

Technical training.
Product information.

G30 Navigation System



BMW Service

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BMW Group University
Technical Training

ST1604

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General information

Symbols used

The following symbol is used in this document to facilitate better comprehension or to draw attention to very important information:



Contains important safety information and information that needs to be observed strictly in order to guarantee the smooth operation of the system.

Information status and national-market versions

BMW Group vehicles meet the requirements of the highest safety and quality standards. Changes in requirements for environmental protection, customer benefits and design render necessary continuous development of systems and components. Consequently, there may be discrepancies between the contents of this document and the vehicles available in the training course.

This document basically relates to left hand drive vehicles. Some operating elements or components are arranged differently in right-hand drive vehicles than shown in the graphics in this document. Further differences may arise as the result of the equipment specification in specific markets or countries.

Additional sources of information

Further information on the individual topics can be found in the following:

- Owner's Handbook
- Integrated Service Technical Application.

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The information contained in this document forms an integral part of the BMW Group Technical Qualification and is intended for the trainer and participants in the seminar. Refer to the latest relevant information systems of the BMW Group for any changes/additions to the technical data.

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Technical training.

G30 Navigation System

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G30 Navigation System

1. Introduction

1.1. New features in the G30

The G30 is based on the technology that was introduced in the 7 Series. This training manual describes the new features or changes when compared to the G12.

The table below lists the new features and changes in the G30 compared to the G12:

Function/component	New feature/change
Navigation system 	<ul style="list-style-type: none">• ParkNow• Parking information

1.2. Further information

The functions in the G30 are based to a great extent on those of the G12. the following table provides a more in-depth overview:

Function	Technical Reference Manual
Navigation map update	<ul style="list-style-type: none">• ST1610 Infotainment 2016• ST1501 G12 Information and Communication section Telephone and Telematics Systems
Navigation system	ST1501 G12 Information and Communication section Navigation

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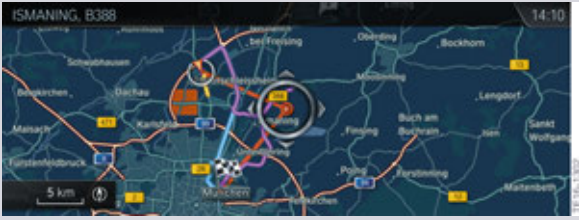

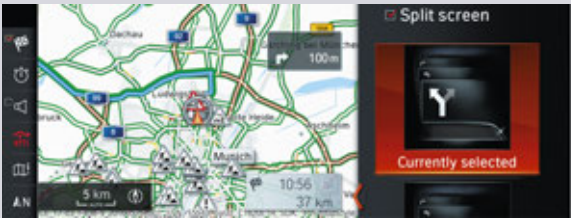
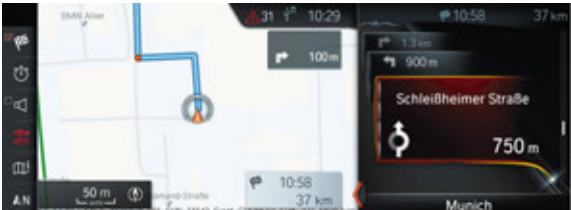
2. Navigation

2.1. Functions

All the functions are already familiar from the G12.




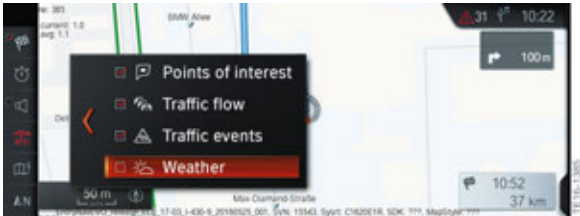
2.1.1. Features of the Headunit High 2

The table below provides an overview of the functions of the Professional Navigation System (OE 609):

View	Description
<p>Route magnet</p> 	<p>The current route guidance can be modified if navigation is active.</p>
<p>Quick search</p> 	<p>The quick search can be used to find special destinations or addresses by input.</p>
<p>Assistance window</p> 	<p>Further information can be displayed in the assistance window of the split screen display.</p>
<p>Roadbook</p> 	<p>The routing, including junction and additional information is displayed in the assistance window.</p>


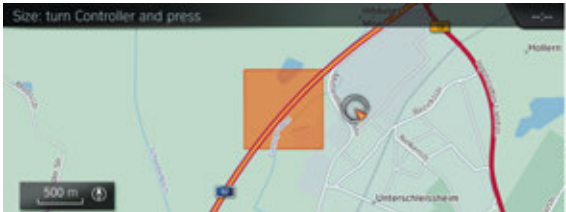

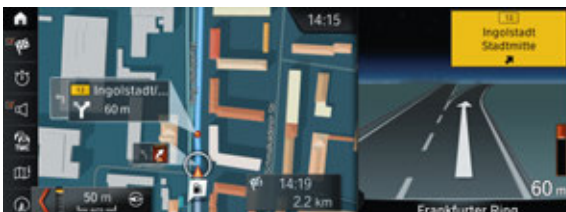
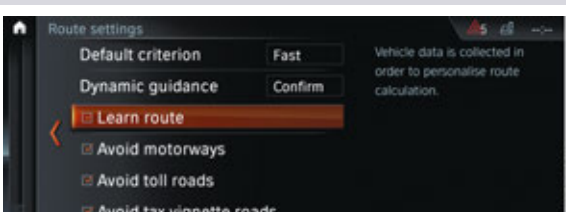
G30 Navigation System

2. Navigation

View	Description
<p>3D view</p> 	<p>The buildings in selected cities are shown in a 3D view.</p>
<p>Auto zoom</p> 	<p>In active route guidance, the map is automatically zoomed as a junction is approached.</p>
<p>RTTI</p> 	<p>The current traffic flow is shown in different colors.</p>
<p>Weather in map</p> 	<p>The current weather is displayed on the map.</p>

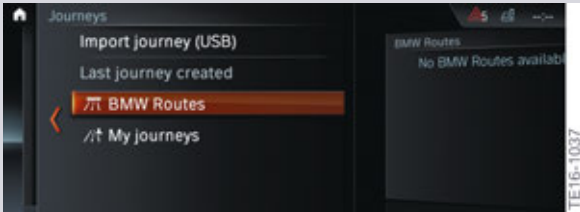
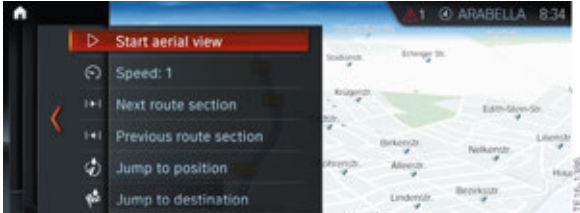
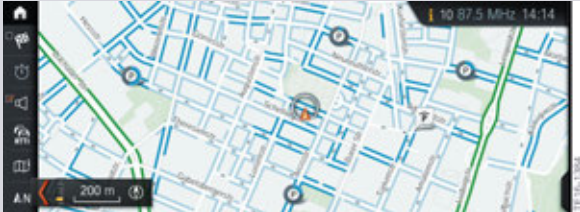
G30 Navigation System

2. Navigation

Function	Graphic
Satellite view	 A satellite view of a road network in a mountainous region. The map shows a complex network of roads, with a red line indicating the current route. The terrain is hilly and green, with some buildings and infrastructure visible. The interface includes a scale bar for 2 km and a vertical label 'TE16-1035' on the right side.
Areas to avoid	 A map showing a specific area highlighted in orange to indicate a route to avoid. The map includes a scale bar for 500 m and a vertical label 'TE16-1036' on the right side. The text 'Size: turn Controller and press' is visible at the top.
Detailed street view	 A 3D street view of a city intersection. The view shows buildings, trees, and street names like 'Spur Rd' and 'Constitution Rd'. A scale bar for 25 yd is visible. The interface also shows a frequency of 87.5 MHz and a time of 15:01. A vertical label 'TE16-0946' is on the right side.
3D exit	 A 3D view of a road exit. The map shows a road leading to 'Ingolstadt Stadtmitte' and 'Frankfurter Ring'. A scale bar for 50 m is visible. The interface also shows a time of 14:15 and a distance of 2.2 km. A vertical label 'TE16-0947' is on the right side.
Online routes	 A screenshot of the 'Route settings' menu. The 'Online routes' option is selected and highlighted in orange. Other options include 'Default criterion' (Fast), 'Dynamic guidance' (Confirm), 'Learn route', 'Avoid motorways', and 'Avoid toll roads'. A vertical label 'TE16-0948' is on the right side.
Learning navigation (online)	 A screenshot of the 'Route settings' menu. The 'Learn route' option is selected and highlighted in orange. Other options include 'Default criterion' (Fast), 'Dynamic guidance' (Confirm), 'Avoid motorways', 'Avoid toll roads', and 'Avoid tax vignette roads'. A vertical label 'TE16-1038' is on the right side.

G30 Navigation System

2. Navigation

Function	Graphic
BMW Routes including importing and saving routes	
Aerial view	
Parking information	

2.1.2. Route guidance

If route guidance has been interrupted, the message asking whether the route guidance should be continued is only displayed under the following conditions:

- The interruption lasted longer than 15 minutes.
- The current vehicle location is more than 300 m from the destination.

G30 Navigation System

2. Navigation

2.1.3. Turn-off recommendation

The turn-off and lane recommendations are not only displayed in the assistance window. The turn-off information and lane recommendations are also shown in the navigation map if autozoom with information is active.



G30 turn-off recommendation

Index	Explanation
1	Lane recommendation on the map
2	Turn-off recommendation on the map
3	Lane in which the vehicle is currently located
4	Turn-off recommendation in the assistance window
5	Lane recommendation in the assistance window

2.2. Navigation maps

The customer is given a three-year subscription for navigation map updates for both navigation systems (Professional Navigation System (OE 609). Furthermore, automatic updating of the navigation maps is available for both navigation systems. The prerequisite for this is a valid BMW ConnectedDrive contract (OE 6AK).

The following table features an overview of the navigation system in the G30:

Navigation system	Headunit	Map data	Variable
Professional Navigation System (OE 609)	HU-H2	EVO	32 GB

G30 Navigation System

2. Navigation

2.3. Update options

2.3.1. Overview

The following options for updating the navigation maps are available:

- Automatic updating
- Updating during service
- Updating by the customer

2.3.2. Automatic map data updating

The prerequisite for automatic updating of the navigation maps is a valid ConnectedDrive contract.

The region for automatic navigation map updating is set in the ConnectedDrive portal.

2.3.3. Enabling code

The enabling code for the navigation maps is 128 digits long for the headunit (HU-H2) (20 digits on older headunits). The enabling code is therefore no longer entered via the controller, but is provided on the USB stick together with the navigation maps.

Further information relating to navigation map updating may be found in the Aftersales Assistance Portal ASAP (Sweeping Technologies).

2.3.4. ConnectedDrive portal

The customer can download the navigation maps from the ConnectedDrive portal and upload them into the vehicle himself. A detailed description of this procedure may be found in the Training Reference Manual "ST1610 Infotainment 2016".

G30 Navigation System

3. ConnectedDrive

3.1. ParkNow



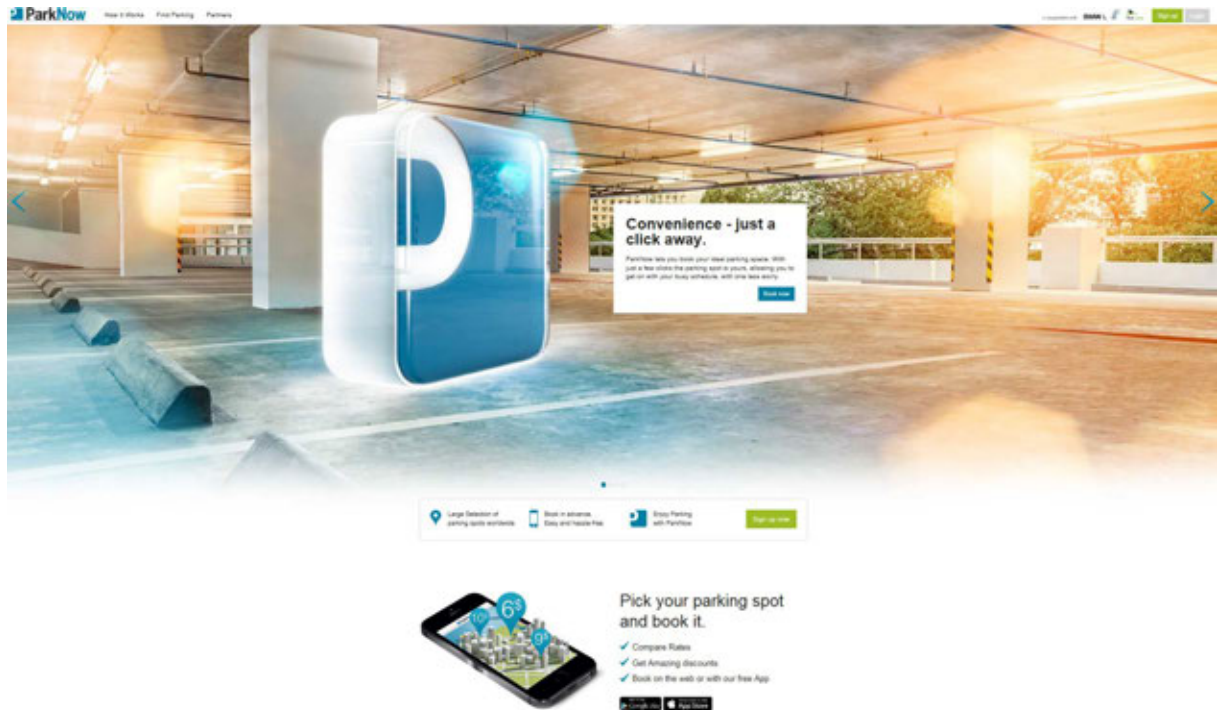
G30 ParkNow App.

ParkNow displays parking availability in the surrounding area and permits cash-less and ticket-less parking on the street and in multi-storey parking garage. The parking process can be started and ended via the controller with a start and stop function that is accurate to the minute. The parking process is automatically started and stopped in multi-storey parking garage on entrance and exit. Access to the multi-storey car park is ensured either by number plate recognition or using the ParkNow customer card.

For more information regarding ParkNow please visit <https://www.park-now.com>

G30 Navigation System

3. ConnectedDrive



ParkNow web site

A distinction is made between the following parking processes in ParkNow:

- Parking in metered on-street parking areas
- Parking in multi-storey parking garage or underground parking garage
- Reservation of a parking space in multi-storey parking garage

ParkNow is a function that can be used from the ConnectedDrive menu.

BMW is offering ParkNow for the first time in the G30; further vehicles will also be given the function later date.

The following vehicles **will not** have the ParkNow function:

- F07
- F10

BMW i models will not get ParkNow until **a later**:

- I01 (November 2017)
- I12 (March 2018)

ParkNow starts in the USA with the G30 however other BMW models will not get the function until March 2017.

G30 Navigation System

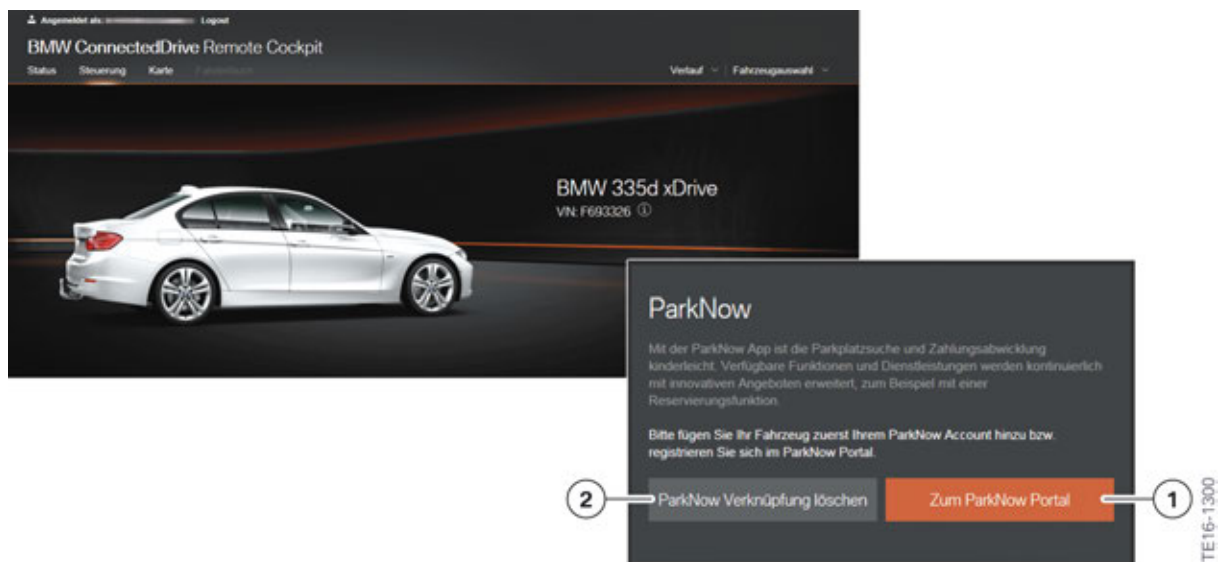
3. ConnectedDrive

3.1.1. Registration

ParkNow only works in the vehicle if an active ConnectedDrive contract (6AK BMW Online and BMW Apps) is ordered. However 6AK BMW Online and BMW Apps is standard equipment on the US version G30.

The driver must first register with ParkNow and ConnectedDrive and then link the two accounts in order to be able to use ParkNow. There are two options available for the registration process:

- Registration with ParkNow and subsequent linking to the Connected Drive account.
- Start ParkNow registration via Connected Drive.



ParkNow registration via the ConnectedDrive portal

Index	Explanation
1	Delete ParkNow link
2	ParkNow portal

G30 Navigation System

3. ConnectedDrive

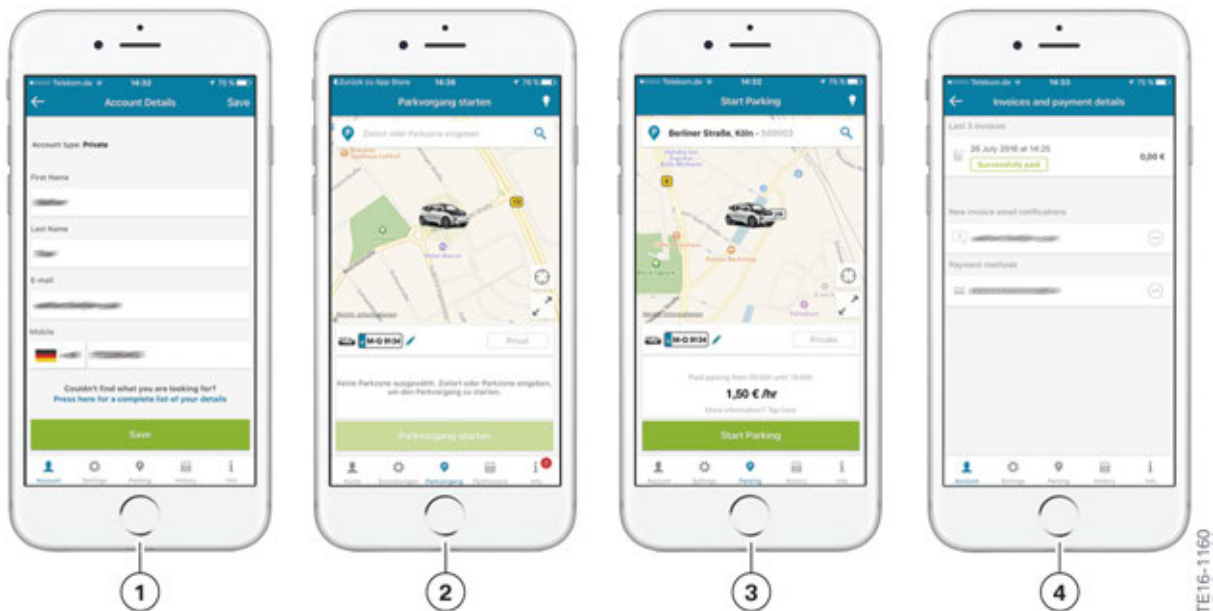


ParkNow login via BMW ConnectedDrive Sign in

Payment data is specified during ParkNow registration. Available payment options are direct debit, credit card or PayPal.

3.1.2. ParkNow app

ParkNow can also be used on a smartphone; the ParkNow app must be installed for this.



ParkNow app

G30 Navigation System

3. ConnectedDrive

Index	Explanation
1	Registration
2	Select destination or parking zone
3	Start parking
4	Payment process

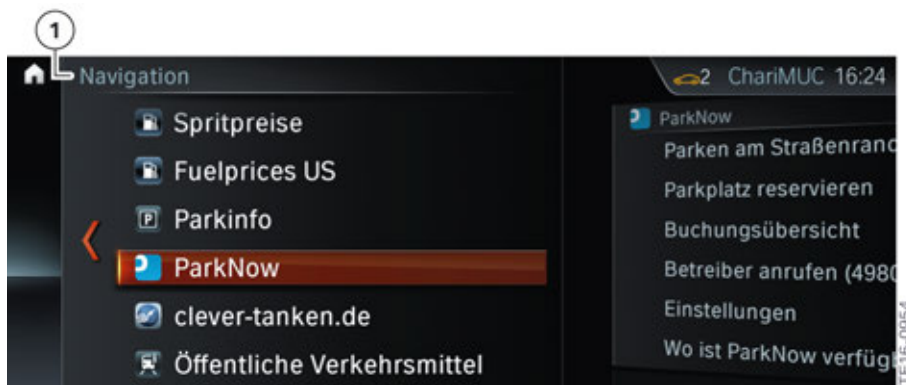
3.1.3. Menu

The ParkNow function can be launched from a number of menus in the vehicle:

- Navigation menu
- ConnectedDrive menu

Navigation menu

ParkNow is started from the Navigation menu.



G30 ParkNow navigation

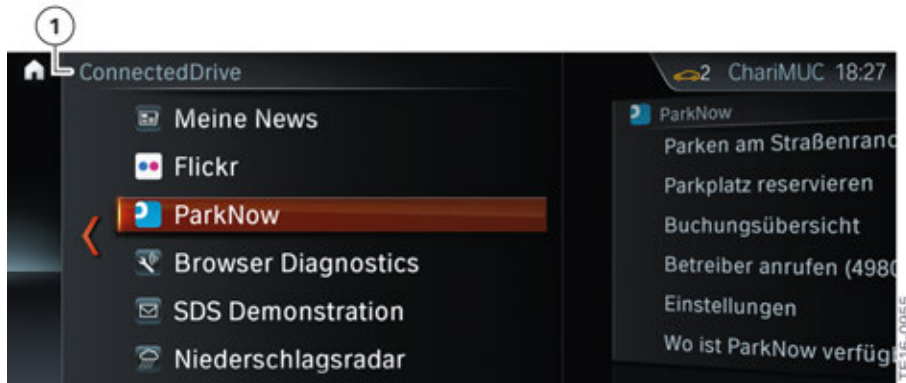
Index	Explanation
1	Navigation menu

G30 Navigation System

3. ConnectedDrive

ConnectedDrive menu

ParkNow can also be accessed via the ConnectedDrive menu in the vehicle.



G30 ParkNow ConnectedDrive

Index	Explanation
1	ConnectedDrive menu

3.1.4. Examples

Practical examples of ParkNow are described below:

On-street parking

The vehicle is parked in a metered on-street parking space (available from 3/17). ParkNow is selected in the vehicle and parking is started. It is planned that the ParkNow app will be used to pay for the service via “smart” parking meters installed on the street. Parking is ended automatically as soon as the vehicle travels at a speed in excess of 35 km/h. The parking fees are billed by cash-less methods as mentioned previously.

See the Parkmobile web site for further information regarding the on street parking transaction.

See the ParkNow web site for more information regarding the parking service app.

G30 Navigation System

3. ConnectedDrive



G30 ParkNow selection of metered parking space at the roadside

Index	Explanation
1	Pay for parking
2	Start parking time
3	Prompt to display a ParkNow badge in the vehicle (only in German market; in the US market payment is done via the App)
4	End parking

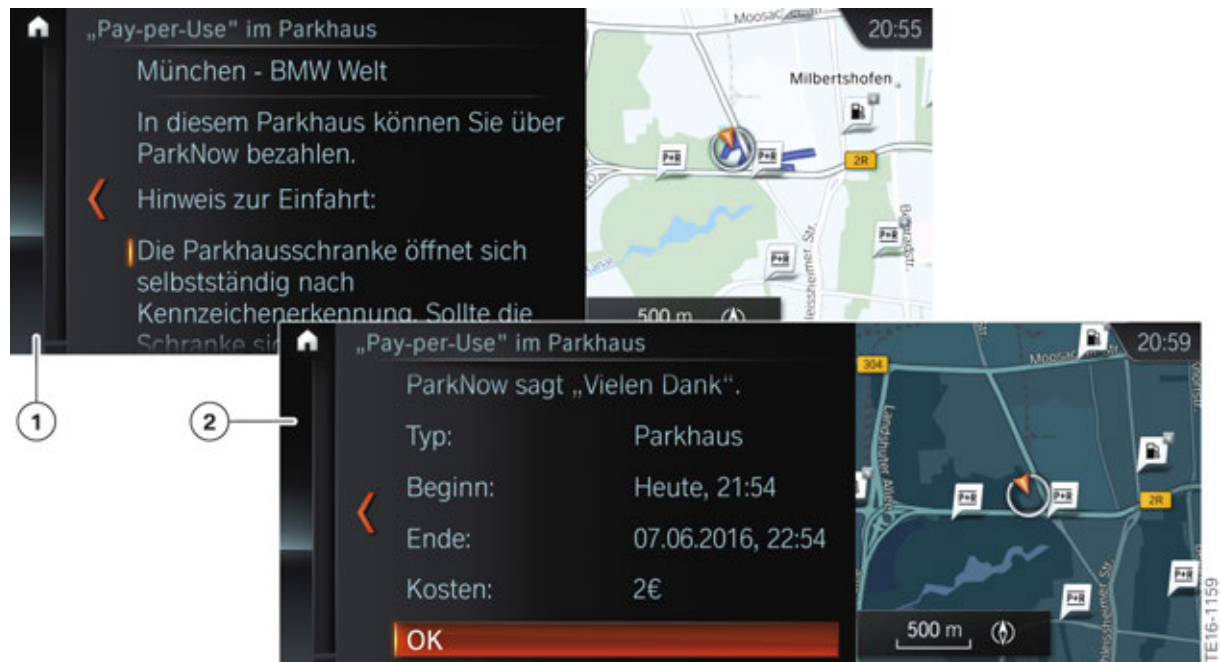
Parking in multi-storey parking garage or underground parking garage

If the multi-storey car park is a partner of the ParkNow program, the vehicle number plate will be captured by a camera and the barrier will open automatically as the vehicle enters. The parking time is started automatically at the same time. Partner multi-storey parking garage are identified on the navigation map with an asterisk.

G30 Navigation System

3. ConnectedDrive

Alternatively, the ParkNow customer card can be used if there is no number plate recognition facility.



G30 ParkNow parking in a multi-storey car park

Index	Explanation
1	Pop-up message on entering the multi-storey car park with information concerning the multi-storey car park
2	End parking with information relating to parking time and cost

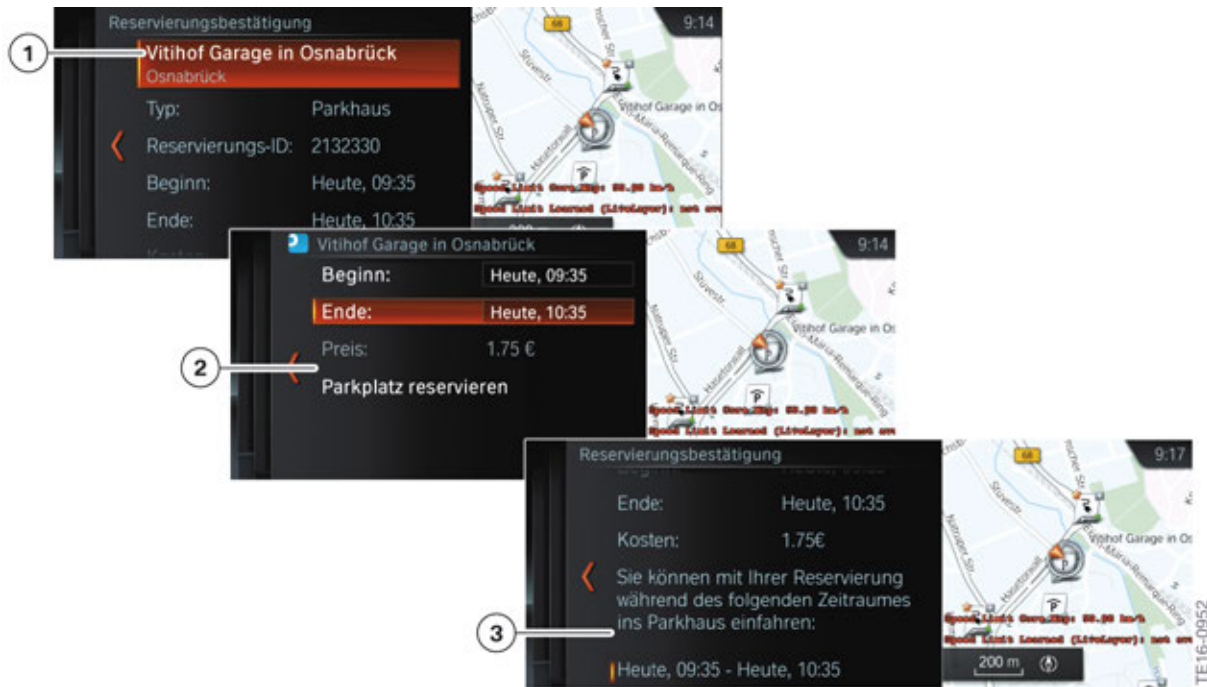
Reserve a parking space

In some selected partner multi-storey parking garage a parking space can be reserved in advance.

No particular parking space is assigned for a reservation, it merely means that a parking space is kept free in the multi-storey car park. Recognition and parking for a reserved parking space are identical to the procedure described above.

G30 Navigation System

3. ConnectedDrive



ParkNow parking space reservation

Index	Explanation
1	Select multi-storey car park
2	Information about a reservation
3	Reservation confirmation

3.2. Parking information

Parking information is a new function in navigation. The parking information is called “On-Street Parking Information” in the vehicle menu.

A probability of there being free parking spaces determined by calculating various values is shown on the navigation map. The data for this calculation is determined by Floating Car Data, among other parameters.

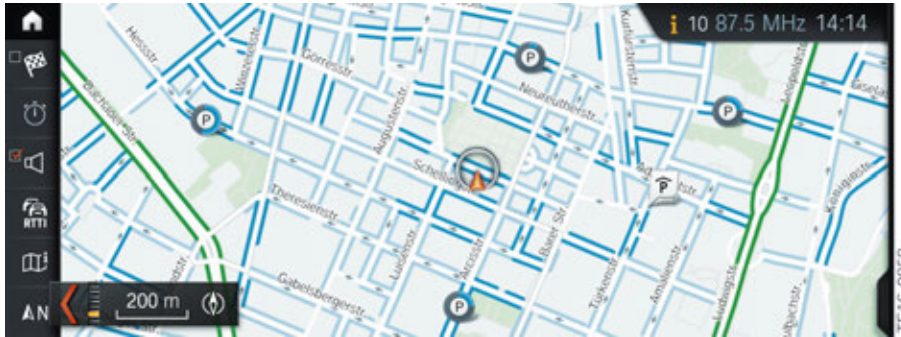
The vehicle must satisfy the following prerequisites which are standard on all G30 vehicles:

- Professional Navigation System (OE 609)
- Advanced Real time traffic information (OE 6AM)
- ConnectedDrive services (OE 6AK)

The scale for the navigation map must not be set to more than 500 m to allow an overview of the parking information to be displayed in the navigation map. The parking information is displayed for a radius of 2 km around the current position of the vehicle.

G30 Navigation System

3. ConnectedDrive

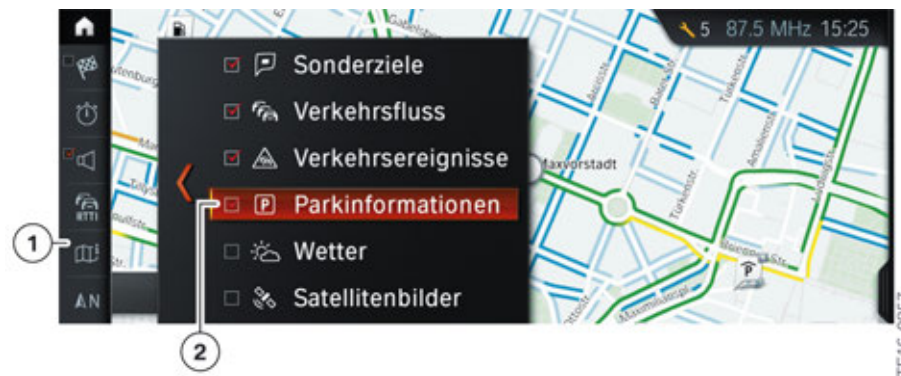


G30 parking information

Index	Explanation
Light blue	Medium probability of finding a free parking space (approximately 50%)
Dark blue	High probability of finding a free parking space (approximately 75%)

3.2.1. Activation

Parking information must be activated in the navigation system.



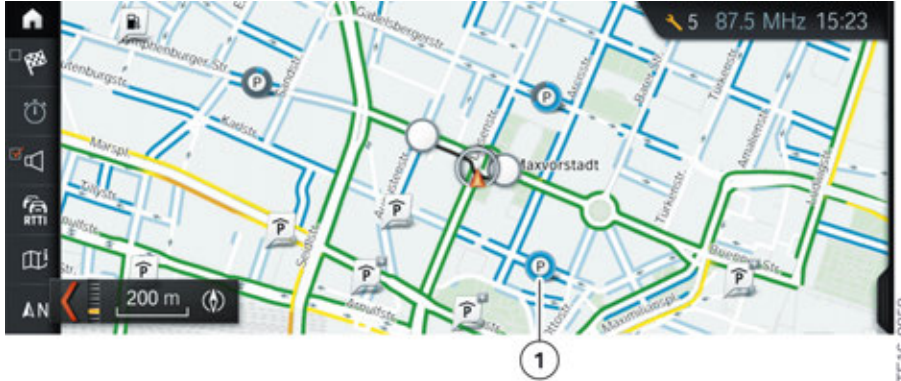
G30 activating parking information

Index	Explanation
1	Additional information on map
2	Parking information

G30 Navigation System

3. ConnectedDrive

3.2.2. Display



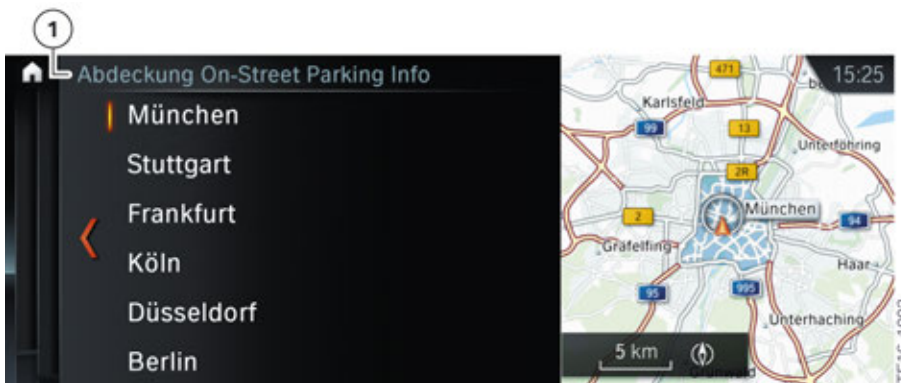
G30 DriveNow parking information

Index	Explanation
1	Time information concerning parking spaces freed up by DriveNow vehicles

A “P” in the map display indicates when a DriveNow vehicle leaves a parking space free. The circle around the “P” runs down, like a stopwatch. This lets you see how long ago the DriveNow vehicle left the space. A complete revolution of the circle takes 5 minutes.

3.2.3. Cover

Parking information is a ConnectedDrive service and is available in selected cities. You can call up a list showing these from the menu. At the start, parking information relates principally to a few major cities in Germany. The list can change at any time as this is a ConnectedDrive service. That means that further cities will follow.



G30 parking information cover

Index	Explanation
1	Parking information cover



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