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ENFORCEMENT

Key to a successful parking strategy



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Title

Enforcement

Key to a successful parking strategy

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Scan car in Trondheim
Source: © Trondheim parkering

1. About this brochure

1.1 SUMMARY AND WAYFINDING

In this brochure, the PARK4SUMP project shares insights on parking enforcement. After defining the focus of the publication – enforcement of regulated and paid parking (see section 1.2), a balanced approach for three parking enforcement objectives (street regulation, service provision and revenue raising) is proposed (Chapter 2: Key for success: a balanced approach). In the third chapter, parking enforcement is defined as a process that is embedded in the SUMP (Chapter 3: Defining the parking enforcement process). The chapter 4 (Enforcement principles) sets out 7 principles to which a sound parking enforcement policy should adhere. The chapter 5 highlights key enforcement tools and the chapter 6 brings forward specific parking enforcement issues, including some new challenges.

1.2 FOCUS OF THIS BROCHURE: ENFORCEMENT OF REGULATED AND PAID PARKING

Parking provision comes in many forms and with many amenities.

Off-street parking offers drivers the opportunity to store vehicles in publicly accessible, semi-public (e.g. supermarket during opening hours) or private parking facilities (e.g. office parking). These spaces can be (virtual-) barrier protected, or unprotected spaces. Although in some cases, public authorities

play a role in removing vehicles from privately owned infrastructures or land, this is not the focus of the publication.

The on-street parking offer consists of regulated parking, where location-based rules apply to who can park (permit, type of vehicle) and for how long, but no on-the-spot payment is required. This can also apply to paid parking regimes. Both regulated and paid parking regimes define a parking right, based on the applicable (paid) parking rules, which is of utmost importance when enforcing parking policies. This parking right is location and time based, giving the ability to park at a certain place at a certain time.

And finally, there is illegal parking - parking in locations that are not assigned or appropriate for parking, such as pavements, highways, etc. This often comes with road safety implications for other road users.

We will focus on enforcement of on-street parking policies and measures, and more specifically on regulated and paid parking. In chapter 7 – new challenges, we highlight a limited number of new and upcoming enforcement challenges that go beyond this focus.



2. Key for success: a balanced approach

Before starting to discuss detailed aspects of parking enforcement, it is good to understand why cities engage in this activity. What would happen if there were no, or insufficient, enforcement? There would be chaos in the streets, citizens would feel neglected (both drivers looking for parking spaces as well as other road users), and revenue from parking would plummet. Therefore, a proper on-street parking enforcement policy envisages a balanced approach of different objectives: street regulation, service provision and revenue raising.



An enforcement officer in Trondheim, Norway
Source: © Trondheim parkering

2.1 STREET REGULATION

The key objective of on-street parking enforcement strategies, in their basic form, share a simple but important objective: cities want to prevent chaos in their streets. Street regulation is applied to establish an orderly use of the available urban space. This links with PARK4SUMP's "parking principle 20"¹: always keep a certain amount of parking space vacant. In addition, street regulation can lead to improved public spaces, where more space can be given to walking, cycling and other forms of living streets. Street regulation can allow on-street space to be prioritised for different user groups e.g. residents, visitors or delivery vehicles – thus not only managing parking in view of location and time, but also in view of functional use of the on-street capacity.

2.2 SERVICE PROVISION

Enforcement strategies raise awareness amongst citizens and visitors of the high value of parking in the central urban area. This cost can be financial (paying the parking fee or resident's pass) or psychological (restriction in time and space). This value needs to be mirrored by quality of the parking service. Making use of this service (the on-street parking offer) will come at a cost for the parking client. Parking enforcement is in most cases the visible form of the parking service provided to residents and visitors. This

cost can be compensated with a provision of services. The most obvious service to the parking client is the fact that they can use public space in a private manner. The enforcement of parking regulations keeps this service available to drivers following the rules. The service provision can consist of easy payment options – for instance post-payment. Post-payment replaces an immediate fine but leaves the driver a period of grace to settle the parking cost. A secondary service (to all citizens) is that the managed on-street parking scheme increases the quality of the urban realm.

2.3 REVENUE RAISING

As with road user charging, revenue raising from parking is the means to an end. The price charged initiates a change of behaviour that is intended to improve the system performance. The payments received, then create a stable revenue stream. Revenues can be raised from residential parking permits, or from parking charges. Non-compliance combined with enforcement can add parking fines to the revenue. A secondary source of revenue is the fact that stricter on-street parking management can help to increase the revenue from off-street facilities.

If these three elements are out of balance, the parking policy will not be effective (e.g., due to lack of compliance), fair, or efficient. It will be too costly for the organising authority and/or for the parking client.

¹ CIVITAS Park4SUMP, "Good reasons and principles for Parking Management", available at https://park4sump.eu/sites/default/files/2020-07/PARK4SUMP_good%20reasons_and_principles_4_parking_management_final_36_web_EN.pdf



© Rupprecht Consult 2019

The 12 Steps of Sustainable Urban Mobility Planning (2nd Edition) – A decision maker's overview
 Source: © Rupprecht Consult 2019



3. Defining the parking enforcement process

STARTING POINT:

Fair and efficient, for local authorities, and for drivers

First, make the regulations and enforcement fair and efficient. For example: make the fine higher where parking obstructs other traffic, and make sure that everyone has the same risk of getting a fine if they break a rule. In the introductory phase, do not give a fine for the first or second offence, just give a warning. Let people know where and how the money raised is spent.

3.1 ENFORCEMENT OF PARKING VIOLATIONS IS A PROCESS, EMBEDDED IN THE SUMP

A well-designed parking policy serves the objectives defined in the SUMP. This translates to local parking regulations, that are operated by means of traffic signs, street design, street equipment (pay and display machines, sensors...) and services (payment systems, permit schemes...).

The role of parking enforcement is to confirm compliance or non-compliance with local parking regulations and then act upon non-compliance. But there is more: not only can the revenue raised from enforcement fines and fees be used for the public good (preferably to implement the SUMP!), the data gathered through parking enforcement can also help to evaluate and adapt SUMP policies and measures.

The image that citizens have of parking enforcement, is of a person issuing a ticket. This is only part of the story. Parking enforcement is a process and should also be considered and planned that way by the competent local authority. The parking enforcement process is an integral part of the Sustainable Urban Mobility Plan (SUMP).



Cars parked on the sidewalks in Krakow.
© Robert Pressl.

3.2 CRUCIAL STEPS IN THE ENFORCEMENT PROCESS

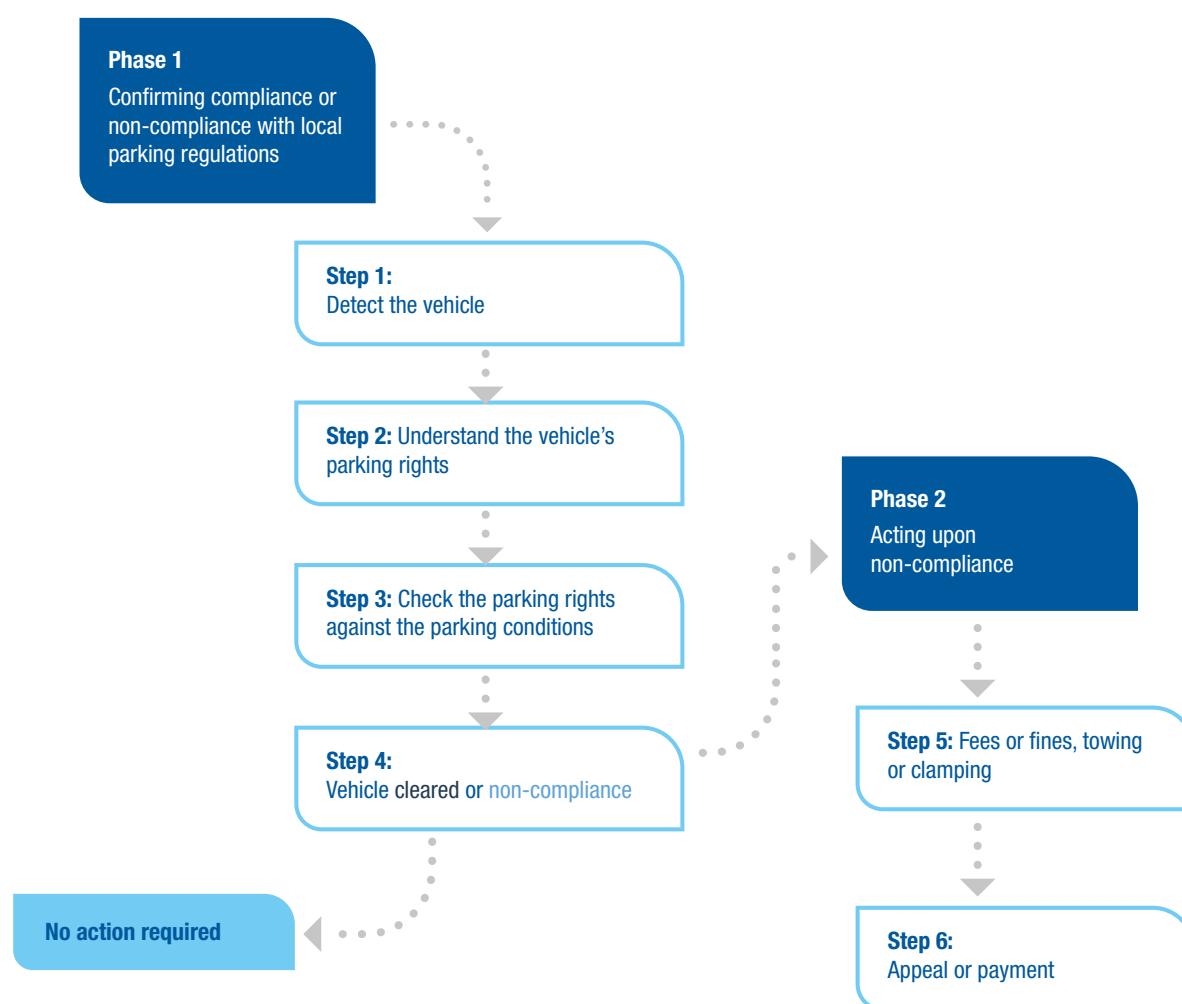
The parking enforcement process consists of two major phases. The first phase is to check whether a vehicle has the right to be parked where it is detected, the second phase is to act upon any non-compliance. These phases are the same for manual and digital parking enforcement.

1. Confirming compliance or non-compliance with local parking regulations:

The first step is to detect a vehicle. A person (the parking controller) or a device (camera) notices the vehicle. Next, the controller needs to check the parking rights of the vehicle against the parking conditions

applicable where and when the vehicle is found. The parking right can consist of a permit (resident, parking card for the disabled, electric vehicle, service vehicles etc.), a time indicator (parking disk in any form), or proof of payment (paper ticket or cloud-based application). Checking the consistency of the parking conditions and the parking rights, can happen manually (e.g., the controller sees the ticket or permit), or digitally (e.g., an automated number plate recognition equipped camera system refers the license plate number back to a register that keeps all the parking rights stored – see below for further explanation).

This part of the process of enforcement is concluded either by clearance of the vehicle (the vehicle has the right to park, at the given location at the given time of day), or identification of the vehicle as non-compliant, moving into the next phase.



Graph 1: Acting upon non-compliance

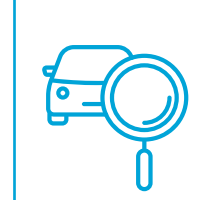
2. Acting upon non-compliance

Depending on national and local frameworks, non-compliance can be addressed in several ways: treatment can be penal or non-penal (see below the graph 1), can be dealt with through fines or sometimes administrative fees. Some cities apply towing and clamping for non-compliant cars, sometimes of non-resident drivers, to ensure payment of the fine. The process of fining the drivers needs to be accompanied with the opportunity to appeal the local authority's decision.

An important issue in the process, is to get hold of the vehicle-owners' identity and address. This issue is problematic for non-resident drivers, as cities do not have

access to national vehicle registration databases of other countries. In most EU countries, the vehicle owners (or most frequent user in case of lease contracts) are at the receiving end of the fine or fee. There are currently no coherent and unique European solutions to solve the problem of accessing vehicle registration data across authorities.

The steps mentioned above can be carried out by the city or can be outsourced to a third party. This is the example of Prague, which has gradually upgraded the enforcement and penalisation process. The camera monitoring vehicles, equipped with cameras, are owned by a third party, but a city-owned centralised IT system collects all the data required for the operation of the regulation.



4. Enforcement principles

The PARK4SUMP experience shows that cities are gradually using more digital tools to manage parking.

	Enforcement is completely manual	Enforcement staff use cameras and/or electronic ticket machines	Enforcement staff use all available technologies, and they are assisted by cars or motorbikes with number plate reading technology
Number of cities	5	9	5

	FAIR	EFFICIENT
Parking manager	<ul style="list-style-type: none"> Within national legal framework Foreign vehicles face same enforcement regime Address specific parking needs (e.g. parking for the disabled) Revenue returns to services 	<ul style="list-style-type: none"> Cost efficient Time efficient Fines will be collected Happy employees
Driver	<ul style="list-style-type: none"> Everybody faces the same enforcement regime Knowledge that everybody pays for parking Revenue use that benefits the city Transparent procedures and opportunity to appeal 	<ul style="list-style-type: none"> Clear understanding of how and where to pay Information available in various languages No interference with the vehicle (clamping, towing), 'simple' money transfer to finalise the enforcement process

In addition, cities evolve from pure police-driven enforcement to administrative handling of unwanted parking behaviour – often outsourcing specific enforcement tasks to private entities. These two trends: digitalisation and ‘servitization’ can present a challenge for local authorities to manage. In that regard, it is key to follow a number of enforcement principles.

PRINCIPLE 1:

Design parking systems that drivers can easily comply with

Unsurprisingly, compliance increases with more effective enforcement. Enforcement is not an end in itself: it is a means to achieve compliance with parking regulations. A well-designed scheme will enhance compliance. There are other means that cities can use to increase compliance such as street design, traffic signalisation, user information, payment options and digital means.

These elements can make it easier for drivers to comply, but drivers should also be motivated to comply. This requires regulations to be legitimate: the controls should be necessary and proportionate. This also requires the regulations to be well-communicated and ‘simple’.

PRINCIPLE 2:

Encourage people to be compliant

Citizens need to understand the relationship between their behaviour and the quality of the urban environment. The city can be transparent on how income from fines/fees is used – specifically in view of earmarking these revenues for the achievement of public policies, or for the city’s SUMP measures.

The parking manager can create a positive ‘vibe’ surrounding paying for parking. Through marketing campaigns consumers

can be made more aware of the necessity of regulated parking. Proper payment for parking can be supported by loyalty schemes. This does not often happen, and – if implemented – could be linked to shift to more sustainable mobility behaviour. Rewards can be created by price stimuli and the offering of alternative travel solutions.

Lisbon and its soft enforcement

Historically, the enforcement of illegal parking in Portugal, was very badly perceived. The police were very reluctant to enforce parking violations and so revenue from paid parking spaces decreased. A private company took over the job of enforcement. They lowered the charges from unpaid parking, abolished unpopular measures such as clamps and serial offenders received higher fines. These changes were welcomed, and the new system receives a limited number of complaints, proving its success. After implementation in 2005, revenues doubled in less than three months.

PRINCIPLE 3:
Follow as much as possible civil-administrative procedures

Breaching the rules for regulated parking and paid parking, within locations that are assigned for this purpose is best enforced when this is not classified as a criminal offence. The enforcement procedures are preferably dealt with under civil-administrative law, rather than criminal/penal law. In this way, parking management can

raise municipal revenue that can be used to encourage sustainable mobility!

This is of course dependent on national legislation.

A step further is to decriminalise parking violations completely so that non-police staff can carry out the full enforcement process. A major advantage of this solution is that the income from former fines is now income for the city instead of the state.

What PARK4SUMP argues:

Even when an enforcement regime exists on paper it may be only partially implemented because the wrong staff are entrusted with the task. Enforcement is often split among different organisations. While the police often takes care of parking violations, city-owned or private entities control paid parking. The latter are mostly working effectively, but the police often lack time and have more important tasks to do than controlling parking infringements. A solution that is often employed in this situation is to pass responsibility for enforcement activities from the police to city-owned or private entities. They monitor any parking violations and forward these to the police who levy the actual fine.

PRINCIPLE 4:
Sanctions should be proportional

The actions taken after the observation of non-compliance should be a sufficient deterrent to achieve the objective of the parking regulation (e.g. parking rotation up to the availability of 15% of the spaces), but should also be reasonable and acceptable. They should make the driver reconsider his or her own behaviour, and not make them disapprove of the city and its policies. One recommendation could be to have comparable rates for parking fines and those for not paying for public transport.

Physical interference with the vehicle should be avoided. Practices such as towing or clamping should only happen when there are safety and security reasons, or a serious chance of not recovering high amounts of parking revenues or fines.

PRINCIPLE 5:
Enforcement procedures should be transparent.

The authority should ensure the ability of the driver to understand the full enforcement procedure. Along with the notification of payment, there should be a contact point for further information. Milestones in the enforcement procedure should be publicly available. A reasonable approach



Sofia: towing of a car.
© Robert Pressl

to dealing with different languages could be developed and appeals to enforcement-related decisions should be possible with minimal thresholds.

PRINCIPLE 6:

Fair and equal treatment of different parking clients

The public support for parking policies can be challenged if it is not possible to enforce all vehicle categories in a similar way. Fair and equal treatment of different user categories should be envisaged (e.g. foreign vehicles, urban freight logistics and service vehicles, Corps Diplomatique licensed vehicles ...). This does not prevent focusing enforcement efforts on specific areas (e.g. high pressure, low compliance, notifications of end of parking time through digital payment systems) or for specific use cases (e.g. parking spaces for the disabled, short term parking and delivery bays).

PRINCIPLE 7:

Value your enforcers

The parking enforcers or controllers are the strongest link in the enforcement process. Not only are they the ones facing the drivers

directly, but they are also the individuals making the day-to-day practical and operational decisions to make enforcement a success. They should be fully supported in doing their job.

Proper and regular training of the controllers is important, so that they can help people with parking and other questions, and not just give out fines. Language training and communication skills are important. The portfolio of responsibilities of the controllers can be increased beyond parking. Parking controllers can engage in community activities and become 'eyes on the street' or they can focus on supporting tourists. They become, in effect, ambassadors of the city. Their schedule should, in this case, allow time to take up these additional tasks.

Technology plays an important role in this support. Easy-to-use and operate handheld controllers, easy to follow decision trees pointing at the right decisions to take, open communication lines with the back-office for support... It all adds to the professional well-being of the controller.

UK / Norway: Changes to more professionalism

The British Parking Association (BPA) has been on the forefront in developing new qualifications and training for the on-street parking sector. Roughly 80.000 people in Great Britain work in the parking sector, including 15.000 Civil Enforcement Officers. The BPA has installed a system of soft accreditation for its members that sets training standards and job qualifications for the sector.

PARK4SUMP partner city Trondheim reports that their way of training the enforcement staff results in lower numbers of sick days, and lower staff turnover. [More about this in the Trondheim video report.](#)



Scan car in Rotterdam.
© FGM Harry Schiffer



5. Enforcement Tools

5.1 STREET DESIGN ELEMENTS TO ENABLE ENFORCEMENT

As mentioned in ‘Principle 1: Design parking systems that drivers can easily comply with’ the design of the urban environment that is subject to parking regulations contributes to the compliance of the driver. The city should install clear and generally understandable signage that delimitates the regulated zones and explains the applicable street regulations. Parking spaces can be clearly described and made distinct from the rest of the other public space, to indicate where you can park. There are several ways this can happen, with colour-coding in paint, or using different surface materials. This can even indicate the different use cases for the parking spaces (e.g. spaces for people with disabilities, logistics, residents, shop&go spaces).

5.2 CLAMPING AND TOWING

A wheel clamp, also known as a wheel boot or parking boot is a device that is designed to prevent motor vehicles from being moved. In its most common form, it consists of a clamp that surrounds a vehicle wheel, designed to prevent removal of both itself and the wheel. Vehicle clamping is in operation in some areas but is controversial. The same applies to vehicle removal: local authorities are often allowed to towaway vehicles that have been abandoned or illegally parked on a public road. Vehicles are towed to a central location where a significant fee must be paid for release (in combination with the towing costs).

5.3 DIGITAL PARKING ENFORCEMENT

Cities can only implement those enforcement procedures and technologies that are required/allowed in the national legislation.

There is, in most cases, a digital component to parking enforcement, even if it is a simple database keeping track of fines. While the technologies are mature, regulatory issues may complicate their effective introduction. These regulatory issues could take many forms: the need to double-check digitally recognised parking offences in person, difficulties to access the national number plate registry for data protection reasons, etc.

Global Data Privacy Regulation: be aware!

For both digital and in-person processes: data privacy is key and the GDPR applies. The city should design GDPR compliant procedures and is also responsible for the GDPR-compliance of its contractors. The city should advertise its data protection policy and assign a data protection controller. Information of compliant drivers should be deleted from the system unless they opt into an account-based system.

Digital tools can be applied at different stages in the parking enforcement process.

Vehicle detection:

- Randomised and smart routing of controllers: fair and efficient enforcement is partly based on devices that guide parking enforcement officers on random

routes but also redirects controllers to locations with expected low payment compliance. At a more advanced stage, automatic detection by scan cars and robots might also come into play.

- Automated Number Plate Recognition (ANPR): cameras can be mounted on scan cars or scan mopeds.
- Real-time occupancy detection: next to the existing data on off-street parking garages, increasingly information on on-street parking spaces is detected by sensors and cameras. This allows better routing and also occupancy analysis. However, this requires precise GIS maps of the existing parking spaces within a city, including frequent updates (i.e., when there is a temporary change of rules).

Detecting non-compliance

- Handheld devices to check parking rights. These can be equipped with cameras, geo-locators and printers.
- Digital parking rights repository: most digital parking schemes are built on a digital repository (a server) that holds the parking rights allocated to vehicles (through number plates). These rights can be temporary (by means of payment), or permanent (residents parking, parking for people with disabilities). They are always location-based (e.g. the right to park as a resident would be limited to your neighbourhood), but locations can differ in size (street, zonal, city wide). This database is the reference for enforcement and will function as the data hub for parking management.
- National database of registered vehicles
- Bilateral agreements city to state, state to state.

Action upon non-compliance: fines and fees

- Paperless issuing of payment instruction
- Online appeal

The digital tools can be combined in a city parking dashboard: several market players offer dashboards that aggregate information generated by the above-mentioned digital tools, collecting data from different sources,

The Dutch National Parking Register

The Dutch National Parking Register's digitally stored data is a key asset for smooth parking enforcement. Licence plates of parked cars can be verified in real time using scan cars. The licence plate is checked against a national register of georeferenced parking rights that are held in the parking register, being fees or permits. This approach has increased the willingness to pay substantially.

The Park4SUMP partner city Rotterdam offers a great example of digital parking enforcement. Take a look at this [video](#).

Fully digital enforcement process	In-person approach
<p>Potential to enforce more parking.</p> <p>The fairness of the system increases with more parking being enforced.</p> <p>After the initial investment, the marginal cost of additional enforcement is low. This efficiency gain can be allocated elsewhere.</p> <p>Enforcers like it, their job status increases.</p> <p>Parking becomes part of a general transition towards e-governance.</p>	<p>National legislation does not allow Automatic number plate recognition (ANPR).</p> <p>Lack of digital culture and infrastructure in the city.</p> <p>No centralised and easy access to the licence plate register.</p> <p>Digitalisation can be too large a project for a small parking enforcement unit to deal with.</p> <p>Allows for ‘community enforcement’ – eyes on the street and additional tasks like giving information to tourists.</p> <p>More labour-intensive, jobs for people.</p>

Reasons for digital or in-person approach to parking enforcement

integrating and analysing it: occupancy, financial return, etc. are available at a glance.

Digital tools can also be used for several purposes. This ‘dual use’ can save costs, but also has its legal limitations. Digital enforcement tools can be used for other (criminal) offences: Automatic number plate recognition (ANPR) feeds can be used to check against stolen vehicles or uninsured vehicles.

5.4 USING ENFORCEMENT DATA TO INFORM POLICY DECISIONS

Digital and in-person enforcement processes generate interesting information about how cities function. Smart parking enforcers and mobility departments will make the best use

of this data to inform their operations and strategies (e.g., the SUMP).

This also relates to the PARK4SUMP parking principle 23 – wait to observe the actual demand before building to meet predicted demand². Aggregated enforcement data helps to map the actual demand and parking pressure. It also provides information on rates of payment, pay-and-display ticket machines that generate the most/least collections, out of order pay-and-display ticket machines, streets with the most or least parking infractions.

The information can guide maintenance and control efforts. Broken pay and display machines, vandalised signage etc. can be fixed quicker if information is addressed in a structured way.

² CIVITAS Park4SUMP, “Good reasons and principles for Parking Management”, available at https://park4sump.eu/sites/default/files/2020-07/PARK4SUMP_good%20reasons_and_principles_4_parking_management_final_36_web_EN.pdf



A silver car stopped on the road near car parks illegally on the sidewalk.
© shutterstock.com

6. Specific Enforcement Issues

6.1 FRAUDULENT USE OF THE EUROPEAN PARKING CARD FOR PERSONS WITH DISABILITIES

Crucial in enforcement strategies is a common understanding of parking rights for people with disabilities. There is a standardised style of parking card for disabled people which is recognised in all EU countries. This parking card³ allows a disabled person, who is entitled to use certain parking facilities in their EU country of residence, to move more easily in the territory of another EU country and avail themselves of all the parking facilities granted to the disabled in that EU country.

This recommendation provides for the standardisation of the layout of parking cards for people with disabilities and their recognition by the EU countries, in order to facilitate such people's freedom of movement by car. The Annex entitled "Provisions on the Community model parking card for people with disabilities" contains very specific provisions on what the standard European card should look like, specifies its height, width, colour, material (plastic-coated), content and how and where the information specific to the EU countries is to be displayed. EU countries remain responsible for issuing the card.

In this respect, EU countries use their own definition of disability and define the procedures for granting the card. The

recommendation does not aim to change the way in which the disability parking card is implemented at national level. Nevertheless, the European dimension has a substantial impact on the free movement and independent living of disabled EU citizens. Many Member States have added features not foreseen in the recommendation:

Operation Enable

Dublin police started 'operation enable' in 2017 to monitor the use of disabled bays and parking permits. Permits that are used fraudulently are seized and returned to the issuer. Offenders are prosecuted. The operation has been supported by an online social media campaign, with presence on TV and radio. The campaign has been replicated outside Dublin.

³ The Community model was introduced by Council Recommendation 98/376/EC.



Anti-copying paper; Hologram; Bar code or QR code; NFC tag for wireless card detection.

It is important to note that as the benefits from the parking card increase so does the tendency to fraud by illegal forgery or trading of such cards. The harmonisation of the cards has led to them becoming extremely simplified, allowing them to be forged more easily. Thus, additional security features must be considered to prevent counterfeiting and forgery.

Disabled parking card fraud has three main types:

1. Use of the card by persons other the holder: they are often family members or carers of the holder;
2. Use of the card of a deceased person: family members do not hand in the card after the holder's death;
3. Use of duplicates: holders of the card or persons acting on their behalf request a duplicate card while still having the original (forbidden practice).

6.2 NEW CHALLENGES

From parking enforcement to public space management

In cities such as Barcelona, parking enforcers have started to control bus lanes, bus stops, pedestrian passages, double parking, and places of loading and unloading, to help improve traffic flow/safety. Also, their responsibilities can extend to monitoring and reporting on the condition of all elements of the urban landscape that are the responsibility of the local government, including technical equipment (escalators and lifts, fountains, traffic signals and lights, street furniture (containers and bins) as well as urban greenery.

Appropriate use of parking spaces with electric charging infrastructure

New functions of on-street parking spaces, such as the access to electric charging infrastructure, add to the enforcement challenge. If specific spaces are reserved for electric vehicles, can the controller check if the vehicle is electric, and is charging (even with cables connected)?

Enforcement of bicycle parking

The city of Leuven (Belgium) actively manages on-street parking of bicycles where it is faced with large volumes of bicycles in its streets. Some streets have painted bicycle parking zones where you can park your bicycle for a short period. As the main enforcement tool, the police can remove bicycles, which are then brought to a central storage facility where they can be picked up. This can be the case if there is a permanent parking restriction for bicycles, a temporary restriction for specific events, if a bicycle is labelled and is immobile for 3 weeks, or if a bicycle is blocking access.

Enforcement of parking regulations for buildings

Parking standards are the building regulations that specify how much parking capacity new buildings should provide. The Brussels region retroactively applies its parking standards for buildings where people are employed to the existing building stock. This policy is implemented through the environmental permits that employers need to acquire to operate their business. In the process of environmental reporting, the number of on-site parking spaces must be reported.

The surplus of parking spaces in view of the set standards, must be gradually removed, or



A car parks illegally on the sidewalk.
© shutterstock.com

companies are fined/taxed. The advantage of this policy is that there is no competitive advantage in delaying the renovation of

building stock or in the lease of buildings that do not meet current standards. The Brussels Regional Environment Services check annual declarations about parking capacity available in workspaces.

Enforcement against malevolent app developers

It is not only drivers that can contravene parking regulations. App suppliers can also impede local policies and regulations. Questionable practices such as the private trading of public space or reselling of private parking spaces without adhering to local or general safety regulations cannot be tolerated. Enforcement in this case takes the role of legal prosecution.

The Netherlands: Parking app ‘Parkeerwekker’ banned

In February 2021, a Dutch court banned the app ‘Parkeerwekker’ (‘parking alarm clock’). The app informs drivers who did not pay for parking about approach scan cars. The ruling is based on the fact that the app invites users to ‘do wrong’. The City of Amsterdam went to court after initial contacts between the city of Amsterdam and the app developer did not lead to the expected result. The app was based on sourcing dashcam data from users – thus mapping the movement of the scan cars. The court ruled that public interest in this case trumps commercial interests.



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6. Park4SUMP Videos on parking enforcement. Available at: <https://park4sump.eu/index.php/resources-tools/videos>
7. www.europeanparking.eu/en/awards/ with valuable information about on-street parking schemes and their enforcement aspects

www.Park4SUMP.eu



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