



# **EPA Parking Data Essentials – Part 1**

## **Management Summary**

## **Introduction to the Parking Data Essentials Series**

## **Publishing parking data on and retrieving it from a NAP**

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# Contents

Management Summary .....	1
Purpose of the EPA Parking Data Essentials series .....	1
Introduction .....	3
Background .....	3
The obligation to publish parking data .....	3
National Access Points .....	4
NAPCORE (National Access Point Coordination Organisation for Europe) .....	4
NAPCORE-EPA Cooperation .....	5
Other important EU legislation .....	5
The benefits of sharing parking data .....	6
Data exchange based on common standards .....	8
Licensing and commercial rights for use of data .....	9
Publishing parking data on and retrieving it from a NAP .....	10
Examples of National Access Points .....	12
The Netherlands .....	12
Germany .....	13
France .....	14
Appendix A .....	15
EU Data Act - Impact on the parking sector .....	15
Appendix B .....	16
EU Data Governance Act - Impact on the parking sector .....	16
Appendix C .....	18
Terms and Conditions Dynamic Data .....	18

# EPA Parking Data Essentials

## Management Summary

### **Purpose of the EPA Parking Data Essentials series**

The EPA Parking Data Essentials (PDE) is a set of documents that cover the essentials for parking data management in the context of Intelligent Transport Systems (ITS), as required by European Union regulations. The PDE series is a foundational guide for the European parking sector, aligning with broader EU mobility, digitalization and sustainability goals.

### **Parking Data Essentials - Part 1 - Introduction to the PDE series and the National Access Points**

This document, Part 1 in the PDE series, highlights the significance of standardized parking data within the EU, driven by the ITS Directive and associated Delegated Regulations. These regulations mandate the availability of transport-related data, including parking, through National Access Points (NAPs) to support sustainable mobility solutions.

PDE Part 1 provides a guide to stakeholders in the European parking sector on how to publish and retrieve parking-related data through the National Access Points (NAPs). The document also outlines the benefits of publishing and sharing parking data.

#### ***National Access Points (NAPs)***

NAPs are centralized platforms established in each EU Member State. They are designed to facilitate access to and exchange of transport-related data, including parking.

This document discusses the varying structures of the NAPs across Europe, which can be web-link repositories, databases, or hybrids. It provides detailed instructions on how to publish and retrieve parking data in various Member States, offering insights into the specific processes and platforms used in the Member States.

### **Parking Data Essentials - Part 2 - European Regulated Parking Data Profile**

PDE Part 2 introduces the concept of a European Regulated Parking Data Profile.

Municipalities, parking providers, parking service suppliers and parking data integrators are potential owners or the sources of the required parking-related data and will thus have to comply directly with the described Delegated Regulations.

EPA is working (together with the [NAPCORE project](#)) on a European Regulated Parking Data Profile. This profile is the result of our analysis of the current Delegated Regulations, in so far as they apply to parking data.

Utilization of this profile will enable public administrations, parking providers, and other stakeholders to ensure that they comply with EU regulations when publishing their parking data.

### **Parking Data Essentials - Part 3 - Data Privacy and Licensing**

PDE Part 3 emphasizes the importance of adhering to data privacy guidelines and ensuring that licensing for data use is non-discriminatory and supports broad access and reuse.

Data privacy is a concept that organizations of all sizes encounter in modern business. The General Data Protection Regulation (EU) 2016/679 (GDPR) protects fundamental rights and freedoms of

## European Parking Association

natural persons and in particular their right to the protection of personal data across the European Union and (at the time of writing) the UK. Each organization will face differing degrees of complexity in achieving compliance with GDPR rules, according to their relationships with their suppliers, customers (those they provide services to) and, of course, the public. National legislation may also have a bearing on the contractual agreements and processes that are required.

Following on from EPA's work on parking data specifications and Application Programming Interfaces (APIs), EPA members identified that there was need to develop a set of industry guidelines with recommendations as to how data privacy principles should be applied to parking. The intention is that these guidelines will help organizations achieve compliance with local data privacy laws and regulations.

These guidelines are still being reviewed and will be published at a later date as PDE Part 3.

### **Parking Data Essentials - Part 4 - Glossary**

PDE Part 4 is a Glossary of the terms, abbreviations and their definitions used in the PDE series of documents. The glossary aims to clarify the meaning of specialized or technical terms.

## EPA Parking Data Essentials

### Introduction

The EPA Parking Data Essentials (PDE) is a set of documents that cover the essentials for parking data management in the context of Intelligent Transport Systems (ITS) as required by European Union regulations. The PDE series as a foundational guide for the European parking sector, aligning with broader EU mobility and sustainability goals.

The present document, Part 1 in the PDE series highlights the significance of standardized parking data within the EU, driven by the ITS Directive and associated Delegated Regulations. These regulations mandate the availability of transport-related data, including parking, through National access Points NAPs to support sustainable mobility solutions.

PDE Part 1 also provides a guide to stakeholders in the European parking sector on how to publish and retrieve parking-related data through the National Access Points (NAPs).

### Background

The population in many urban areas is continually expanding due to the opportunities they provide for services, work, leisure, commerce and culture. This expansion, together with the imperative to achieve Net Zero by 2050 is creating major challenges for public administrations, service providers and citizens alike.

(Smarter) cities are looking for smart solutions to keep residents, workers, visitors and companies mobile and in line with sustainable practices. City administrations are looking for enhanced mobility solutions to reduce pollution, congestion, and generally improve accessibility. Service providers are developing solutions to help cities achieve their policy objectives.

The European Parking Association ([EPA](#)) promotes and supports the parking sector within the broader context of sustainable mobility and development strategies. The parking sector plays a key role in the mobility ecosystem and has vast and varied experience managing parking and other kerbside activities for municipalities across Europe. The sector is therefore in a unique position to develop and implement innovative solutions to urban mobility challenges. EPA facilitates cooperation between professional parking organizations and the exchange of knowledge amongst both its members and mobility related stakeholders and policy makers. EPA promotes the important financial and technical resources available to local economies through Public Private Partnerships.

An important part of EPA's mission is to exchange information and best practices, influence and advocate at European and international levels and to develop interoperability between and harmonization of the relevant standards. Why are these activities important for the European parking sector?

### The obligation to publish parking data

#### Directives and Delegated Regulations on ITS information services

EU ITS Directive (2010/40/EU) (amended by Directive - [EU - 2023/2661](#)) provides for a framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport. Delegated Regulations to support the directive have been established and adopted to support the deployment of more coherent ITS information services covering a range of

topics including multimodal travel information, traffic management, traffic information, safe and secure truck parking, etc.<sup>1</sup> These European Union Delegated Regulations have been adopted by the European Parliament and Council of Ministers. They place obligations upon EU Member States to enact national legislation that will make a range of transport and mobility data available, including references to parking data, park and ride information, etc. How each Member State goes about achieving the requirements of the Delegated Regulations may be different. In general, a lead national ministry (in most cases the ministry of transport) will take steps to ensure the data required by the Delegated Regulations is made available.

## National Access Points

The ITS Directive mandates the establishment of National Access Points (NAP), nodes in which ITS-related data is concentrated and published in the form of datasets. NAPs are focused on facilitating access to and exchange of transport-related data (including parking). Each Member State must implement a National Access Point through national law. These implementations effectively oblige parking operators and other data owners to publish a defined set of data about their operation on the relevant NAP.

The NAPs are the central platforms for mobility data. They facilitate access, easy exchange and reuse of transport related data in Europe. The NAPs help support the provision of EU-wide interoperable travel and traffic services to end users.

There are currently more than 30 operational NAPs in the EU Member States (and beyond)<sup>2</sup>, where mobility related data is published and made available for use. Unfortunately, the NAPs are not harmonized and are quite different in their setup and data access interfaces, using different data formats and standards.

## NAPCORE (National Access Point Coordination Organisation for Europe)

The National Access Point Coordination Organisation for Europe (NAPCORE) is an organisation set up to coordinate and harmonise mobility data platforms across Europe.<sup>3</sup> It has been launched as a coordination mechanism to improve interoperability of the National Access Points as a backbone of European mobility data exchange.

NAPCORE improves the interoperability of mobility data in Europe with mobility data standard harmonisation and alignment. Also, NAPCORE increases access and expands availability to mobility related data by coordinated data access and better harmonisation of the European NAPs.

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<sup>1</sup> The relevant European Delegated Regulations regarding parking are:

- Delegated Regulation [2015/962](#) (RTTI), which has been replaced by [2022/670](#), the provision of EU-wide real-time traffic information services.
- Delegated Regulation [2017/1926](#) (MMTIS), which has been amended by [2024/490](#): the provision of EU-wide multimodal travel information services.
- Delegated Regulation [885/2013](#) (SSTPA): the provision of information services for safe and secure parking places for trucks and commercial vehicles.

<sup>2</sup> A Detailed description of NAPs and a list of those available is published by NAPCORE. See <https://napcore.eu/description-naps/national-access-point/>

<sup>3</sup> NAPCORE is co-financed by a Programme Support Action under the European Commission's Connecting Europe Facility.

## European Parking Association

Furthermore, NAPCORE empowers National Access Points and National Bodies by defining and implementing common procedures and strategy, strengthening the position and the role of NAPs, supporting steps towards the creation of European-wide solutions to better facilitate the use of EU-wide data.

### NAPCORE-EPA Cooperation

EPA signed a MoU with NAPCORE at the ITS Congress in Lisbon in May 2023. The agreement's defined objectives are to:

- Foster joint work on alignment and interoperability of standards (DATEX II, APDS, NeTeX).
- Encourage and ensure the provision of parking data on the NAPs by EPA's national member associations and commercial associate members.
- Identify challenges and issues regarding parking as well as identifying measures to address them.
- Enable NAPCORE and EPA to join forces to have a stronger voice in the alignment of data, data quality, usability and standardization to guarantee a functioning exchange of information.
- Create a win-win situation for NAPCORE and EPA and enable the pooling of knowledge.

Under the terms of this MoU EPA is carrying out the following activities:

- Being an active member of the NAPCORE Advisory Board.
- Undertaking a preliminary audit of the parking data on currently available on the National Access Points (see [A Study of the Parking Data currently available on the NAPs](#))
- Finalizing and agreeing with NAPCORE a 'European Regulated Parking Data Profile'.
- Testing the APDS/ DATEX II/ NeTeX converter to ensure interoperability, particularly in France (cf. EC Delegated Regulation on MMTIS [2024/490](#)).
- Supporting Q-Park, Indigo and Interparking with publishing their basic data sets on the relevant NAPs.

### Other important EU legislation

The following EU legislation also impacts on the European parking sector's obligations concerning parking data.

#### EU Data Act

As part of its broader framework, the [EU Data Act \(2023/2854\)](#) seeks to ensure fair access and use of data in all sectors, including the parking sector. It facilitates data sharing between parking service providers, authorities, and consumers to improve services, transparency, and innovation.

By regulating access to real-time parking data, it aims to enhance efficiency, foster competition, and promote smart mobility solutions across the EU.

The Data Act entered into force on 11 January 2024 but will start to apply in the EU on 12 September 2025. An analysis of the possible impact this act can have on the parking sector can be found in Appendix A.

#### EU Data Governance Act

The [European Data Governance Act \(2022/868\)](#) promotes a culture of data sharing, transparency, and trust. For the parking sector, this means greater collaboration between public and private stakeholders, leading to innovation in parking solutions and more efficient use of urban space. However, compliance and data governance costs will need to be carefully managed by parking operators to take full advantage of the Act's opportunities.

The Data Governance Act entered into force on 23 June 2022 and, following a 15-month grace period, was applicable from September 2023.



An analysis of the potential impact of this act on the parking sector can be found in Appendix B.

## **The benefits of sharing parking data**

### **Why is it important to publish parking data?**

In addition to ensuring compliance with the EU Directives and their implementation in national law by the member states, the ability to share parking data in a commercially acceptable manner is increasingly important for the parking sector itself.

### **What are the benefits?**

Looking at cities we see that they are increasingly congested with traffic. The need for sustainable transportation solutions has never been greater.

Real-time parking availability information is a growing trend in urban transport, using various types of sensors and other technologies to provide drivers with up-to-date information on where they can find an available parking space.

This data can inform where new parking spaces should be built, how much they should cost, and when they should be opened or closed. It can also be used to inform drivers of the best routes to take to avoid traffic congestion.

The overall benefits for data providers and data users may be summarized as follows:

#### **Data Providers:**

- Lower development costs
- Easier data sharing

#### **Data users:**

- Easier data access
- Multiple data hosts in one place
- Standardized, well-defined data

#### ***Improved User Experience***

Real-time parking availability data significantly enhances the overall user experience for drivers. By providing accurate information about parking availability, drivers can save time, reduce frustration and plan their trips more efficiently. The convenience of accessing real-time data through mobile apps or navigation systems empowers drivers to make informed decisions and avoid unnecessary detours or congested areas.

This improved user experience promotes sustainable mobility by encouraging drivers to use shared mobility options, choose alternative modes of transportation and supports a behavioral shift towards more sustainable transportation practices.

#### ***More Efficient Traffic Flow***

Parking availability data enables drivers to locate vacant parking spaces quickly. By accessing this information through mobile apps or navigation systems, drivers can identify parking options, reducing the need for unnecessary circling and congestion. This, in turn, enhances traffic flow, reduces carbon emissions and contributes to a more sustainable transportation system.

#### ***Reduced Search Time and Emissions***

Cruising for parking not only wastes time but also increases vehicle emissions. Parking data helps drivers locate available parking spaces more efficiently, reducing search time and minimizing unnecessary idling. Real-time parking availability information promotes sustainable transportation by minimizing environmental impact.

This is especially important for electric vehicles, which require charging stations to maintain the battery. Knowing in advance where these charging stations are located can help drivers plan ahead and make their trips more efficient.

### ***Electric Vehicle (EV) Charging Infrastructure***

While electric vehicles are becoming increasingly popular, one of the major challenges is creating an adequate infrastructure to support them. EV users currently still experience 'range anxiety,' which can only be alleviated if they have access to real-time data about the availability of EV charging points.

Parking availability data can help EV users decide where to park and charge their vehicles. By identifying areas with high demand for EV charging spots, authorities can plan for the installation of additional charging points where needed.

Moreover, real-time parking data can help authorities better manage their current EV charging infrastructure. For example, if certain charging spots are rarely used, they may be relocated to more convenient areas or those with a heavy demand.

### ***Improved Integration with Public Transport***

Public transport systems play an important role in reducing traffic congestion, and parking availability data can help improve their integration. Drivers can be provided with parking information near public transport stops, reducing the hassle of finding a parking space in unfamiliar areas. This proves highly beneficial during peak times when parking spaces tend to be scarce. Knowing where available spaces are located in advance helps drivers plan their trips accordingly and reduces the need to search for a space during their journey.

This information helps drivers plan their trips and makes it easier for them to make multi-modal trips incorporating public transport. Commuters can easily combine driving with public transport, reducing the number of cars on the road and promoting a more sustainable, multimodal transportation approach.

### ***Enhanced Carpooling and Ridesharing***

Another way to reduce traffic congestion is through carpooling and ridesharing. Parking availability data can help riders find spaces near their meeting points and plan their trips more efficiently. Knowing the availability of parking spaces in advance helps riders coordinate pick-up and drop-off times, reducing the need to search for parking spaces during their journey.

This also helps promote a more sustainable form of transportation, as it reduces the number of cars on the road. Furthermore, parking availability data can help riders find reasonably priced spaces close to their destination, saving them time and money.

### ***Encouraging Active Travel***

Parking data can encourage sustainable modes of travel, such as walking or cycling, by providing information about available parking facilities near key destinations.

By promoting active travel options, cities can reduce dependence on cars, alleviate traffic congestion and improve air quality, leading to a more sustainable urban environment. This is particularly important in densely populated cities such as Paris, London, or Amsterdam, where traffic and air pollution can be a severe problem.

For instance, if a cyclist can always find an available bike-parking spot near their destination in advance (by knowing the availability of nearby parking spots) the cyclist can decide which route to take and whether they need to plan ahead.

### ***Behavioural Change and Demand Management***

Real-time parking availability data can be leveraged to encourage behavioral change and manage parking demand effectively. Strategies such as dynamic pricing based on demand fluctuations can help cities incentivize drivers to shift their parking behavior. This approach helps optimize parking occupancy, reduces congestion and supports sustainable transportation objectives.

If drivers have access to real-time data about the availability of parking spaces, they can more easily identify areas with higher vacancies and plan their routes accordingly. This can help reduce traffic and improve the overall efficiency of the transportation network

### ***Intelligent Urban Planning (Data-Driven Decision Making)***

Urban planning is more important than ever as cities become more densely populated and congested. This has resulted in a need for more efficient public transport systems and better utilization of urban space. Parking availability data can provide valuable insights into how to optimize the use of limited parking spaces in urban areas.

Real-time parking data enables city officials and transportation planners to make data-driven decisions. It helps monitor parking patterns, occupancy rates and usage trends. This can help authorities to plan for additional infrastructure and services, such as charging stations or bike-sharing hubs, and identify parking demand across the city.

For instance, if data shows that a particular area has a high demand for parking spaces, authorities can consider this when planning future developments in the area. Similarly, if data shows that certain areas have low demand for parking spaces, authorities can reallocate the land to other uses, such as green spaces or public areas.

This leads to targeted interventions such as improved public transport connectivity, bike lanes, or pedestrian infrastructure. This data-driven decision-making approach supports sustainable transportation initiatives and facilitates efficient resource allocation.

For instance, municipalities can use real-time parking data to understand the reasons behind parking demand fluctuations and create better pricing policies accordingly. This helps reduce the need for costly infrastructure changes and improves parking utilization.

## **Data exchange based on common standards**

Data exchange requires common standards to be implemented effectively, in the same way that a common language is required for two people to understand each other. In 2018, EPA (in co-operation with the British Parking Association and the International Parking and Mobility Institute) created the Alliance for Parking Data Standards (APDS) to develop a data standard for exchanging parking data. This initiative was undertaken in response to a study that identified that there were no standards in place that met the needs of the parking sector. It was recognized that, as smart-city, curbside management and mobility efforts continue to expand, the ability for parking facilities and operations to share data efficiently is important to the continued success of the sector.

The APDS specifications enable entities to share various types of data within the parking and curbside domains and, more importantly, with other sectors and users of parking and curbside resources.

The specifications created by APDS are now an ISO standard (ISO/TS 5206-1) and have been adopted as Part 6 (Parking publications) of the DATEX II CEN standard (CEN/TS 16157-6:2022).

## **Licensing and commercial rights for use of data**

It is important to note that when data is made available via the National Access Points, it must be done in a non-discriminatory manner. There is, however, no obligation under the EU legislation for the data to be provided as open data. It should also be noted that the national implementations of the European legislation by the individual members states can go further and include such additional obligations in local law.

Under the EU legislation licensing of data provision is permitted. However, the terms of the license must not unnecessarily restrict possibilities for reuse or be used to restrict competition.

Licence agreements can be used to protect the legitimate commercial interests of the data provider but they must only impose reasonable restrictions on the reuse of the data. Any financial compensation shall be reasonable and proportionate to the legitimate costs incurred of providing and disseminating the relevant data.

An example of such a license is available in



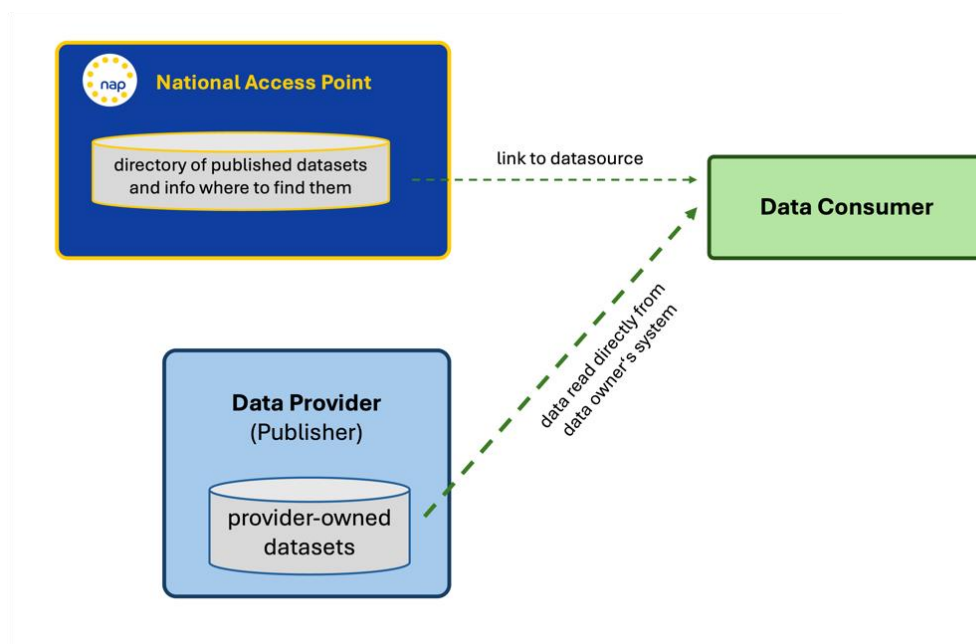
## Publishing parking data on and retrieving it from a NAP

It is nearly impossible to make a general description of how to put parking data on a NAP due to different NAP's structures and processes. However, in general, there are 3 main NAP structures:

### Weblink repository NAP

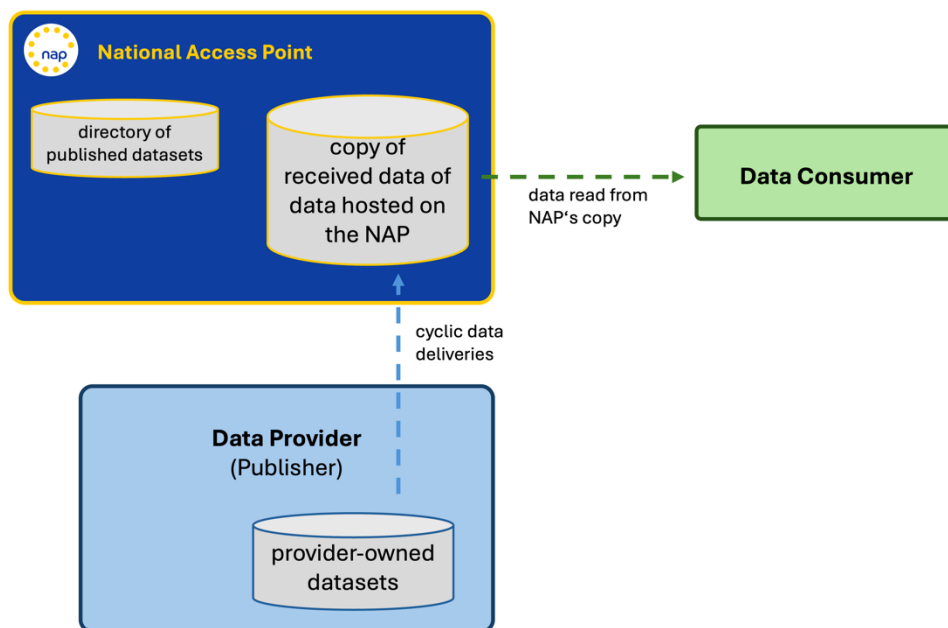
This type of NAP is a collection of hyperlinks (web links) that directs users to various datasets (usually managed by the source owner or an aggregator)

Where there are no datasets on the NAP itself, the data consumer identifies the relevant provider for the information required from a link to the desired dataset.



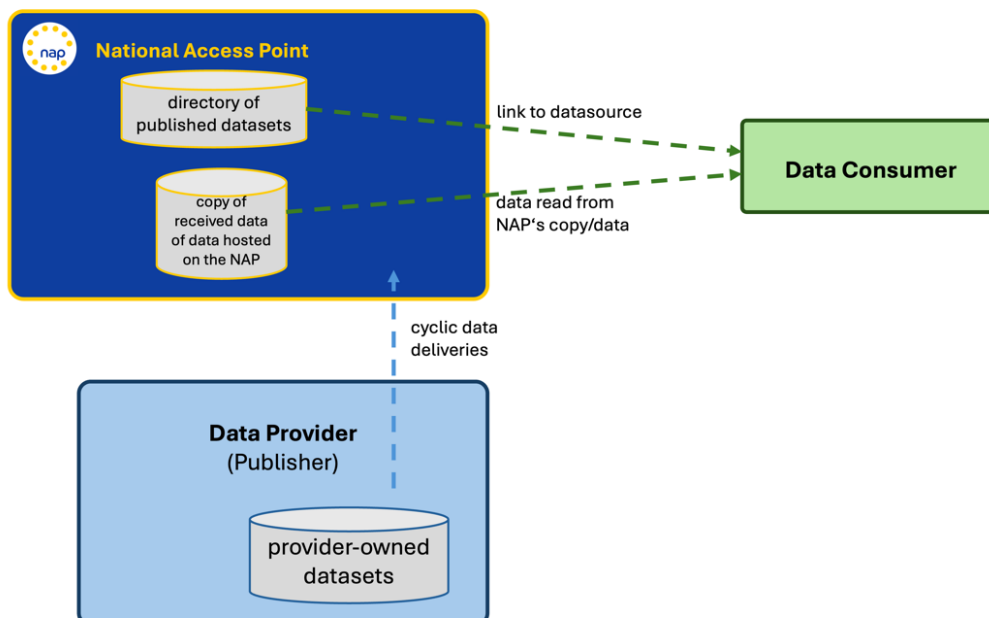
### Database NAP

In this NAP type, the data is hosted by the NAP (data is supplied by the source owner or an aggregator, usually via an API)



### Hybrid:

A Hybrid NAP is a mix of database(s) and a weblink repository



## Examples of National Access Points

EPA intends to extend the present document over time to provide a separate guide for each member state.

To follow are the first examples, The Netherlands, Germany and France.

### The Netherlands

The Dutch NAP is the called Nationaal Toegangspunt Mobiliteitsdata (NTM) and is available at <https://www.toegangspuntmobiliteit.nl>. The user interface offers Dutch and English.

NTM is a hybrid NAP. It is mainly a web-link repository but also offers a truck parking database.

#### Publishing parking data

To publish data on the NTM you have to contact Rijksdienst Wegverkeer ([RDW](#)). RDW hosts all on and off street parking data in the Netherlands in the Nationaal Parkeer Register ([NPR](#))

On the [CROW](#) website you will find the document Standard for the Publication of Dynamic Parking Data (SPDP). SPDP is a subset of DATEX II (2016) and is mainly used for exchanging parking data. To access this document, you will need to register.

Parking operators can push both static and dynamic parking data to the available API. It is possible to provide certain data under certain conditions (see Retrieving Parking Data). If you, as a parking operator, wish to use the API to push parking data, it is necessary to create a connection that gives you access to the digital interface. The RDW can support you with this. Contact RDW on <https://www.nationaalparkeerregister.nl/formulier/contactformulier>

#### Retrieving parking data

You do not need to register to access parking data.

Truck parking can be retrieved from the homepage of NTM ([www.toegangspuntmobiliteit.nl](http://www.toegangspuntmobiliteit.nl)).

On and off street parking data can be accessed at (<https://ntm.ndw.nu/publicaties/a1a49af5-75d5-49c6-9b06-2cad922d508>). The button on the right “Naar publicaties/View publications” leads to several links:

- “Download hier de publicatie in JSON/Download the publication in JSON” leads to the NPR Open Data WebAPI: <https://npropendata.rdw.nl/parkingdata/v2/> where a JSON is provided with all available parking data, on street and off street.
- “Download hier de publicatie in DATEX II/Download the publication in DATEX II” leads to the same NPR Open Data WebAPI: <https://npropendata.rdw.nl/parkingdata/v2/> where a JSON is provided with all available parking data, on street and off street.  
The standard used, SPDP, is a subset of DATEX II
- “Publicatie bij eigenaar/Publication at owner” leads to het RDW Open Data portal, where more datasets are provided.
- “Welke gebruiksvoorwaarden zijn van toepassing/Which terms of services apply?” leads to the document:  
“Voorwaarden afname dynamische parkeerdata” which are the General Terms and Conditions relating to the agreement on the acquisition of dynamic parking data. See Appendix A.



## Germany

The German NAP is the called *Mobilithek* (<https://mobilithek.info>). The user interface offers German and English. The *Mobilithek* provides a download area with detailed technical documentation to get you started.

*Mobilithek* is a Weblink repository NAP.

To publish or retrieve data, you first need to create an account. In a second step, you will then either set up a new organization or indicate an existing registered organization that you belong to.

Once you have successfully registered, there is one additional step to complete before you can start publishing and retrieving data: you will have to obtain a digital client certificate (issued by the *Mobilithek*) which is required for machine-to-machine communication between your system and the *Mobilithek*. Details can be found in the [Technical Interface Description](#) (this link downloads a PDF).

### Publishing parking data

To start publishing data on the *Mobilithek*, you set up a so-called *Offer*. It describes the details of the dataset you are about to publish, provides categorisation information so others can easily find it, and specifies the terms of use. In the content description, you will be asked for the data exchange standard used to represent your dataset (e.g. DATEX II).

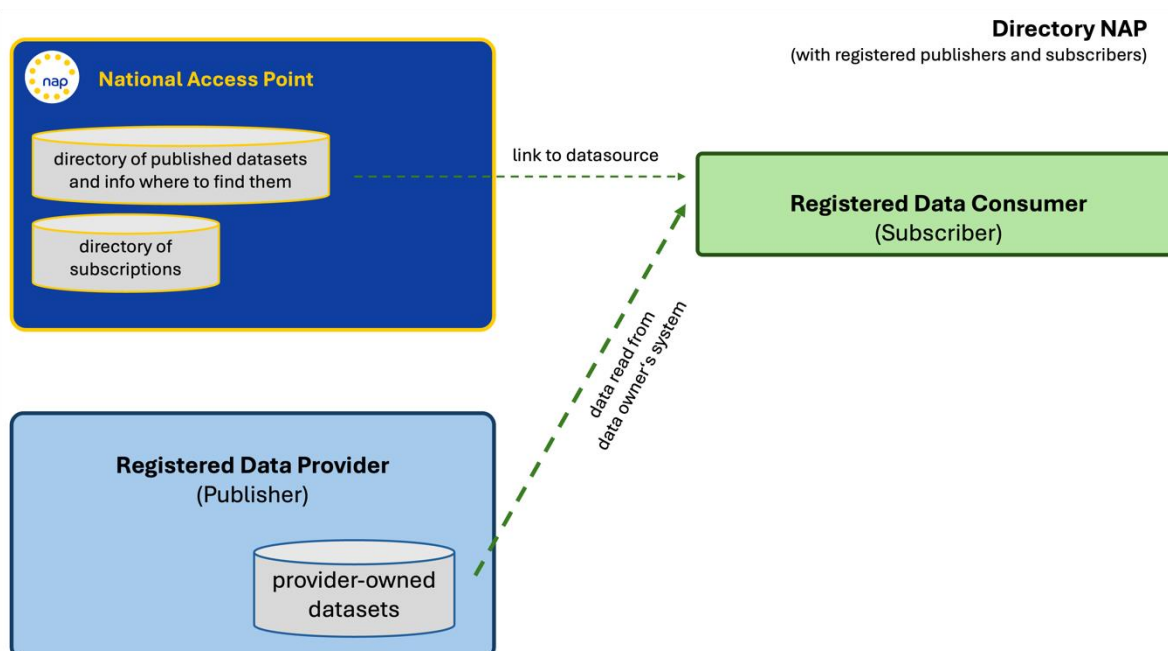
The *Mobilithek* offers two different ways of making data available: "brokered" and "not brokered". Brokered data are sent to the *Mobilithek* which will store them in its own database and serve read requests from this shadow copy. For non-brokered data, the *Mobilithek* only provides network route information to your own data-serving backend.

### Retrieving parking data

To retrieve data from the *Mobilithek*, you use the data offers search form to find publications you are interested in. You then request a *Subscription* to the selected datasets, accepting the terms of use. Once the data provider has accepted your request, you can start retrieving the data.

## France

The French NAP for transport sector is <https://transport.data.gouv.fr>. There is a centralized website ( <https://www.data.gouv.fr/fr/> ) that encompasses all the other data initiatives in France (from other sectors). The user interface offers 3 languages: French, English and Spanish. The French NAP provides a download area with detailed technical documentation to get you started <https://doc.transport.data.gouv.fr/>



If you want to start publishing or retrieving data, you first need to create an account at <https://data.gouv.fr>. In a second step, you will then either set up a new organisation or indicate an existing organisation that you belong to.

### Publishing parking data

Several methods can be used to publish a dataset on data.gouv.fr. Here, we present 3 methods:

- 1) Publication of data via <https://transport.data.gouv.fr/> (generic method)
- 2) Publication of data by harvesting (a suitable method if you have a local open data portal whose metadata corresponds to the Opendatsoft, CKAN or DKAT syntax)
- 3) Publication of data via API (recommended when a dataset is published on a regular basis)

More information can be found here: <https://doc.transport.data.gouv.fr/administration-des-donnees/guide-de-publication/publier-un-jeu-de-donnees>

### Retrieving parking data

To retrieve data from <https://transport.data.gouv.fr>, you can navigate or search specific data sets from: <https://transport.data.gouv.fr/datasets>

The user, whether identified or not, downloads one or more files free of charge from transport.data.gouv.fr. He/she uses them freely in compliance with the license (open license, ODbL license, etc.).

## Appendix A

### EU Data Act - Impact on the parking sector

The [EU Data Act \(2023/2854\)](#) aims to promote data sharing and facilitate access to data across sectors. This act has the following potential impacts on the parking sector:

#### 1. Data Sharing and Access

- **Enhanced Data Exchange Requirement:** Parking operators, municipalities, and third-party service providers (e.g., navigation apps, mobility platforms) will be required to share parking-related data more openly. This could include data on parking space availability, pricing, and traffic flow. The Act facilitates easier access to this data for various stakeholders.
- **Greater collaboration:** collaboration between public and private entities in the parking sector will be encouraged. Municipalities may need to make real-time data on public parking spaces accessible to private apps and services, which can improve user experience and reduce traffic congestion.

#### 2. Monetization and Control of Data

- **Data Rights:** The Act ensures that businesses, including parking operators, can monetize the data they generate or control. However, this must be done while respecting the rights of the data originators (e.g., vehicle owners or users of parking services).
- **Protection of User Data:** Users will have more control over their personal data, meaning parking services that collect information on where and when individuals park must ensure compliance with stringent data protection rules.

#### 3. Innovation and Competition

- **New Business Models:** The Data Act promotes the creation of new business models. For example, third-party mobility platforms can use open access to parking data to build new integrated services, potentially leading to more dynamic and flexible parking solutions.
- **Increased Competition:** Requiring open data access can increase competition among parking service providers, driving innovation, and potentially lowering costs for consumers.

#### 4. Smart Cities and Mobility Solutions

- **Integration into Smart Cities:** The parking sector will play a key role in smart city initiatives. Open data policies enable cities to better integrate parking data into their urban mobility strategies, optimizing traffic flow and reducing emissions.
- **Automated Parking Systems:** Data sharing can enhance automated parking systems by providing real-time availability and pricing data, leading to more efficient use of space.

#### 5. Compliance and Costs

- **Regulatory Compliance:** Parking operators will need to invest in technologies to ensure compliance with the data-sharing requirements. This may involve costs associated with upgrading infrastructure to provide real-time data.
- **Data Governance:** Companies will need to implement clear data governance strategies, ensuring proper handling of the data they share and receive.

### Summary

The [EU Data Act \(2023/2854\)](#), as part of its broader framework, seeks to ensure fair access and use of data, including in the parking sector. It facilitates data sharing between parking service providers, authorities, and consumers to improve services, transparency, and innovation. By regulating access to real-time parking data, it aims to enhance efficiency, foster competition, and promote smart mobility solutions across the EU.

## Appendix B

### EU Data Governance Act - Impact on the parking sector

The [European Data Governance Act \(2022/868\)](#) (DGA) creates a framework for sharing and reusing data across sectors. It has several implications for the parking sector, particularly in terms of how data is accessed, managed, and reused. Potential impacts on the parking sector include:

#### 1. Facilitating Data Sharing and Reuse

- **Open Data Framework:** The DGA facilitates the sharing of data between public authorities and private entities. For the parking sector, this could mean increased access to public parking data (e.g., parking availability, pricing, and usage patterns) from municipalities, enhancing the potential for better integration between public and private parking services.
- **Data Altruism:** The DGA introduces a framework for “data altruism,” where organizations or individuals voluntarily make their data available for common good purposes. In the parking sector, this could involve companies or municipalities sharing real-time parking data to help improve urban mobility, reduce congestion, or contribute to environmental sustainability goals.

#### 2. Improved Transparency and Data Access

- **Data Intermediaries:** The DGA introduces data intermediaries that act as neutral brokers to facilitate data sharing between different entities, ensuring fair access. In the parking sector, these intermediaries could help connect parking operators, municipalities, mobility service providers, and app developers. By making parking data more accessible, this could lead to a more integrated mobility ecosystem.
- **Public Sector Data Reuse:** The act enables the reuse of certain types of public sector data that were previously not available for commercial use. For the parking sector, this could unlock access to valuable data from municipalities, such as real-time data on public parking spots or historical usage patterns, which can be used to develop new services or optimize parking solutions.

#### 3. Innovation and Smart Mobility

- **New Services and Business Models:** The increased data sharing encouraged by the DGA can foster innovation in the parking sector. For instance, third-party developers can use open parking data to create smart parking applications, integrating real-time parking availability with navigation, payment solutions, or dynamic pricing based on demand.
- **Smart Cities and Mobility Solutions:** Parking data can play a critical role in broader smart city strategies. The DGA provides a framework for the sharing of parking data, enabling it to be integrated into larger urban mobility solutions, improving traffic flow, reducing parking search times, and minimizing emissions.

#### 4. Data Protection and Trust

- **Increased Trust in Data Sharing:** The DGA puts a strong emphasis on protecting data and ensuring that sensitive data (including personal or commercial data) is handled securely. Parking operators and mobility services that collect personal data (e.g., license plate information, payment data, or location tracking) will need to comply with the DGA's provisions on data protection, ensuring transparency and building trust with users.
- **User Control Over Data:** The DGA emphasizes the importance of individuals and organizations maintaining control over the data they generate. In the parking sector, users may have more control over how their data (e.g., location or usage patterns) is shared with third parties, potentially leading to changes in how parking service providers handle customer data.

## 5. Operational and Compliance Costs

- **Compliance Requirements:** Parking operators may face additional regulatory and compliance requirements to ensure their data-sharing practices align with the DGA's framework. This could involve costs related to upgrading IT infrastructure or implementing new data governance policies.
- **Participation in Data-Sharing Ecosystems:** To benefit from the opportunities created by the DGA, parking providers might need to actively participate in data-sharing ecosystems, which can involve adopting interoperable data standards and collaborating with data intermediaries.

## 6. Impact on Data-Driven Parking Solutions

- **Dynamic and Real-Time Parking Management:** Increased data sharing can improve dynamic pricing models for parking based on real-time demand, helping cities and operators optimize space usage and reduce congestion. This is aligned with the DGA's goal of promoting data use for public benefits such as reducing urban congestion.
- **Better User Experiences:** Access to rich data sets can help third-party developers and mobility platforms create more accurate and user-friendly parking apps. These can offer real-time availability updates, seamless payment options, and integrated route planning, benefiting both users and parking operators.

## Summary

The [European Data Governance Act \(2022/868\)](#) is aimed at promoting a culture of data sharing, transparency, and trust. For the parking sector, this will mean greater collaboration between public and private stakeholders, leading to innovation in parking solutions and more efficient use of urban space. However, compliance and data governance costs will need to be carefully managed by parking operators to take full advantage of the Act's opportunities.

## Appendix C

**NOTE:** *These terms and conditions are supplied for illustration purposes only. They must not be used as the basis for an agreement without obtaining legal advice from a properly qualified source in the country in which they are intended to be used.*

### Terms and Conditions Dynamic Data

General Terms and Conditions relating to the agreement on the acquisition of Dynamic Parking Data between Operators and Consumers

#### 1. Definitions

1.1 In these general terms and conditions, the following definitions shall apply:

**Consumer:** The individual who, pursuant to the Agreement, acquires data from the Operators.

**Data:** Dynamic parking data originating from and owned by the Operators, providing availability information about their parking locations.

**Purpose:** The purpose of this agreement is to enable Parties to inform travelers, particularly motorists, about the number of (real-time) available parking spaces in the Netherlands, with the primary objective of reducing (urban) traffic and thereby lowering CO2 emissions, improving accessibility, and enhancing the livability of cities.

**Operators:** The following Parties, all operating parking locations:

The private limited company “xxxx”, with its statutory seat in “xxxx”;

The private limited company “xxxx”, with its statutory seat in “xxxx”;

....

**Agreement:** The agreement between the Consumer and the Operators, pursuant to which the Consumer acquires the Data, and to which these General Terms and Conditions apply.

**Party:** Those parties to this Agreement, namely the Consumer and the Operators.

**Confidential Information:** All information provided by the Operators to the Consumer, in addition to the Data, including but not limited to information about the organization, software, documentation, concepts, and/or product information. Confidential Information does not include information that is already publicly known, has been made public with the consent of the Operators, or has been made public pursuant to a legal requirement.

1.2 Definitions, whether in singular or plural, shall include both singular and plural, and vice versa.

1.3 Provisions of these General Terms and Conditions shall not be interpreted to the detriment of a Party merely because that Party was responsible for drafting the relevant provision.

#### 2. Acquisition of Data

2.1 The Operators grant the Consumer the non-exclusive, non-transferable, and non-sublicensable right to (re)use the Data for the Purpose, subject to and in compliance with these General Terms and Conditions.

2.2 The permitted use of the Data by the Consumer includes, unless otherwise agreed, also the temporary - for a maximum period of one (1) week after receipt of the Data - copying of the Data to the (working) memory of the Consumer's computer equipment, copying to and storing the Data on

## European Parking Association

the hard disk or other data carrier(s) of the Consumer, and making backup copies of the Data, to the extent necessary for the Purpose.

2.3 The Consumer shall not sublicense the rights obtained hereunder to use the Data to third parties and/or redistribute the Data, except with the prior written consent of the Operator from which the Data originates and who owns the Data. The Consumer is not permitted to take actions that obstruct or hinder the normal operation of the Data or cause damage to one or more of the Operators in any other way. Operators are entitled to impose a (derivative) fee if the Parties agree that the Data from Operators is passed on by the Consumer and the Consumer receives compensation for this.

### 3. Conditions for Data Use

3.1 The Consumer warrants that:

- (i) the quality of the acquired Data remains guaranteed at all times;
- (ii) compliance with applicable laws and regulations, including but not limited to privacy laws and regulations, is ensured;
- (iii) the Data is not used for purposes other than the Purpose, and more specifically not for purposes related to interpreting or making predictions regarding the performance of one or more of the Operators.
- (iv) the Data is not manipulated. Parties cannot deviate from the provisions of this paragraph.

3.2 The Consumer shall take appropriate technical and organizational measures to prevent data loss, unauthorized access to Data, or misrepresentation of the Data.

3.3 To prevent abuse, the Operators reserve the right to take reasonable measures at their own expense to investigate and verify whether the Consumer is using the Data outside the rights and conditions granted under the Agreement. The Consumer shall provide all reasonable cooperation and access thereto.

3.4 Unless otherwise agreed in writing, the Consumer may not give the impression that it acts for or on behalf of one or more Operators.

3.5 If the Consumer uses the Data in breach of the Agreement, the Consumer shall owe a directly payable penalty of €25,000 (twenty-five thousand euros) for each instance of non-compliance with the provisions mentioned in this Agreement, plus €5,000 (five thousand euros) per day or part thereof that the Consumer fails to cease its actions after being notified. Such action shall also be deemed as a attributable breach, as a result of which any Operator whose Data is concerned - notwithstanding the right to the penalty owed - may bring a claim for damages.

### 4. Acquisition of Data free of charge

The Consumer is not obliged to pay the Operators a fee for the acquisition of the Data.

### 5. Intellectual Property

5.1 The Consumer acknowledges that the database containing Data is a database as intended in the meaning of Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases and the Dutch Database Act and/or that the Data is protected under Copyright Law. All intellectual property rights including, but not limited to, database rights and copyrights, with respect to the Data, belong exclusively to the Operator as the rights holder (and/or its licensors). This provision shall constitute an evidentiary agreement within the meaning of

Article 153 of the Dutch Code of Civil Procedure in conjunction with Article 7:900 paragraph 3 of the Dutch Civil Code.

5.2 The Consumer shall only obtain a right to use the Data to the extent explicitly granted under the Agreement and necessary for the Purpose. Any other or further right of the Consumer to use the Data is excluded. This Agreement does not in any way constitute a transfer of ownership of intellectual property rights from one or more Operators to the Consumer.

5.3 The Consumer is not permitted to remove or modify any indication concerning the confidential nature or the protection by intellectual property rights, including copyright notices or passwords, regarding, among others, the Data, software, (data) files, and/or documentation, without the explicit and written consent of the Operator from whom the relevant Data originates.

5.4 The risk of loss, theft, embezzlement, or damage to the Data or other data provided by the Operators shall pass to the Consumer at the moment it comes into the actual control of the Consumer or a representative thereof.

5.5 The Operator from whom the Data originates is also the exclusive holder of intellectual property rights, including trademark rights, trade name rights, and copyrights, with respect to the name and sign (logo) related to that Data. If the Consumer wishes to use the name and/or sign (logo) of an Operator without it being for the purpose of exercising the Purpose of this Agreement, the Consumer shall inform the relevant Operator thereof and shall at all times use the text provided by the relevant Operator for this purpose.

## 6. Confidentiality

6.1 The Consumer shall observe strict confidentiality with regard to Confidential Information.

6.2 Unless with the prior written consent of the Operator from whom the Confidential Information originates, the Consumer shall not provide or disclose to third parties or its personnel any information and data carriers made available to it, unless disclosure is necessary for the performance of the agreed-upon services. The Consumer guarantees that its employees also comply with these.