliances at home – and the next day the batteries will still be enough to get to work. Marcus Fendt calculates: A residential unit consumes about ten kilowatt hours per day, and modern electric cars have a battery capacity of at least 50 kWh.

In an overarching view, the car is not only connected to the home grid, but also to the public power grid and provides stabilisation. "We need much more intelligence in the power grid," Fendt explains. As a rule, the German power grid is only used to 55 to 60 percent of its capacity, he says. Transmis-

sion peaks occur only rarely. Much more could be made out of the existing infrastructure if car batteries were used as electricity storage.

"We have to integrate the car into the grid," says Fendt. Constant charging and discharging is no problem for the batteries, by the way; bidirectional charging is already standard in Japan. There are also pilot projects in Germany, for example in Hagen, Westphalia. BMW is also testing the "vehicle to grid" principle with 50 electric vehicles as mobile power plants. In this context, Marcus Fendt refers to a position paper of the VDA and the NPM, in which corresponding application scenarios are described.

Outlook with confidence

So there are many reasons for the Managing Director of The Mobility House to look ahead with confidence. "Electric mobility can no longer be stopped," Marcus Fendt is convinced. In view of the politically heralded end of the combustion engine, there is hardly any doubt about it. What is needed now is an intelligent and scalable charging infrastructure, Fendt demands. He adds: "There are solutions for everything." ∎
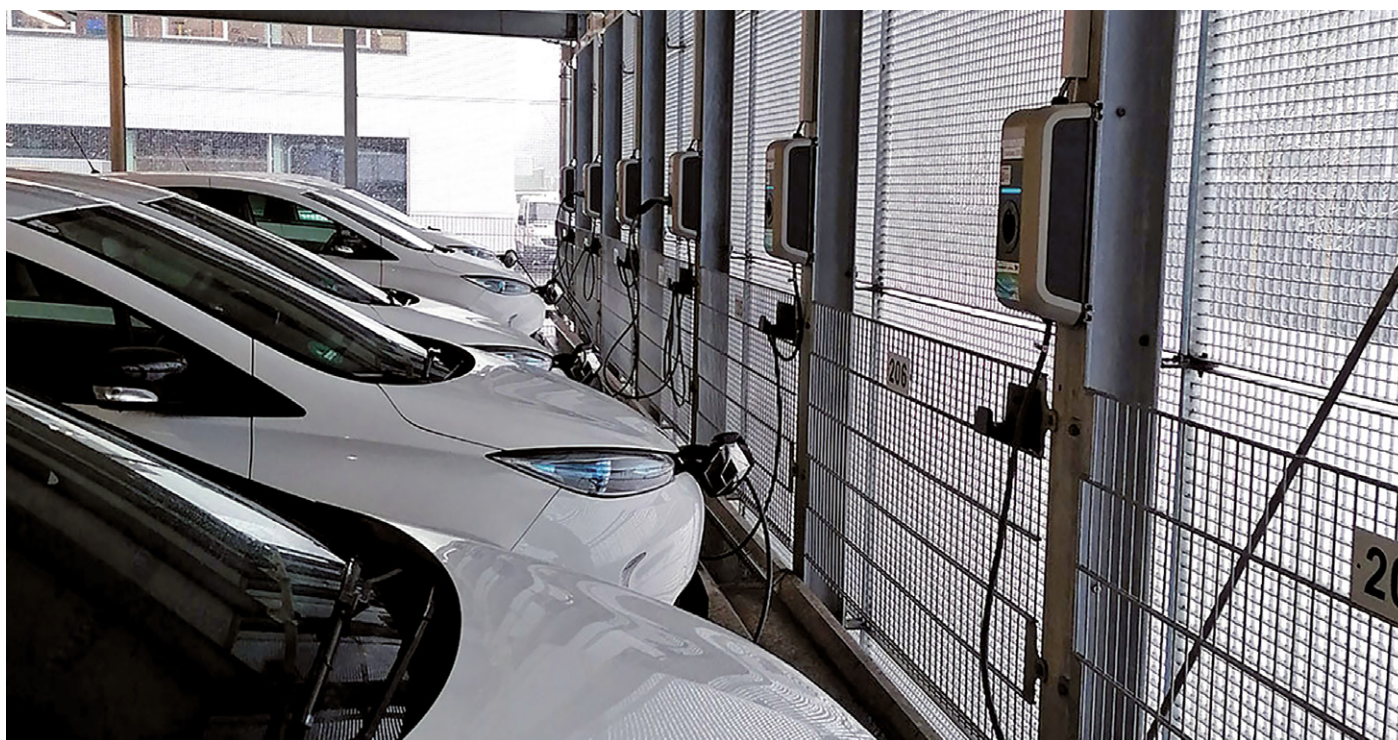
Charging solution from The Mobility House in a company car park

© The Mobility House (2)

The establishment of other mobility offers is a step on the way from the traditional car park to the "mobility hub".

© Telpark (3)

2nd EPA-POLIS Webinar

Car parks in flux

On 9th December, speakers from across the parking sector met to discuss parking management for new mobility services and to present the Park4SUMP guidelines and a selection of integrated parking and service solutions. The focus was on 'urban hubs' and how traditional parking spaces are being transformed into them.

Parking is not what it once was; the integration of shared mobility, charging points and logistics functions is rapidly changing the face of the sector. New concepts of sustainable mobility solutions are being realised all across Europe. In the second EPA-POLIS Webinar, the cities Rome Freiburg, Stuttgart and Madrid presented their concepts. Nigel Williams, Vice President of the EPA, said: "Our collaboration with POLIS is over ten years old, and together we are exploring the rapidly changing face of parking, as it becomes an avenue for supporting multimodal travel."

Park4SUMP

The Horizon 2020 project Park4SUMP aims to consider parking management as part of a wider strategy that can benefit urban mobility, but also the overall quality of life in our cities. Indeed, good parking management can help free up public space, support local businesses, reduce search traffic, generate revenue and make cities more attractive.

In 16 cities, the project is deploying a range of new and innovative parking solutions. From bicycle parking in Rotterdam to the "one-minute city" in Sweden, the project aims to transform parking management from an operational task to a strategic one

and make parking management the backbone of the SUMP.

"Better urban parking policies are essential if we want to make our cities more sustainable and support the democratisation of public space," said Park4SUMP coordinator Laurens Vander Kuylen of Mobiel 21.

One example is the city of Freiburg. The German city is home to 230,000 inhabitants and 30,000 students and is growing fast. Every year, the number of cars increases by 750. This is a challenge for the city and raises questions such as: What are the most appropriate parking standards for car and bicycle parking? The city's answer to such questions is development areas and the establishment of residential areas. Residential areas are characterised by varying degrees of car dependency. An example of such an area is Vauban, which was realised between 1995 and 2010. In this area, cars are not allowed to park next to the flats and 40 cars are available for car sharing. The background to this is that one of the city's goals is to make the neighbourhood as car-free as possible. Furthermore, Freiburg wants to set a standard for parking, with a lower number of cars in the city centre and a higher number on the outskirts.

In addition to Vauban, there are two other districts in Freiburg where the city is

trying to establish new mobility concepts. In Kleineschholz and Dietenbach, mobility offers such as car sharing, bicycle rental and cargo bikes are being integrated. Peter Schick from the City of Freiburg said: "We now have an opportunity to experiment with new parking strategies."

The car park of the future

João Caetano Dias, Business Director at Empark, joined the webinar to provide practical insight into how the car parks of the

future can be created, reflecting on the role of cities and the service sector.

"Many of our European cities have underground and multistorey carparks, yet space is so valuable, we must use these in more flexible and practical ways," said Dias.

Empark is now developing mobility hubs by integrating car sharing, scooter and bike sharing and recharging facilities in existing parking spaces. In June 2021, the first Telpark mobility hub opened at Madrid's Plaza Colón. It has 30 charging points as well as seven Mobility Players: they include car sharing, scooter sharing and bike companies. New Telpark mobility hubs are planned in Bilbao, San Sebastian and Barcelona.

"If cities continue to offer free or low cost on-street parking, such mobility hubs will not fulfill their potential, we must create the economic models which incentivize new parking offerings," asserted Dias.

Electrifying the car park

Accommodating electromobility is a key challenge for the parking sector and cities. By 2030, 30 percent of cars sold will be BEV. As the electrification of vehicles grows, parking services must be able to keep pace with these trends if it is to support Europe's transition away from combustion vehicles. That means there has to be a reliable infrastructure together with an appropriated pricing structure and support from the regulators to create this environment.

"We have to adapt our assets to accommodate this EV wave, easing access to reliable charging, while creating an appropriate pricing structure," said Olivier Challe, Head of EV Charging Strategy at Indigo. He says, that the post covid world is changing: Challe thinks, that the 15-minute is coming to life with a need of 24/7 proximity services. The purpose of Indigo is to open the space for peaceful city motion.

Challe outlined how off-street parking must adapt to offer "park and charge" services. Indeed, Indigo is developing a monthly subscription tariff to streamline usage, as well as fast-charging hubs in the city centre to accommodate taxis and logistics vehicles.

Combining parking and transport hubs

Improving parking offers at transport hubs such as train stations and airports is critical to seamless transit. However, to achieve this goal improvements integrating the mobility system are often required in many transport hubs.

Rome-Fiumicino Airport has transformed its parking offer, integrating on -and off- street and multilevel parking into a digi-

tal access-controlled service management mobility model. Where previously vehicles had free roam over the airport's parking facilities and road network, the new model separates and controls transit allowing only public vehicles adjacent to the terminal and permitting private cars on a parallel route controlling the stay over time. The framework is managed through a digital control centre, overseeing an access, permit and payment system. This was also relayed to users through a comprehensive communication campaign. This management model could be particularly suitable for integrated traffic and mobility schemes in small and medium sized urban centres combining UVARS and parking with accessibility, congestion and urban quality strategies. "The new system brought order to the parking offering, streamlining traffic flow," said Fraccari.

Parking in train stations is also being improved to enhance access. In Germany DB BahnPark is developing parking facilities which are central transfer hubs for various transport services or forms of mobility form large, medium and small sized cities. "We are supporting all efforts to make sustainable mobility strategies successful, by reducing car parking spaces and making space for car sharing, bike parking and other more environmentally friendly options," said Torsten Sprengel, CEO of DB Bahn-Park.

At the end of the Webinar, Interparking CEO Roland Cracco highlighted the upcoming EPA Congress & Exhibition as a CO_2 neutral congress and talked about the program. You find more details about the EPA Congress on pages 22/23. ∎

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POLIS Conference in Gothenburg

A new look at mobility and parking

By Fabian Küpper, Editor Parking Trend International

After Covid-19 made many events impossible for two years, the POLIS conference could take place in Gothenburg in December 2021 – only with vaccinated persons. Over two days, representatives from European cities exchanged views on various aspects of parking. There was a focus on curbside management and shared mobility.

The venue of the POLIS conference was Gothenburg, a city that itself exemplifies what was discussed at the conference, among other things: The electrification of cities and shared mobility. "Between 2016 and 2020, we had only one electric bus line, Line 55," POLIS President and Gothenburg's Transport Minister Toni Orsulic told us. "Today we have 200 e-buses in 37 different lines."

However, it was not only about the electrification of cities but also about aspects such as traffic management of the future, parking and shared mobility or curbside management. Speakers from all over Europe presented the solutions of their companies or cities, but at the same time also urged that there must be cooperation between cities and car park operators. This also reso-

nated with the expert panel at the opening conference. "We still need to innovate and the city is not very innovative. Most innovation comes from businesses. And to advance the solutions that already exist, you need collaboration," said Barbara Stoll, director of the Clean Cities Campaign. Maria Strömberg, Gothenburg's director of clusters and innovation, found that mobility solutions need to be adapted: "We need to bring more micromobility into the solutions to bring more companies into the game." These and other aspects suggested at the opening conference were then discussed in the individual thematic groups.

Curbside management
Paola Cossu from FIT Consulting asked how best to start such a dialogue. She said

it was important for cities and car park operators to come closer, as the role of the verges had "changed over the years" and a collaboration between operators and cities is necessary, because the local authorities and planners need to design and manage the curb space in collaboration with public transport companies or service providers. They have to go "hand in hand", so to speak. For Cossu curb side is "where movement meets access." Cyclists and e-scooter riders need safe lanes to pass parked cars, while delivery truck drivers need space to drop off packages. In times of e-commerce and Covid-19, especially the last aspect is getting more important, as the trend is towards more online shopping, which means that more last-mile delivery services are needed if you want a sustainable and at-

tractive city centre. For Cossu, urban streets are in a sense "an open ecosystem" with dynamically adapting curb space to users within a safe, efficient and inclusive environment.

Another big thing is the deconfliction of the curb. Here are parking lanes transformed into flex zones. Characteristics of the Flex Zone include a separate on-street cycle lane, on-demand micro transit services and semi-automatic people movers. These and other solutions should make a 15-minute city possible. Residents should be able to reach everything they need in 15 minutes on foot, by bike or by public transport.

Another speaker who addressed curbside management was Martijn Prater, founder of "Coding the Curbs". According to Prater, parking search traffic is responsible for 30 percent of traffic congestion in cities. This and the fact that logistics in city centres will increase by 40 percent in the next five years. These figures show that the use of parking space must change. Because at the moment there is a lack of parking and loading space in cities, says Pater. For him, however, the real problem is the inefficient use of space. To optimise the use, he proposes, among other things, so-called "Smartzones". These are digital and scalable platforms that serve several purposes at the same time. For example, they can be used as charging stations for electric vehicles or as parking spaces for bicycles and scooters. By scanning the QR code, one can book a smartzone for a limit-ed period of time. The smartzones are intended to reduce the number of kilometres driven by 20 percent, according to Coding the Curb. The company's goal is to install 100 smartzones across Europe by 2025. There are currently ten zones in total, including in Groningen, Amsterdam and Utrecht.

Traffic Management and shared mobility

Traffic management is the backbone of urban mobility. With these words, Dr Nina Nesterova from the University of Breda introduced her presentation on the traffic management of the future.

One topic related to traffic management is of course bicycles. The city of Appeldorn in the Netherlands has combined bicycles and intelligent transport systems (ITS). The aim of the BITS project, which was launched in 2019, is to make cycling 'smarter' and more attractive with the help of ITS. ITS aims to improve conditions for cyclists in three areas: Safety and reliability, speed and convenience, and comfort and experience. An example of improved conditions in the area of speed and convenience are five countries currently involved in the project: Netherlands, UK, Denmark, Germany and Belgium. In the near future, the project will be expanded to BITS 2.0, with an even stronger focus on travel and the bicycle as part of the mobility chain. The topic of parking and shared mobility was addressed by Steffen Arnbo Nielsen and Gustav Friis from the City of Aarhus. Nielsen said that "we have to lead people to use shared mobility." For them, the goal is not to make people use shared mobility. Rather, it is about making a car-independent lifestyle attractive. And this lifestyle ultimately includes shared mobility. To achieve this goal, parking management needs to be rethought.

The policy needs to be changed to prioritise the promotion of shared mobility parking measures and the establishment of mobility hubs. Because the mobility centres ensure that mobility needs are met even without a car.

Other suggested solutions are for example more dedicated road space for shared cars, which would reduce the number of parking spaces for private cars at the same time or low costs for parking at important places for users of shared mobility.

The most powerful tool for them is the increase of the parking costs. This includes a higher price for the public parking license and for public parking. At the same time the economic conditions or shared cars shall be expand. This shall bring the citizens to the point to switch to shared mobility.

But parking measures and the supply of shared mobility doesn't do the mobility change alone, Nielsen and Friis said. There have to be measures across all areas, for example redeveloped cityscapes and well-developed public transport. ∎

Representatives from European cities at POLIS Conference in Gothenburg

start2park/ Frankfurt UAS

Measuring, explaining and predicting parking search traffic

A research project funded by the Federal Ministry of Transport and Digital Infrastructure (BMVI) analyses the search for a parking space and the resulting parking search traffic. With the help of the free research data app "start2park", this can now be recorded and analysed.

When calculating travel time with navigation apps, the time needed to find a parking space is neglected. Therefore, the attractiveness of private car use compared to other modes of transport appears higher than it actually is. Implementing parking search time in navigation apps could reduce unnecessary parking search traffic. This would be associated with a reduction in emissions, traffic volume and travel time. In addition, previous studies show that parking search has not yet been convincingly measured and empirical results have so far varied widely. These differences in results are due to specific local conditions in the study areas, different recording times as well as different survey methods.

Closing a research gap

The start2park research project aims to close this research gap by precisely measuring the duration of the search for a parking space based on data collection by an app developed for this purpose. In particular, it is said to be able to precisely determine the start time of the search for a parking space. The start2park app was developed in cooperation with the practice partner Fluxguide, Vienna, and offers a modern mobile interface designed for easy operation while driving. The app was rolled out across platforms for iOS and Android devices (publicly available since September 2021). In this way, the average time taken to find a parking space can be determined according to the type of district and time of day. A research goal of the project is to develop a model to explain parking search duration in order to identify options for public transport planning.

App-based data is combined with Big Data by the practice partner Bliq, Berlin. Using data mining and statistical analysis, the search for a parking space is explained by possible determinants such as traffic density, date and time. With the help of machine learning algorithms, a prediction model will be developed to implement real-time predictions about the duration of parking space searches in navigation apps.

If you are in Europe, you can support the project. Download the free start2park app on your mobile phone and regularly record your parking search. In doing so, you will support research on sustainable mobility and gain insight into your parking search times. You can also find information at www.start2park.com.

The research project is funded by the German Federal Ministry of Transport and Digital Infrastructure. It started in July 2020 and runs until June 2023. ∎

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The app "start2park" is part of a research project on parking search traffic at the Frankfurt University of Applied Sciences.

Contact

Frankfurt University of Applied Sciences, Research Lab for Urban Transport (ReLUT):
- Prof. Dr. Tobias Hagen thagen@fb3.fra-uas.de
- Dr. Sabine Scheel-Kopeinig, s.scheel-kopeinig@fb3.fra-uas.de

SCHEIDT&BACHMANN SB

entervo infinite

DIGITALISING PARKING SIMPLY AND QUICKLY

Mr Fleps, with entervo infinite Scheidt & Bachmann wants to digitalise parking simply and quickly. How is this planned and what exactly is entervo infinite?

Ulrich Fleps: The whole world is in a state of a radical digital change. Video conferences are replacing business trips, delivery services are replacing supermarkets, and online shopping is becoming more and more popular. Is that a good thing? Maybe not always, but in the case of parking it certainly is. The parker wants to park their car without hassle. Car park operators and owners want to make this possible – with minimal hardware, highly variable and, in the current times, with small investment. That is where Scheidt & Bachmann Parking Solutions comes in.

How do you achieve that?

With entervo infinite, there are very low investment costs for the infrastructure on site. As a pure software as a service solution, we are changing the entire approach – in future, operators will be able to book what they want to offer their customers for the desired application periods and will always be on the road with the latest version.

How does that work exactly?

It is very simple – on the last page of this magazine, we have tried to illustrate this in an understandable way. We mount a camera in the lane, connect it to entervo infinite and, by means of a switching contact, we control the barrier. This way, the operators keep their existing devices and can still jump on the digitalisation train.

Do you have a concrete example for us?

With pleasure – the first bookable service digitalises the parking process for motorists. If these customers can conveniently drive in and out of the car park using licence plate recognition and payment is made in the background, then parking is inconspicuous and digital. Customers appreciate this. Whether they are long-term parkers, registered short-term parkers or customers of a mobility service provider. With entervo infinite, car park operators can retrofit any existing system with these services. This also applies to older Scheidt & Bachmann systems. entervo infinite is constantly evolving, geared to the needs of our customers.

Can you already give an outlook?

In my opinion, the industry is in the most radical phase of change it has ever been in. Everyone is talking about mobility hubs, about various additional services that have to be offered. Operators are asking themselves at what point in time they should invest in which service. With entervo infinite, we make it easy for you. You can add another newly integrated service to your portfolio at any time. In addition, the integration of

Ulrich Fleps,
**CEO of Scheidt & Bachmann
Parking Solutions**

the outdoor units will also take place in the future. On the roadmap are, for example, our sophisticated automatic pay stations. We want to deliver what the customers will need in the future. We are convinced that we can achieve this with entervo infinite.

Thank you very much for the interview. ■

EasyPark

"Making cities more livable"

"CEO talks"

…with Nico Schlegel, EasyPark

On 9th November 2021, a new catalogue of fines came into force that will make parking violations much more expensive. We took this as an opportunity to talk to Nico Schlegel, Managing Director of EasyPark in Germany.

Fines for parking without a ticket or with an expired ticket have been raised significantly. Do you expect more customers from this?

Nico Schlegel: It helps to bring payment discipline forward and is not directed against motorists, but ensures fairness. Not only we as app providers, but also the entire parking management system, the municipalities and the citizens benefit from this. However, this requires a successful interplay of parking fees, fines and control frequency.

Can you explain this "trinity" of on-street parking a little more?

Higher fines only have the desired deterrent effect if checks are also carried out regularly. We have a direct connection to the control software of the cities, so that the city can immediately see if a driver has started a parking process with EasyPark when entering the licence plate number. This way, black sheep are easily convicted. The money collected through increased fines and improved payment discipline can be used sensibly for urban development, and regular parkers find a parking space more easily. And finally, the fines should also be in proportion to the parking fees - when weighing up the payment of parking fees against the risk of a hefty fine, it should always be more attractive to play it safe and pay according to the rules.

But in principle, this also applies to conventional parking ticket machines?

Yes, we also support the coexistence of both systems. However, in our opinion, paying with the app is much easier and faster: users of the EasyPark app are not dependent on matching coins – especially if you are in a hurry – and have the great advantage of being able to conveniently extend their parking time via smartphone if it takes longer than planned to go shopping, to a meeting or to the doctor. This increases the likelihood that drivers will always have a valid parking ticket, reduces their stress and avoids parking tickets for citizens who actually want to pay.

Does it make sense in the long run to operate several systems in parallel?

Die Dinge ändern sich. Wir sind seit zehn Jahren aktiv und spüren einen deutlichen Shift. Immer häufiger nehmen Städte von sich aus Kontakt mit uns auf. Ein finanzieller Anreiz für die Kommunen besteht darin, weniger Automaten aufstellen, instandhalten und leeren zu müssen.

You also promise to contribute to a better quality of life in the city. Through what specifically?

We make parking very transparent. A lot of data is available via a dashboard. We can show where people park and how busy individual streets are. Our app makes it easier to find free parking spaces and thus reduces parking search traffic. Cities can use the data to see, among other things, where parking space can possibly be limited, how parking spaces for people with disabilities are utilised and distributed. We can also help cities navigate drivers to available spaces in garages.

Where does EasyPark stand now and in the near future?

We bought the PARK NOW Group last year and are currently in the process of merging the systems and our know-how.

We also have more and more data with which we can help cities. Through targeted parking management, cities can influence people's mobility behaviour and thus achieve their goals regarding traffic reduction and climate neutrality more quickly. You have to be able to look at parking holistically, and we make it visible. We also support the Mobility-as-a-Service – MaaS – sector by integrating car sharing into our app. As a new service, we can now also offer parking space reservations through another acquisition. This can be used excellently at airports, for example. In addition, we also offer a digital parking permit system as a Software-as-a-service.

Many cities are deliberately reducing on-street parking at the moment. Is this causing you problems?

Roadside parking only works with rotation. For longer parking times, the parking garage is the suitable alternative. Our app also shows where something is free off-street. We can even help cities reallocate parking space, as we have the ability to provide municipalities with data on parking space utilisation.

Is that why you have recently started cooperating with car park operators?

Actually, we have been doing this for a long time, but it varies from country to country. We see the future in camera technology, against which there were reservations in Germany for a long time. But that is changing significantly. When it comes to garage parking with number plate recognition, we

work with all the leading access solution providers and also see in our results that this technology is the future.

How many car parks in Germany are available in EasyPark?

In total, we can currently offer access to over 180 garages and parking spaces. This number is continuously increasing. We are constantly working on expanding this service and opening up new car parks. In the course of this year, we will expand our offer to several hundred garages, which are increasingly also equipped with number plate recognition.

Are there fears that you will take customers away from the car parks?

Our goal is to be available everywhere - on-street and off-street, in big cities as well as in a small community. By cooperating with car parks, we can mutually benefit from each other and attract new customers. We see this as a win-win situation and are optimistic that more and more operators will also recognise the advantages of cooperation. We are in constructive talks with many, including large operators. We see ourselves as a service provider for car parks and munici-

palities and do not want to become an operator ourselves.

Do you influence the pricing?

TNo, the pricing strategy remains under the sovereignty of the garages and completely autonomous. We merely map the pricing in our app.

What technical challenges do you have to overcome in the process?

We offer our partners many standard interfaces. Connecting to these is not witchcraft. We already have active integration with many access solutions providers for garages. We are also technical pioneers in many other areas: for example, EasyPark is also a fixed component of the Mercedes-Benz MBUX infotainment system, supports Apple Car Play and is also integrated in many newer Volvo vehicles via Android Automotive. Our FIND system for finding free parking spaces has won many national and international awards. We also believe that it is important for the success of digital parking to offer citizens different mobile payment methods – we are pioneers and leaders in this area as well. We consider a service that only offers one or two means of payment to be anachronistic.

Does cash payment still make sense?

In Germany, it is enshrined in law that parking fees in public spaces can always be paid via parking ticket machines. How many machines and at what distance are necessary for this is, however, an open question. At the very least, it can be clearly said that paying via an app is very much in vogue in many areas - as is the case with paying parking fees - and that paying in cash is clearly on the decline.

What is your basic attitude?

On the one hand, we are a service provider for cities and private parking managers and support them; on the other hand, we want to work on making cities more liveable – in line with our vision of "Making Cities More Liveable". We also believe in individual mobility as part of the mobility mix for the future, but it must be environmentally friendly and not take up public space unduly. For more attractive city centres, less on-street and more off-street is certainly the right way. Digitalisation can help a lot in this. Modern cities like Copenhagen are now finding a balance between reduced car traffic and environmentally friendly mobility. ■

Off-street expansion: The EasyPark app is also to be used in more and more car parks.

Indigo Group/ edX/ DPA-X

Underground car parks – The solution for the future?

What will the car park of the future look like? The underground car park is a big deal because it creates free space on the surface. The newly gained space can be used to make the city centre more attractive and liveable. But building underground car parks is complicated, both in terms of architecture and parking infrastructure. DPA-X, the research department of Dominique Perrault Architecture, has launched two projects in collaboration with Indigo Group to develop the car park of the future.

Dominique Perrault, with his studio and SubLab, a multidisciplinary academic and research think tank founded at the Ecole Polytechnique Fédérale de Lausanne (EPFL) in 2013, launched a MOOC (Massive Open Online Course) on underground architecture, known as "Groundscape" architecture.

Groundscape Architecture Lab Carpark Futures

In collaboration with the (EPFL) and the American e-learning platform edX, a new online course is being launched that focuses on the architectural development of underground parking infrastructures. It is a special edition of the MOOC launched in 2018 on the topic of "Groundscape" architecture and is a collaboration between Indigo Group and the American e-learning platform edX. It is a continuation of "Carpark Futures: Opportunities in the Underground", published in 2020. The course offers participants the opportunity to focus specifically on the topic of underground car parks, which is at the heart of current changes in mobility, logistics and energy. It teaches a variety of architectural strategies for redesigning new or existing parking infrastructures. This course, which offers both a free and a paid completion option, can be booked on the edX educational platform until June 2022.

The course is divided into five episodes, which are divided into different acts, including key knowledge and lectures on Groundscape architecture. The course is aimed for architects, urban planners, landscape architects, students, but also for anyone interested in the development of cities and territories. It explores the spatial potential of the underground and proposes a different way of ex-ploring the surface of our cities by offering a resilient, responsible, aesthetic and sustainable response to the many current urban challenges. It allows students to become familiar with urban strategies, design tools and basic construction processes necessary to create spaces underground.

Carpark Futures Competition

The "Carpark Futures" competition is aimed at young architects under the age of 40 who apply alone or in a team. They are invited to explore the architectural, urban, technical and environmental potential of upgrading underground car parks based on the Euralille site in northern France.

Candidates must propose a series of architectural interventions that respond to new practices related to mobility, urban logistics and, more broadly, to changes in lifestyles and consumption patterns.

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The jury, composed of professionals from the fields of architecture and urban planning, is chaired by Dominique Perrault, architect and urban planner and member of the French Academy of Arts, and Serge Clemente, Chairman of the Indigo Group.

Inventing the car park of the future

When you want to build an underground car park today, you have to ask yourself some questions. For example:

- How can underground car parks be redesigned to adapt to current social changes?
- How can architecture respond to the challenges of future mobility and urban density in the broadest sense?

Today, underground car parks, sometimes underused, represent important reserves of space, volume and land, and their potential is immense. It is now necessary to go beyond the vision of the underground car park as a simple, inert storage space to

enable its integration into large urban developments by introducing new programmes, new uses and new architectural qualities. The idea of underground real estate devel-

opment, or "sub-estate", can now be seen as a strategy for optimised, resilient urbanism that conceives of the city as a system rooted in the ground. ∎

ParkMobile

More Locations for contactless payment service in the United States

ParkMobile, one of the leading providers of smart parking and mobility solutions in the United States, is expanding its offering to cities that can use Google Maps and Google Pay to pay for parking through ParkMobile. The service originally became available in November 2020, following a redesign of the Google Pay app.

ParkMobile's integration with Google Pay allows users to pay for parking in over 350 cities across the U.S. without having to download a separate parking app or create a ParkMobile account. Over 100 new markets have recently been added, including Pittsburgh, Jersey City and new universities such as the University of Georgia and Arizona State University.

On Google Maps, ParkMobile users can navigate to their destination and quickly pay for parking at most locations where Park-Mobile is accepted. To pay, drivers can either tap the "Pay for Parking" button in the Google Maps navigation or in the Google

Pay app. Then the driver must add the parking zone number, time and payment method. For first-time use, the vehicle's number plate must also be entered.

"We want to make everyday payments, like parking, fast and easy with Google Pay," said Fausto Araujo, Product Manager from Google Pay.

"We are excited to continue expanding our work with Google and bring ParkMobile's vast inventory into Google Maps," says Jeff Perkins, CEO of ParkMobile. "Thanks to the growing partnership between ParkMobile and Google, more parkers across the US will have an easier and seamless parking and paying experience." ∎
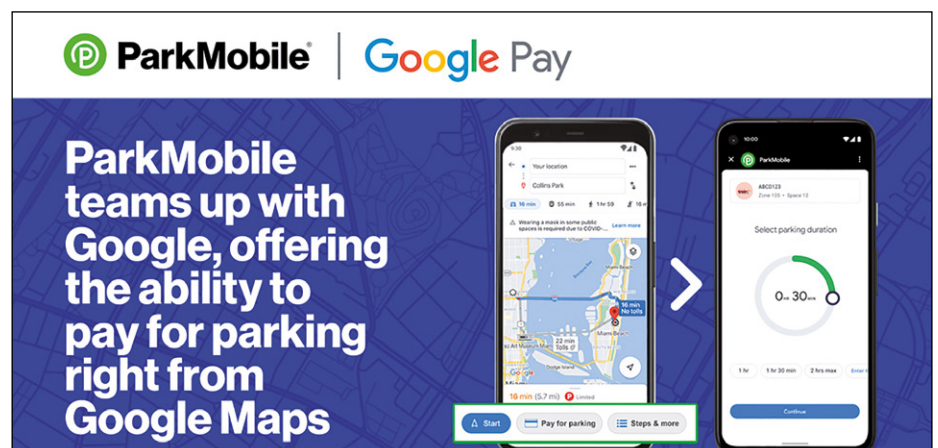
ParkMobile and Google have expanded the range of cities to offer more people a "seamless parking and payment experience".

Croatia

Solar panels on the roof of Gorica parking garage in Zagreb

© Zagrebparking

Installed solar panels on the roof of the Gorica public parking garage.

In September 2021, Zagreb Holding Ltd. Zagrebparking installed solar panels on the roof of the Gorica car park in Zagreb.

Over the years, the roof material of the Gorica public car park, which was opened in 1991, was damaged and roof renovation

was urgently needed. In addition to the roof renovation, Zagrebparking also installed 96 solar panels on the roof to cover part of the car park's electricity needs and improve energy efficiency. The value of the entire investment, including the roof adaptation, is 80,000 euros.

The installation of solar panels on the roof of the Gorica should lead to a reduction in electricity costs, as well as improve the efficiency of energy use in accordance with the Energy Efficiency Act. Depending on the amount of sunshine during the year, the solar panels are expected to cover about half of the annual electricity demand in the Gorica public garage. ∎

Hectronic

New payment terminal HecPay Eco

An easy and cost-effective entry into e-mobility: this is what the new cashless and paperless payment terminal from Hectronic is supposed to make possible. According to the manufacturer, retrofitting an existing charging infrastructure should also be possible with the HecPay Eco.

© Hectronic

The HecPay Eco payment system is designed to facilitate entry into e-mobility.

Hectronic's target groups are cities and municipalities, car park operators, companies with customer and employee parking spaces and small charging parks. Marc Albrecht, Parking Product Manager at Hectronic, emphasises the terminal's user-friendliness: "Customers can easily make contactless payments by credit/debit card and smartphone. The use of common charging cards as well as the authorisation of station and city cards is also possible without any problems. And of course, the barrier-free and contactless payment process for ad-hoc charging is in line

with the charging station ordinance, which comes into force in mid-2023."

By means of a graphic user guide, drivers of an e-vehicle can then select the desired

charging station and gain access to charging options. The payment terminal can control numerous charging stations or charging points per station. ∎

Back in the trade fair calendar: Intertraffic Amsterdam actually takes place every two years. Most recently, however, the fair had to be cancelled due to the pandemic (here is a photo from 2018). From 29 March to 1 April 2022, there is to be another meeting in presence on the RAI grounds.

Intertraffic Amsterdam 2022

World's leading trade fair plans lots of interaction in presence

From 29 March to 1 April 2022, Intertraffic Amsterdam will take place at the RAI exhibition centre. Both the trade fair, for which more than 800 exhibitors have already registered according to RAI, and the lecture programme are free of charge for professionals. With almost 120 sessions and demonstrations, the knowledge transfer is more diverse and interactive than ever before. Stationary traffic also plays a major role in the event's range of topics.

The announcements so far indicate that Intertraffic Amsterdam 2022 will have a strong focus on the increasing digitalisation of transport. Among other things, data exchange is to be mapped by networking all players in the mobility ecosystem. Background: real-time data streams are increasingly becoming the core of mobility services and parking services. Many exhibitors at Intertraffic Amsterdam emphasise the potential of tapping into data, the trade fair organiser informs.

Intertraffic Summit 2022

The programme of the accompanying conference "Intertraffic Summit 2022" focuses on innovative solutions to accelerate the mobility transformation. These will be presented in various formats such as interactive presentations, workshops, demonstrations and panel discussions. Renowned companies, cities and stakeholder organisations such as Swarco, 3M, Yunex Traffic, Tom-Tom, Vitronic, Be-Mobile, Nissan, Amazon Web Services, International Road Federation, Polis, the cities of Amsterdam and Rotterdam, Teledyne FLIR, Verra Mobility, EasyPark, Flowbird, WPS Parking Solutions and many others will be in attendance.

Topics at the summit include secure data exchange, safe mobility with artificial intelligence, using data to fight congestion and optimising traffic through cloud technology. Many presentations will focus on integrated services and examples of Mobility-as-a-Service. A number of workshops will focus on the Green Deal, automated driving, the use of public space as well as parking management and new parking services.

Participation free of charge for trade visitors

Participation is free of charge for professionals, tickets can be purchased via the Intertraffic website. The exhibitors at Intertraffic fill 13 halls, the Summit presentations take place in three theatres and on an open stage. ∎

Non-binding calendar of events

For 2022 as well, the following still applies: Please note that the events listed here may not all necessarily take place as planned. This depends on the further course of the COVID19 pandemic and local regulations.

2022

2nd March
3rd EPA-POLIS Webinar
Online

↷ **https://www.europeanparking.eu/**

29th March-1st April
Intertraffic Amsterdam 2022
Amsterdam, Netherlands

↷ **https://www.intertraffic.com/amsterdam/**

25th-26th May
AIPARK P-Days
Florence, Italy

↷ **http://www.pdays.eu/pdays/**

25th-27th May
Intertraffic Istanbul
Istanbul, Turkey

↷ **www.intertraffic.com/en/istanbul/**

14th-16th June
PARKEX 2022
NEC Birmingham
Birmingham, United Kingdom

↷ **https://www.parkex.net/**

23rd-24th June 2022
Fachtagung BV Parken
Steigenberger Grandhotel
Petersberg
Königswinter

↷ **https://www.parken.de/**

12th-14th September
20th EPA Congress and Exhibition
Square Brussels Meeting Centre
Brussels, Belgium

↷ **https://epacongress.eu/**

30th November
Kompetenzforum
Würzburg, Germany

↷ **https://www.parken.de/Termine/**

2023

28th-29th June
PARKEN
Rhein Main Congress Center
Wiesbaden, Germany

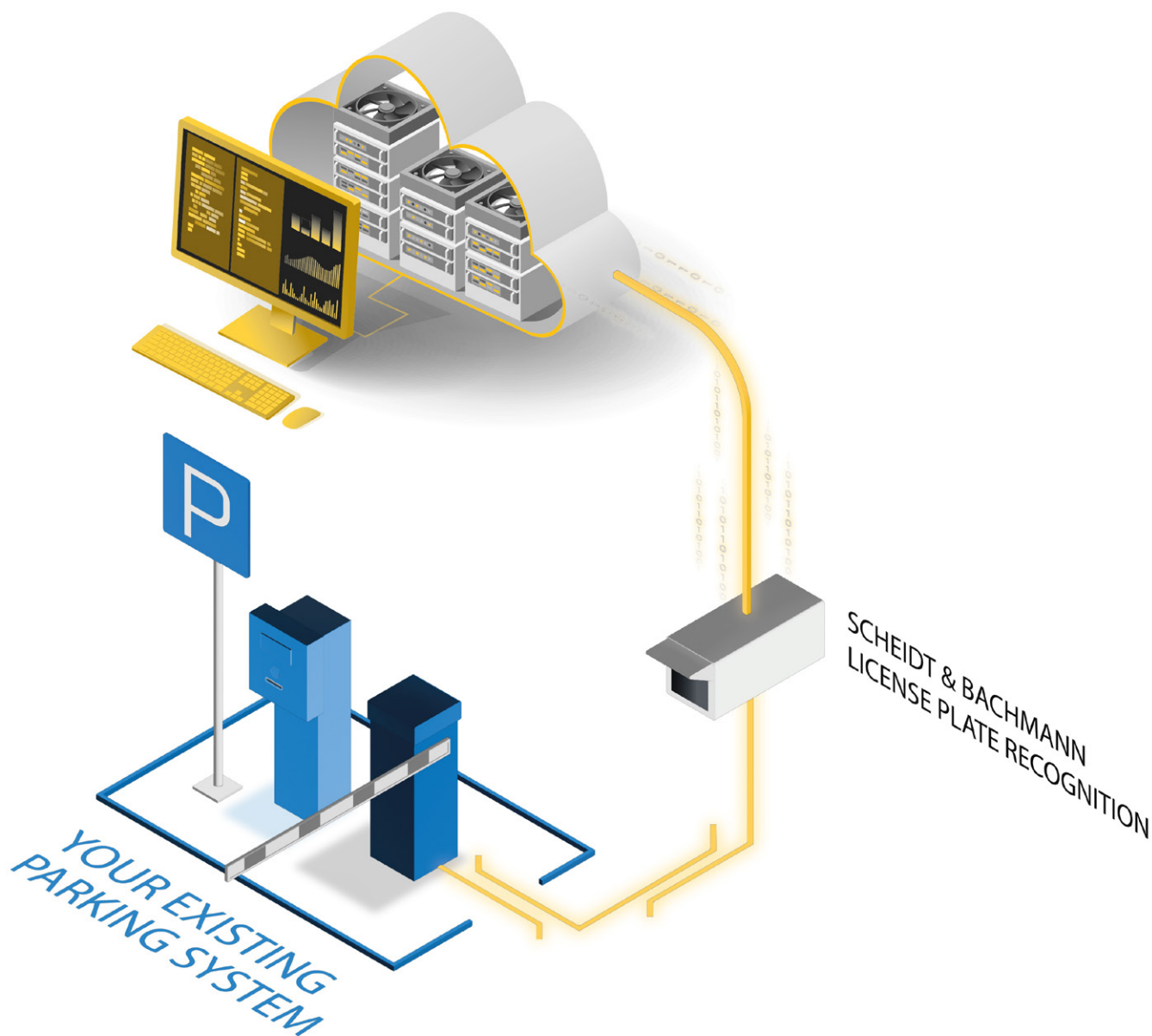↷ **parken.mesago.com/wiesbaden**

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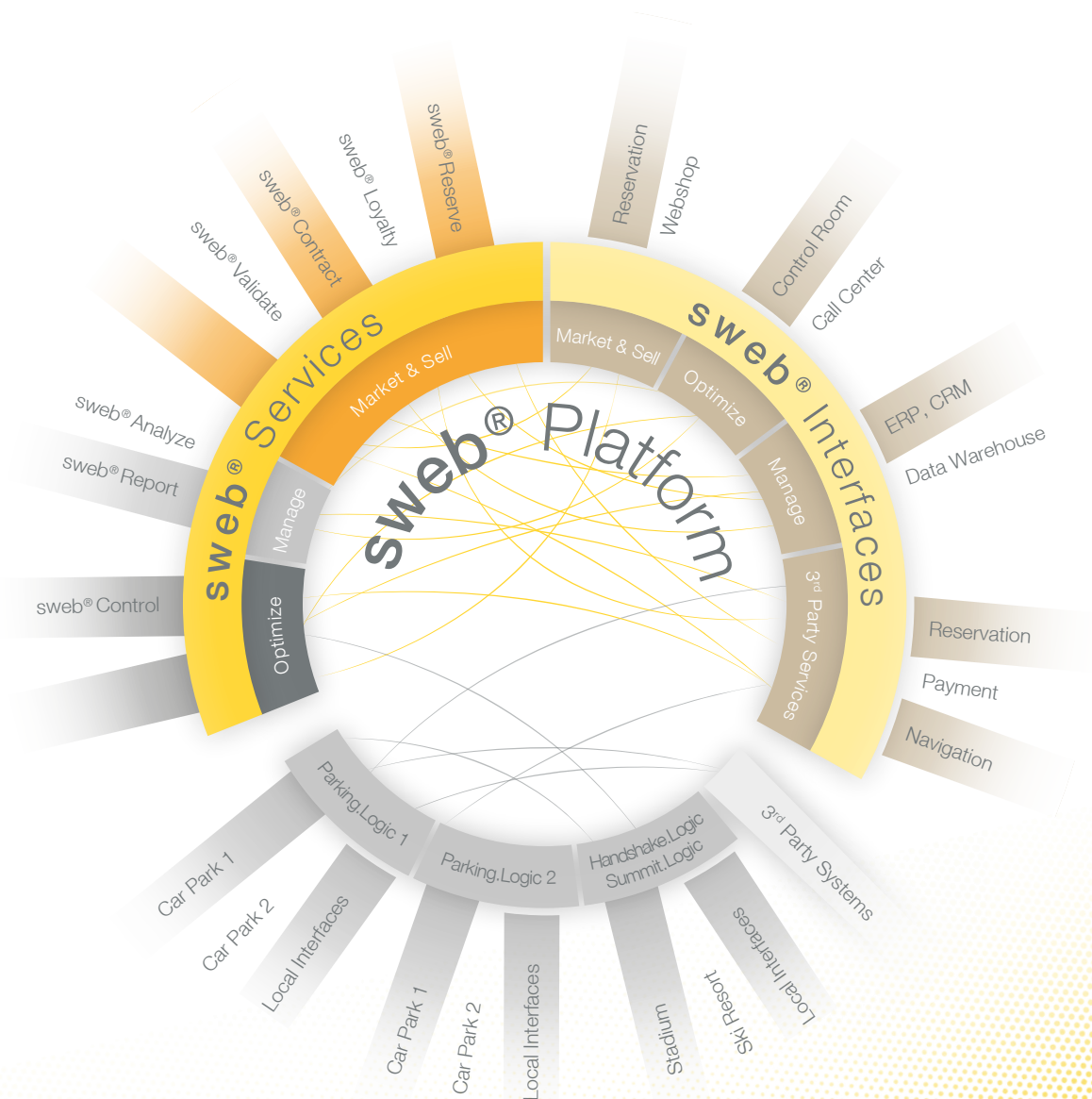
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