



# „All in One?“ Developments and Perspectives for Mobility Stations in the Urban Space

On behalf of



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Beijing, 2022

# Developments and Perspectives for Mobility Stations in the Urban Space

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BBSR	Federal Institute for Research on Building, Urban Affairs and Spatial Development
BIEK	Federal Association of Parcel and Express Logistics
BMDV	Federal Ministry of Transport and Digital Infrastructure
FGVS	Road and Transportation Research Association
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GVFG	Municipal Transport Financing Act
MIV	Motorised Private Transport
ÖPNV	Local Public Transport
ÖV	Public Transport
Pkw	Passenger cars
VCD	German Transport Club

# 1 Introduction

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The strengthening and diversification of public transport services play a central role in the implementation of sustainable mobility concepts. While urban mobility behaviour in particular has increasingly reflected the trend of „using instead of owning“<sup>1</sup> in recent years, and specific mobility needs are becoming the focus of environmentally friendly and equitable transportation planning, so-called „mobility stations“ are emerging in numerous German cities as corresponding infrastructures and transportation stations of a modern local public transport system.

In supporting the environmentally friendly and local transport networks, mobility stations can exert significant relief effects for the environment and traffic flow, whilst promoting the further expansion of electrified light and micro vehicles as well as passenger cars in car sharing operation. At the same time, the implementation of mobility station projects at the urban and municipal level is accompanied by numerous challenges that require close coordination of relevant stakeholders, consideration of the specific local conditions, and active citizen participation in order to generate the highest possible acceptance and use of the newly created mobility services.

In this light, in the frame of the project „German-Chinese Cooperation on Mobility and Fuel Strategy as a Contribution to the Transport Transition“ of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH this report examines different approaches and strategies to planning and implementing mobility stations in Germany. To gain insights into the status quo and the requirements of intermodal mobility of the future, interviews were conducted with representatives of municipal administrations, research institutes, and spatial and transport planning offices from all over Germany (Figure 1). The findings of this expert exchange are directly incorporated into this report, which uses specific projects to highlight exemplary challenges and approaches to solutions for the implementation of mobility stations.

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<sup>1</sup> Sustainable consumption and the approach of a „collaborative economy“ have increasingly become the focus of social debates, especially since the Paris climate protection agreement COP21 in 2015 (Umweltbundesamt 2015, p.20). With regard to shared vehicle use, PwC predicts in its report „Five trends transforming the Automotive Industry“ (2018, p.9) that by 2030 every third kilometer travelled will involve shared mobility concepts.

Based on a literature review, the report first carves out the various definitions of mobility stationstations in Germany, before individual measures are considered from their conceptualisation to their actual operation. The report concludes with a roundup and outlook on future developments. As a collection

of existing studies and current assessments, the document aims to provide interesting insights and new impulses not only for the sustainable design of intermodal mobility in Germany, but also for planning premises of mobility stations in other country contexts.



Figure 1: Overview of the Interviewed Institutes and Projects, Image Source: mixmaps.de



## 2 From Conceptual Design to Implementation

### 2.1 Conception of Mobility Stations

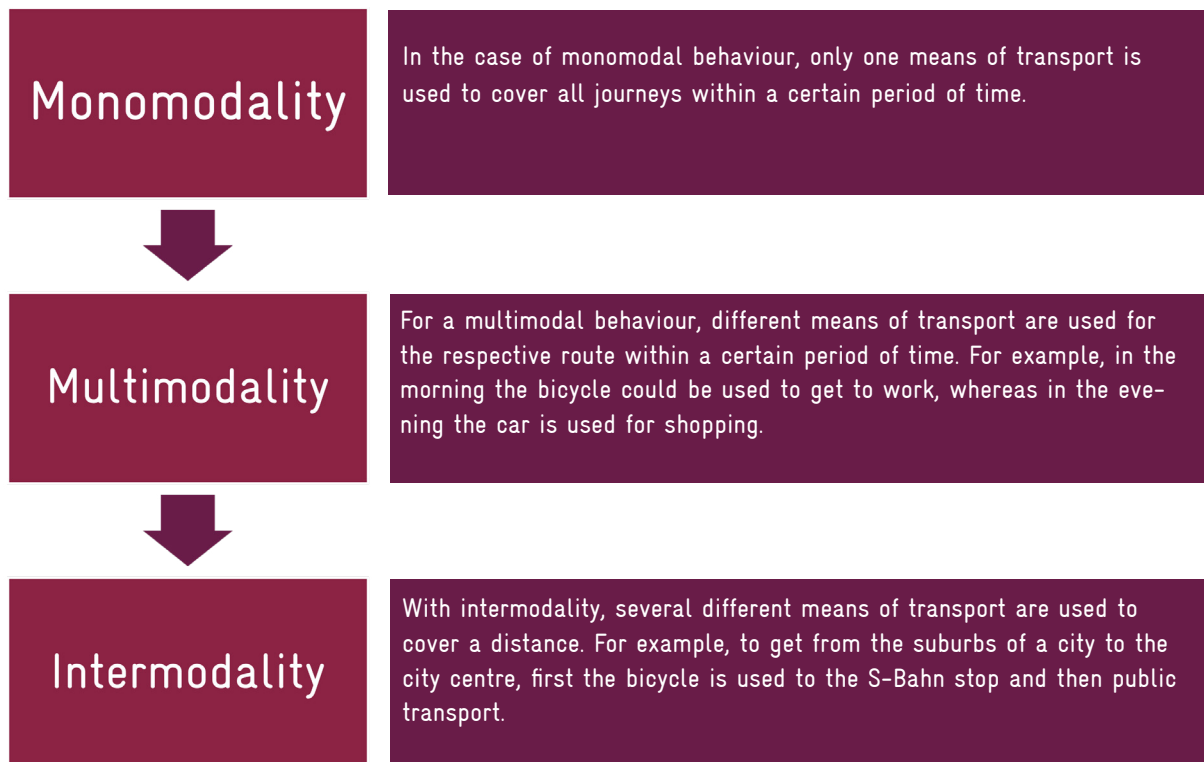


Figure 2: Mono-, Multi- und Intermodality,  
based on FGVS (2021)

Awareness of and the trend toward multimodal travel have risen sharply in recent years. While multimodal mobility behaviour was not explicitly mentioned in the large-scale survey report „Mobilität in Deutschland“ in 2008, the subsequent surveyreport in 2017 provides a clearer picture: Accordingly, the share of multimodal travel of all travel patterns among 30-60 year-olds is 37 % on average, while the age group between 16-19 uses multimodal travel on 56 % of their trips (Nobis and Kuminhof 2018, p. 56).

Although multimodality is often perceived as particularly sustainable due to its association with local mobility, Nobis and Kuminhof (2018, p. 59) emphasise that the use of multiple modes of transport, on the other hand, says nothing about the environmental imprint of the mode choice.

There is no comprehensive und universal definition of the term ‘mobility station’ at hand. Respective infrastructures are labelled differently according to the specific region or project of origin. The mobility stations in Bremen, which were the first to be set up in Germany in 2003, are part of the brand „mobil.punkt/mobil.pünktchen“, while the expansion of „MOBIPunkte“ in Dresden and „Jelbi-Stationen“ in Berlin has been going ahead since 2018 and 2019 respectively. In their discussion paper „Mobilstationen im Stadt.Umland.Netzwerk - ein Versuch einer Begriffseinordnung,“ Jung and Koldert (2019, p. 4) emphasize the need for a uniform definition of the term mobility station, especially in order to „distinguish [a] mobility station from conventional transfer points.“ When comparing different definitions of mobility stations, the following characteristics stand out most:

- A mobility station represents the starting point, end point, or connection point of a route and enables transfers between different modes of transport (Landeshauptstadt Kiel 2016, p. 4; Stein and Bauer 2019, pp. 5-6). Some definitions specify that at least two means of transport must be available (Zukunftsnetz Mobilität NRW 2017, p. 1) and a direct connection

to local public transport (ÖPNV), e.g., a connection to a stop, is necessary (Stein and Bauer 2019, p. 16; Kassel 2014, p. 2).

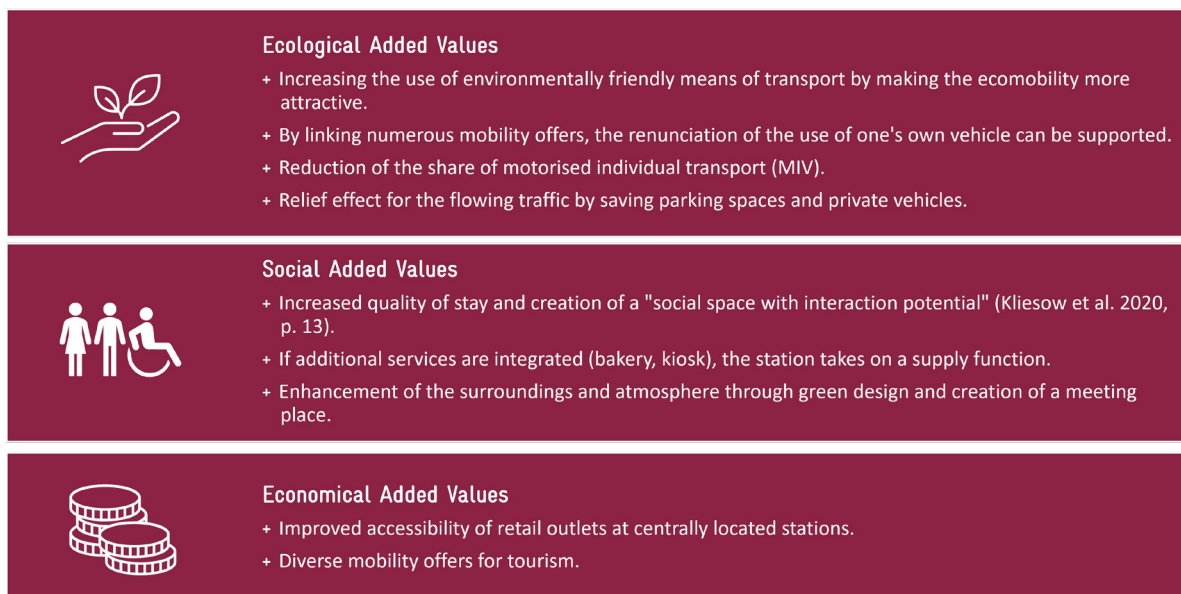
- A mobility station is characterized by the spatial integration and concentration of different mobility offers (Kliesow et al. 2020, p. 10; Landeshauptstadt Kiel 2016, p. 3) and is identified by a uniform design with the objective of high user-friendliness (Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) 2015, p. 6; Zukunftsnetz Mobilität NRW 2017, p. 1).
- The establishment of mobility stations is often perceived as a promotion of sustainable mobility services, which benefits the Umweltverbund (Landeshauptstadt Kiel 2016, p. 3), and environmentally friendly urban development (Zukunftsnetz Mobilität NRW 2017, p. 6).<sup>2</sup>

Mobility stations consequently serve to promote multi- and intermodal (Landeshauptstadt Kiel 2016, p. 3; Stein and Bauer 2019, p. 6) as well as local mobility (Zukunftsnetz Mobilität NRW 2017, p. 9). By providing various mobility services pooled at one location, mobility stations promote alternatives to individual transport by strengthening their accessibility, which, according to Zukunftsnetz Mobilität NRW (2017, p. 2), can ensure

<sup>2</sup> The further development of mobility stations into “smart stations” that offer users greater added value with the help of digitalisation and networking of information technology. The aspects of expanding a mobility station to include information and communication technologies are not beyond the scope of this report.

„cost-effective and flexible mobility in urban areas.“ The establishment of mobility stations also entails the potential to have a positive impact on road safety, as infrastructures can be rearranged and made safer. Based on this, further added values of mobility stations can be classified into the following categories according to Kliesow et al. (2020, p. 12) (Figure 3).

In sum, this report defines the term mobility station as a starting point, transfer point, or end point of a route that provides a diverse range of mobility services in a uniform design.



**Figure 3: Added Values of Intermodal Mobility, based on Kliesow et al. (2020, p. 12)**

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## 2.2 Conceptual Design and Planning

The conceptualisation, planning and implementation of mobility stations are highly dependent on the specific local conditions. Therefore, local expertise through active dialogue with local partners should be strengthened and promoted to adjust the mobility services to local demands. The following section presents individual aspects of the overall process based on the action plan of Kliesow et al. (2020, pp. 26-27) (see Figure 4).<sup>3</sup>

### Coordination of Actors

Based on the planning premise of a municipal infrastructure, it is recommended to establish a central coordination and administration office. This can help to support efficient implementation and clearly define uniform contact persons for all involved actors (Stein and Bauer 2019, p. 28). In addition to the early identification and process integration of all relevant actors, challenges such as a potential shortage of skilled workers for the construction or maintenance of special infrastructures (e.g., the construction of a photovoltaic system) should also be considered from the outset. During the conception phase of the „MOBI-punkte“ in Dresden, a task force was initiated, which accelerated the planning and approval processes. Simultaneously, possible delays due

to a lack of construction capacity should always be considered (Fiedler, personal interview, 09.03.2022). Moreover, close communication with companies and service partners of the mobility station is crucial, as their cooperation is indispensable for the traffic transition (Kassel, personal interview, 04.02.2022).

In principle, long-term cooperation should be sought in order to provide customers with a reliable service and thus ensure a permanent switch to sustainable mobility services. In addition, a uniform operator of the stations should be defined for the maintenance of the areas and coordination of the service providers (IGES Institut GmbH 2021, p. 18), in particular to carry out any repairs or replacements promptly, and thus ensure the consistent attractiveness of the station (Zukunftsnetz Mobilität NRW 2017, p. 48).

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<sup>3</sup> The report “Mobility Station Guidance” by CoMoUK (2019) presents further guidance and recommended actions for setting up mobility stations, based on several examples of mobility stations in Europe.

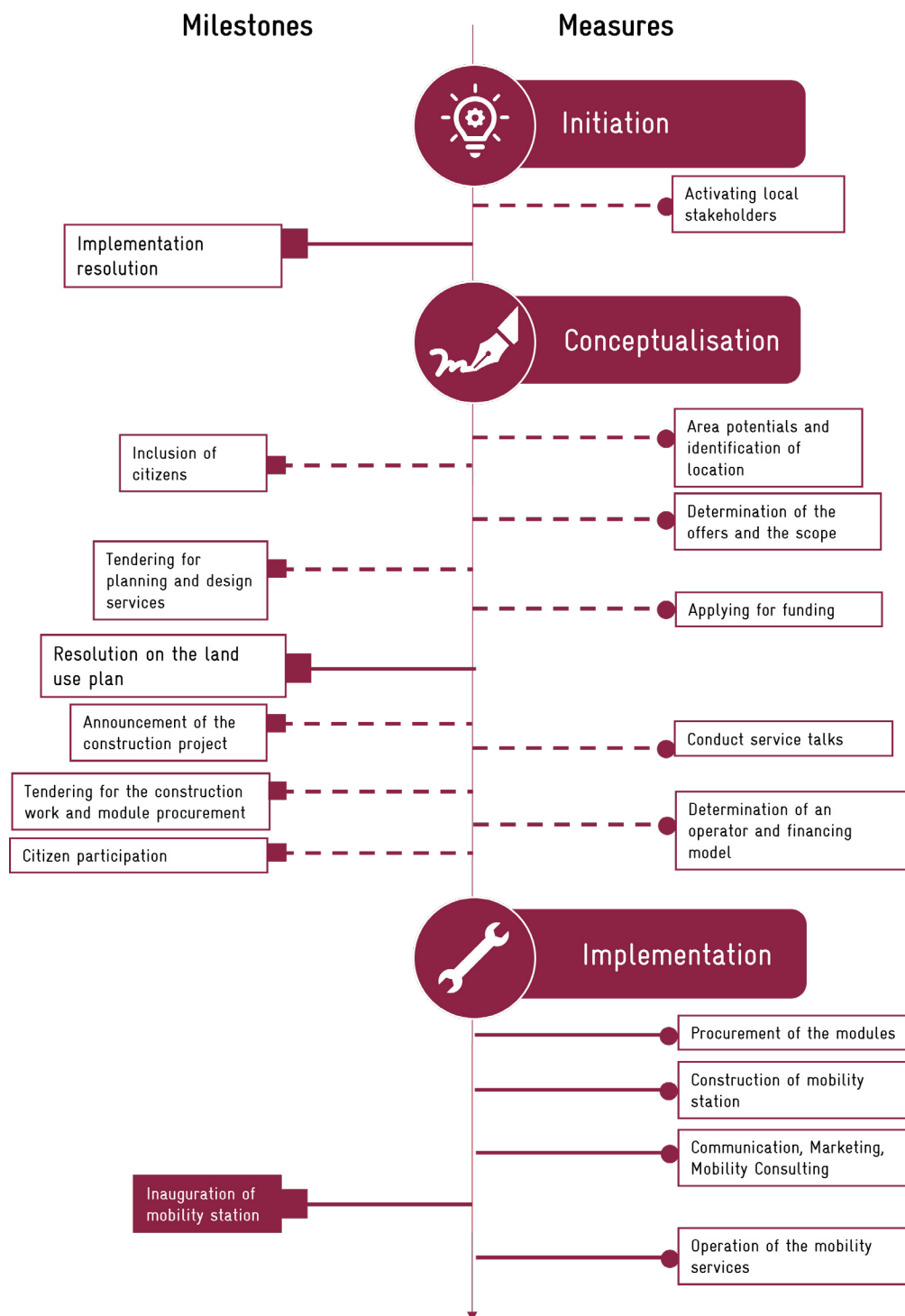


Figure 4: Overall process of implementing mobility stations, based on Kliesow et al. (2020, pp. 26-27).

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## Financing

In principle, financing mechanisms, e.g. access to federal, state or local government funding, vary greatly depending on the project and region. While the first stations in Offenburg received funding from the Ministry for Rural Areas of Baden-Württemberg and the Federal Ministry for Building and the Environment (under the Concept for Climate Protection), the city of Bremen was able to receive financial support from funds from the Public Transport Financing Act (GVFG) and municipal investment funds, according to the Federal Office for Building and Regional Planning (BBSR) (2015, p. 31). Specific funding that is directed at researching a subject matter is another example. According to IGES Institut GmbH (2021, p. 8), a project to investigate mobility stations in peripheral locations in Berlin was carried out with the help of the funding guideline „Mobilitäts-WerkStadt 2025“ from the Federal Ministry of Education and Research.

The milestones and funding measures listed in Figure 4 entail the call for proposals for the planning service, the application for funding, the decision on the development plan, the call for proposals for the construction service, and the financing model. Due to high dependency local conditions, they are not discussed in-depth in this report. As a reference, the BBSR report (2015, pp. 26-33) provides a detailed overview of selected mobility stations with in-

formation on implementation, financing models, as well as spatial and tariff integration.

## Choice of Location

Essentially, public transport is the basis for public mobility services, hence locations where the bundling of several mobility services coincides with a high demand are suitable for the establishment of mobility stations (Landeshauptstadt Kiel 2016, p. 5). Further prerequisites for determining a location are covered by the following criteria (Landeshauptstadt Kiel 2016, p. 6; Zukunftsnetz Mobilität NRW 2017, p. 46; Kliesow et al. 2020, p. 25):

- Barrier-free accessibility and good visibility of the station
- Stations with transfer function must be reliably connected to public transport
- Availability of space
- Availability of a power and communication network (e.g. for charging stations, lighting, Internet, etc.)



**„There is no single blueprint that can simply be adapted everywhere. Close coordination with local actors, exchange on individual elements, and local expertise are indispensable for advancing mobility projects and accelerating planning and implementation processes.“**

Markus Bednarek,  
Planersocietät

The construction of a mobility station also allows the affected public space to be reorganised. Current standards for the safety of road users (e.g. accessibility, safety) can thus be directly taken into account and the public space can be upgraded through social interaction and attractive design (Landeshaupt-

stadt Kiel 2016, p. 9). According to Jung and Koldert (2019, p. 10), locations near densely populated residential areas, workplaces, and places heavily frequented by tourists are particularly relevant for mobility stations, as these have a high demand for various mobility services. During the planning phase of new neighbourhoods, areas can already be designated the construction of mobility stations (Verkehrsclub Deutschland e.V. (VCD) 2019, p. 2).

Fundamentally, the function to be fulfilled by the station should be analysed and evaluated in the respective context during the planning process. The function of the mobility station can be based on both the spatial location and the main target group, as shown in Table 1.

**Table 1: Definition of Mobility Options according to Location and Main Target Group**

	Location		Main Target Group
	Urban, dense Area	Rural Area	
Function	Regionally important transport stations		Commuters and employees as well as tourists and business travellers
	Residential station in the area		Residents
	Work site-related station in industrial parks		Employees

Source: Jung and Koldert (2019, p. 6)

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Until a few years ago, mobility stations were often classified as small, medium, or large stations depending on the amount of equipment (Stein and Bauer 2019, p. 18), but a trend reversal toward classification according to different spatial categories has now become established. Sonja Rube, representative of the planning office USP Projekte GmbH, described in an interview on the research project „City2Share“ and the construction of mobility stations in Munich that, irrespective of the size of a station, the equipment requirement depends in particular on whether the station is a starting point, connection point or destination. A mobility station located in a residential area thus faces different requirements than a station in a commercial area. Especially in residential areas, mobility stations are not only considered to have a functional purpose, but also a role in the spatial evaluation. Sufficient parking space for larger bicycles (e.g., cargo bikes) as well as baby carriages, walkers, and other mobility aids should be provided for mobility stations in residential neighbourhoods in order to accommodate the diverse needs of residents (VCD 2019, p. 3). With regard to spatial requirements and equipment features, mobility stations in rural areas or urban peripheries face particular challenges, as confirmed by the exchange with stakeholders from different

projects (Klein-Hitpaß, personal interview, 21.02.2022). In this context, park & ride functions and the linking of individual and public transport are becoming increasingly relevant (Jung and Koldert 2019, p. 14). In contrast to the lucrative sharing offer in densely populated areas, the use of on-demand services and a stronger electrification of individual transport instead of the expansion of public mobility stations might be more suitable in rural areas with potentially lower demand.

### Equipment

Various methods are possible for categorising the equipment features of mobility stations. This report distinguishes between physical infrastructure features and elements for linking mobility services. The following primarily physical infrastructure features represent possible components of a mobility station (Landeshauptstadt Kiel 2016, pp. 9-10; Jung and Koldert 2019, pp. 8-9; Kassel 2014, p. 8):

- Bicycle parking facilities (weather-protected and specially secured facilities can provide further incentives)
- Free services to increase the attractiveness, awareness, and comfort of the station: WIFI, equipment for bicycle repair, toilet, seating options (possibly charging options for pedelecs, e-bikes and other electrified

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<sup>4</sup> In their discussion paper, Jung and Koldert (2019, p. 8), for example, make a classification according to transport-relevant characteristics, which are closely linked to the mobility offer, and transport-independent characteristics. Other institutions choose a classification based on mobility needs such as private transport, local mobility or service offers (Landeshauptstadt Kiel 2016, p. 7-10).

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small vehicles

- E-charging station for electrified cars
- Ticket vending machine
- Service point with mobility advice and ticket sales
- Lockers
- Kiosk or snack vending machines<sup>5</sup>
- Parcel station
- Digital information terminals (integration of information on connection options, tourist information, etc.)

Elements for linking means of transport and mobility offers can include (Landeshauptstadt

Kiel 2016, p. 7-9):

- Taxi stand
- Long-distance bus stop
- Stop for public transport (or supra-regional transport)
- Park & Ride spaces (particularly important as an interface for mobility stations in urban peripheral locations)
- Short-term parking spaces for carpooling (also known as Kiss & Ride)
- Parking spaces for car sharing
- Parking spaces for bike sharing (including pedelecs and cargo bikes)

## Integration of Parcel Stations

By integrating parcel lockers into a mobility station, daily trips can be combined with the collection of parcels and thus bundled. Due to the COVID-19 pandemic, the parcel volume of the courier, express and parcel services industry increased by 10.9% in 2020 compared to 2019, which corresponds to an average shipment volume of around 13 million parcels daily (Bundesverband Paket & Express Logistik (BIEK) 2021, p. 6). By 2025, the BIEK's "CEP Study 2021" (2021, p. 7) expects a shipment growth of 7% per year to 5.68 billion shipments.



Image Source: Henrik Schmidt, GIZ China

In particular, business-to-consumer deliveries are the main driver of growth and recorded a rise of 19.7% in 2020 due to the increase in online retailing (BIEK 2021, p. 6). In addition to the opportunity of contactless deliveries, parcel stations would especially counteract the growing number of second or third delivery attempts and thus have a positive impact on traffic volumes, especially in residential areas (VCD 2019, p. 3).

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<sup>5</sup> According to Jung and Koldert (2019, p. 9), the integration of a kiosk represents a social meeting point in addition to the pure shopping opportunity and can contribute positively to the perception of safety. Such offers, which aim to increase the quality of stay, are relevant if longer waiting times at the station are expected or a high passenger volume is predicted (Jung and Koldert 2019, p. 13).

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A modular structure of the mobility station enables a cost-effective design that can be flexibly adapted to local requirements and can also be expanded progressively. Individual elements can thus similarly be reduced with little effort (Kassel 2014, p. 6; Stein and Bauer 2019, p. 32). In addition, modular kits do not require extensive civil engineering work, so that a fast and cost-effective construction can be guaranteed (Kliesow et al. 2020, p. 29). The uniform design of a mobility station (and, if applicable, of a corresponding brand) within a certain spatial area is decisive for the recognition value of the stations. Furthermore, a uniform design creates attention for the new mobility offer and facilitates a connection of the users with the product, which promotes multiplier effects in favour of a climate-friendly mobility service provider (Zukunftsnetz Mobilität NRW 2017, p. 9). Holistic marketing campaigns, in the case of the Dresden MOBIpunkte combined with a uniform design on numerous channels, can significantly strengthen brand awareness (Escher, personal interview, 09.03.2022).

**„Mobility doesn't stop at the municipal boundary; traffic flows in the region must be viewed holistically.”**

Matthias Kassel,  
City Offenburg

The marketing of local transport infrastructures in cities and municipalities is associated with very different formats, narratives and challenges. While a strong focus on urban identity can promote the recognition value of mobility stations and their use, this makes the marketing integration into a broader mobility network and the connection of the core city and surrounding areas more difficult. (Zukunftsnetz Mobilität NRW 2017, p. 43). At this point, the case study of Offenburg shows the added value of a neutral brand name: When the first mobility stations were set up in Offenburg, it was not yet foreseeable that the network would be extended to surrounding districts. However, the neutral brand name „Einfach mobil“ (“Simply mobile”) made it possible to expand the network without changing the brand identity.

### **Carsharing**

As a potential equipment feature, the offer of car sharing can be differentiated into two types: While station-based systems allow the vehicle to be returned only at certain locations, a free-floating system allows a vehicle to be parked freely within a delimited zone (Jung and Koldert 2019, p. 10). Depending on the spread of a car-sharing system, considerable savings potential can become visible.

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Zukunftsnetz Mobilität NRW (2017, p. 10) states that a carsharing vehicle used by 48 people can replace up to 20 private cars and thus significantly reduce parking pressure. In a study on carsharing at decentralized mobility stations in connection with the elimination of private cars, Czarnetzki and Siek (2021,

p. 77) found that especially permanent, reserved parking spaces for carsharing in neighbourhoods with high parking pressure have a positive effect on user perception. For a detailed practical report on the effects of carsharing in Bremen, see Schreier et al. (2017).

## Integration of Renewable Energies

The construction of mobility stations also offers the opportunity to create interfaces between the energy supply of the stations, charging stations and their (renewable) energy generation. Approaches to sector coupling can be found, for example, in the installation of photovoltaic systems on the roofs of bus stops (VCD 2019, p. 4), as has been tested at Berlin Südkreuz station as part of DB Station & Service AG's intelligent mobility stations.<sup>6</sup>

In the future, the research and development of mobility stations as energy supply interfaces offers the potential to relieve the electricity grid through load shifting and to promote solutions for the intermediate storage of energy (Pieniak, personal interview, 07.02.2022).



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<sup>6</sup> The final report on the construction of an “intelligent mobility station” at Südkreuz station in Berlin by DB Station & Service AG et al. (2016) highlights various aspects and findings on the topic of sector coupling at mobility stations.

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## 2.3 Implementation

Following the planning and conceptual design of a mobility station, next steps are depicted by the construction and active communication of multimodal mobility. The subsequent points highlight key aspects of the implementation process.

### Civic Participation<sup>7</sup>

The participation of citizens in the design of public space can make a decisive contribution to the acceptance of mobility stations. Particularly in areas with high parking pressure and challenging space acquisition, residents should already be involved in the conceptual design of the stations (Zukunftsnetz Mobilität NRW 2017, p. 46). The early inclusion of citizens in the implementation process not only ensures them that there will be a guaranteed future mobility offer, but further increases the popularity of the project as well as provides the opportunity to clarify any questions in advance.

### Usage Impediments

Whereas the general awareness of citizens with regard to land-use competition in public space has grown in recent years (Klein-Hitpaß, personal interview, 21 February 2022), there are further hurdles to be overcome with regard to the supply and demand of public transport.

**„Multimodal offers are a product in need of further awareness-raising.“**

Maximilian Escher,  
Dresdner Verkehrsbetriebe AG

To further reduce barriers to utilisation, Zukunftsnetz Mobilität NRW (2017, p. 50) recommends „permanently ensuring the simple and easy usage of the services“. Above all, the large number of tariff areas and price levels continues to be a major hurdle for the implementation of stations integrated into a broader mobility system (Korte, personal interview, 08.02.2022). Meanwhile, aspects of accessibility should be considered from the beginning. On the one hand, mobility services must be accessible to non-tech-savvy users, so that the possession of a smartphone is not a basic prerequisite for using them. On the other hand, the implementation of the mobility station requires a constant exchange with organisations for barrier-free accessibility and other interest groups, since the stations often extend into pedestrian areas and thus represent potential dangers for vulnerable user groups, such as visually impaired people and people with walking difficulties (Fiedler, personal interview, 09.03.2022).

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<sup>7</sup> Specific cases and tips for the implementation of citizen participation can be found in the discussion paper “Bürgerinnen und Bürger an der Verkehrswende beteiligen” (Citizens’ participation in the transport transition) in the course of the project “City2Share of Stein and Bauer (2020)”.



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## **Communication and Marketing**

When communicating about the conceptual planning up to the construction of a mobility station, it is crucial to use the chosen narrative to not emphasise losses, such as the elimination of parking spaces, but rather capitalise on the advantages gained, including the attractiveness of the location and the availability of a versatile mobility offer. Especially in discussions with representatives from densely populated municipalities it became clear that advantages must not only be communicated quickly, but also be visible to the citizens (Klein-Hitpaß, personal interview, 21.02.2022). In addition, mobility stations should be promoted within the existing mobility offer in order to increase their visibility. Kliesow et al. (2020, p. 32) recommend advertising the mobility station at three points in time: before the start of operation, to show the added value for the users; at the opening, to make the station known and, if necessary, to provide additional incentives through discounts and finally, during the operation of the station, to strengthen the visualisation of the mobility offer for the users.

In order to create easy access to the mobility offers, the services should be made available on one joint platform through integrated planning and coordination, that acts as an interface between customers and the numerous providers.

## **Evaluation**

Once the mobility stations have been set up and put into operation, data collection and evaluation offer great added value in order to analyse the effect and uptake of the offer, and to make appropriate adjustments to the equipment if necessary. While an evaluation within the first year can mainly contribute to the publicity of the concept, an assessment after two to three years enables the investigation of actual effects and changes in mobility behaviour (Kassel, personal interview, 04.02.2022; Fiedler, personal interview, 09.03.2022). Meanwhile, the expert exchange revealed that in most previous mobility station projects in Germany, evaluation after their construction still does not represent an integral part of the implementation phase. On the contrary, there is often a lack of concrete usage data and clear potential for improvement of comprehensive impact analyses.

## 3 Findings

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Based on the tangible project experiences and participation in the establishment of mobility stations, the exchange with representatives of various urban and transport planning institutions provided important insights into the current challenges and perspectives of intermodal mobility. In the following, the most important findings are presented in thematic clusters.

**„How can we develop new financing models for public transport and promote the development of mobility stations, even at the expense of private motorised transport? [...] Individual factors alone cannot determine the transport transition; it must be the overall construct that can ultimately achieve and shape it.“**

Gregor Korte,  
Planersocietät

### **Conceptual Design and Implementation of Construction Projects:**

In the future, mobility stations should be actively considered in urban and transport planning and, in particular, included in the planning of new neighbourhoods as regards parking space and mobility management. In this context, the expert exchange has shown the trend shift towards planning according to spatial categories. Accordingly, mobility stations are no longer designed in station sizes (small/medium/large), but functionally according to needs in the local context.

### **Availability and Attractiveness:**

The mere existence of a mobility station is not sufficient to significantly change the modal split. In order to motivate people to use sustainable mobility services, a critical mass of stations and shared vehicles is necessary. In addition, further measures need to be taken to advance the modal shift. Besides the creation of a diverse mobility offer, this also includes the de-attractivisation of private transport.

**„The findings of the Munich City2Share project illustrate: A critical mass of vehicles and stations is needed to even presuppose the idea of switching.“**

Sonja Rube,  
USP Projects GmbH

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**„The ideal mobility station is tailored to the space, so it looks different in the city centre than in the countryside. It is oriented towards the users and less towards the ideas of the planners. It's about creating a mobility offer that actually makes people more mobile, and not just generates profit..“**

Victoria Langer,  
German Institute of Urban Affairs gGmbH

### **Utilisation and Evaluation:**

An early and high-profile evaluation of the project can have a positive effect on the perception and intensity of use, and provide a better overview of the demand for certain mobility offers. Aspects of infrastructural and digital accessibility should be considered from the beginning of the planning, and the (tariff-based) integration of the station offers into existing public transport networks should be strived for.

### **Profitability:**

When taking a holistic view of the transport situation, it should also be discussed to what extent each individual mobility station has to be economically profitable or whether the network of different locations should rather be evaluated from a macroeconomic point of view. Besides, rural areas in particular, and subsequently also mobility stations in peripheral urban areas, will play an important role as reliable connection points to urban areas, which, however, will be accompanied by spatially specific challenges.

**„Of course, the question is whether every single mobility station or vehicle has to be profitable, or whether service providers should subsidise less profitable ones with more cost-effective locations.“**

Norman Pieniak,  
Reiner Lemoine Institute gGmbH

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### Intermodal mobility of the future:

In the course of the interviews, all representatives were asked for their assessment of the „ideal mobility station of the future“. The diverse answers reflect a varied mood. While on the one hand, existing mobility offers were described as already sufficient, on the other hand, the existence of a singular „ideal“ mobility station was completely denied. In contrast, interviewees rather pointed at the importance of integration into specific cityscapes with con-

text-dependent functions. At the same time, the respondents named a number of equipment modules and features that can be considered criteria for accessible, sustainable and attractive mobility stations. In addition to the physical infrastructure, aspects of digital integration were also mentioned, e.g. the usage of smart technologies to automatically recognise usage patterns and increase the corresponding supply for vehicles. Some key terms used in the discussions are illustrated in the following diagram.

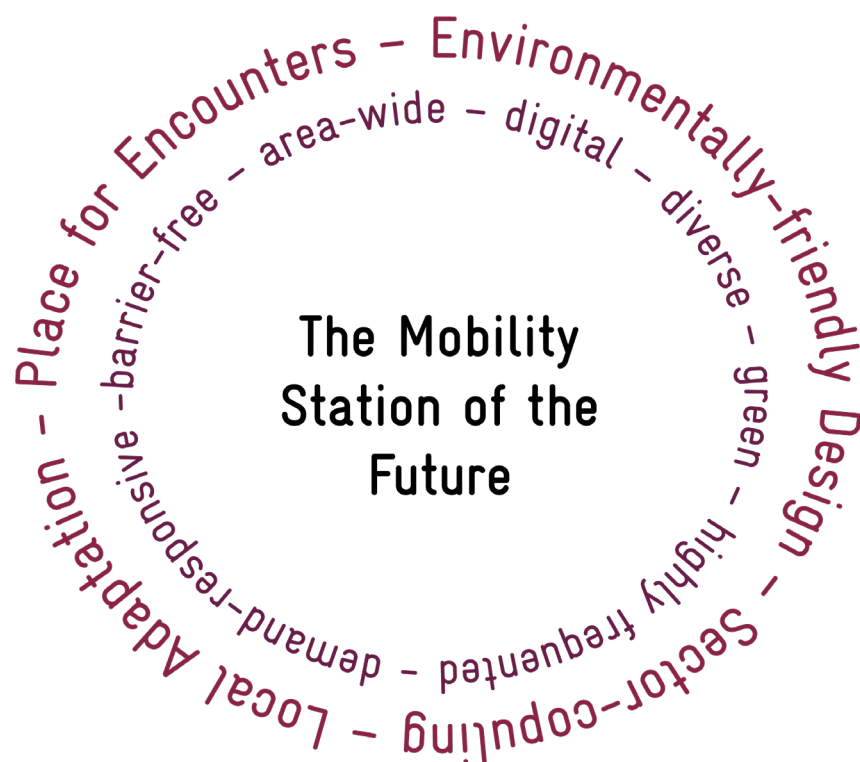


Figure 5: The Mobility Station of the Future,

Source: Own illustration

## 4 Conclusion

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The increased expansion of intermodal mobility offers is not only reflected in the projects and initiatives from all over Germany on which this report is based, but also reflects a dimension of the transport transition in a global context. Although the concept or terminology of the „mobility station“ has not yet established itself in some countries, similar offers of intermodal mobility already exist under a different guise. The explicit marketing of mobility stations in a uniform design can undoubtedly contribute to increasing their recognition value and to a higher frequency of use. At the same time, the added value and effects of newly built mobility stations, according to the expert exchange, depend directly on sustainable change of behaviour and greater awareness of the implications of individualised transport patterns. Inclusive planning, participation of relevant actors and conceptualisation according to local needs represent important steps to generate a high acceptance of new mobility concepts. In the meantime, there is a demand for even more evaluation and data collection in order to assess the emerging infrastructures with regard to their economic efficiency, use and need for improvement and to develop

them further accordingly. In the future, the focus of development will go beyond the individual mobility station as the object of study to its integration into an overall transport concept. Both the handling of land use competition, particularly relevant for urban areas, and the linking of urban and suburban areas as well as the implementation of intermodal mobility in rural areas require further in-depth accompanying research and public discussion. In this context, the commitment and the existing initiatives for a diversified mobility offer serve as relevant signposts for how sustainable intermodal mobility can be shaped not only in the future, but are already existing today.

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