BMW
Service Training

E65/E66 Navigation – BMW Online – Telematics Services
Seminar Working Material

NOTE

The information contained in this training course manual is intended solely for participants of the BMW Service Training course.
Refer to the relevant "Technical Service" information for any changes/ supplements to the Technical Data.

Contents

Introduction

The navigation computer in the E65/E66 is the control unit for three applications:

- Navigation

- BMW Online

- Telematics services

This description represents the status at the start of series production in 11/01.

This description supersedes previous preliminary descriptions.

Navigation

- Introduction

The navigation computer in the E65/E66 serves as a platform for navigation, BMW Online and telematics.

With regard to the navigation function, the navigation computer corresponds in principle to Mk-3 navigation computer introduced for model year 2001.

The following functions were additionally integrated:

- New, larger screen with 8:3 format
- Simultaneous map and arrow presentation modes
- Map and arrow presentation always possible in assistance window (also simultaneously with radio menu etc.)
- Faster new route calculation when deviating from planned route
- Map in antialiasing presentation mode
  (antialiasing = method of smoothing edges in graphics)
- Faster map build-up
- "Avoiding tolls" as a new routing criterion
- Multiple destinations can be grouped in a destinations list and selected one after the other
- Route information arrows, distance and name of the next street shown in instrument cluster
- Extended voice output
- Message list of traffic delays
- Direct destination home (also by voice command)
- Barring of individual roads or entire route sections
- Help texts for individual menu items
- Destination by voice input

As all information and communication systems, the control unit is connected to the MOST bus.

The navigation computer performs certain controller functions within the MOST network.

- Functions

Navigation display

The information is presented in the control display and the instrument cluster. The display window in the control display has been resized to a width-to-height ratio of 8:3.

KT-9367   KT-9683

Fig. 1:   Example of the navigation display in the instrument cluster and in the control display

Index	Description
1	Nibelungenstrasse 1.7 km
2	9800 m Munich Neuhauserstrasse Marienplatz 6500 m Weinstrasse
3	Map presentation mode

The navigation display is shown automatically in the instrument cluster when the navigation system is activated. The display in the instrument cluster **cannot** be switched off in navigation mode. The display of navigation information in the control display can be deactivated by selecting some other function.

Arrow and map presentation
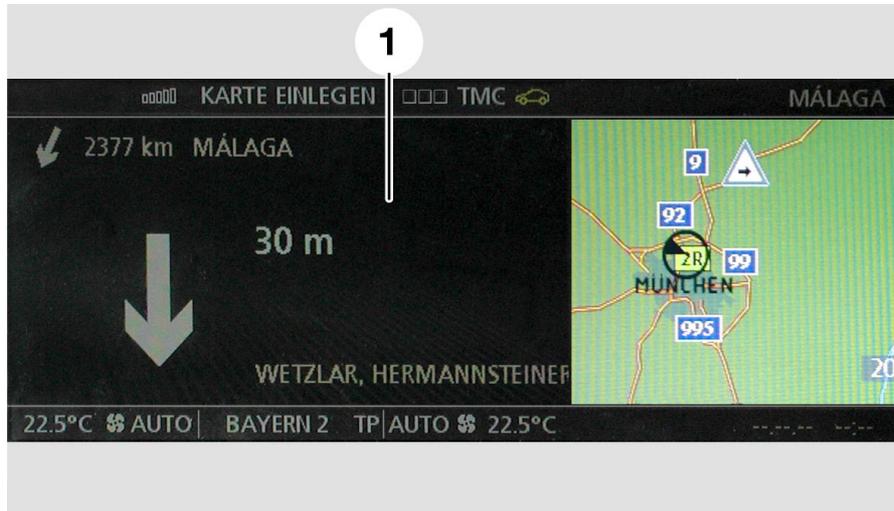
Fig. 2:   Simultaneous arrow and map presentation   KT-9674

Index	Description
1	2377 km MÁLAGA
	30 m
	WETZLAR, HERMANNSTEINER

Map presentation **or** arrow presentation is optionally also possible together with other functions (e.g. radio menu etc.) in the assistance window (right).

Fig. 3: Simultaneous radio and map presentation   KT-9679

Index	Description
1	Radio menu: FM... TP SCAN AM... T 01 ENERGY MD 02 FM 4 CD Memorized T 03 BAYERN 2 Memory stations T 04 BAYERN 3 Video T 05 ANTENNE

New route calculation

Faster new route calculation when deviating from planned route:

After entering the destination or deviating from the planned route, the entire new route is not planned before the next pointer but rather only a section.
As a result, the "next direction" is output at a faster rate.

Antialiasing

Map presented in antialiasing mode:

The image the map presentation is shown in a more brilliant format; the edges are represented more rounded (smoother).

Map build-up

Faster map build-up:

A hardware change in the navigation computer enables faster screen or map build-up.

Route criterion

"Avoiding tolls" as a new routing criterion

Fig. 4:   "Avoiding tolls" as a routing criterion

KT-9682

Index	Description
1	Destination input Destinations list Route guide Route selection Location
2	Using motorway Avoid motorways Fastest route Shortest route Avoid tolls

Individual list/destinations list

Up to 20 individual destinations can be grouped in a destinations list and selected one after the other
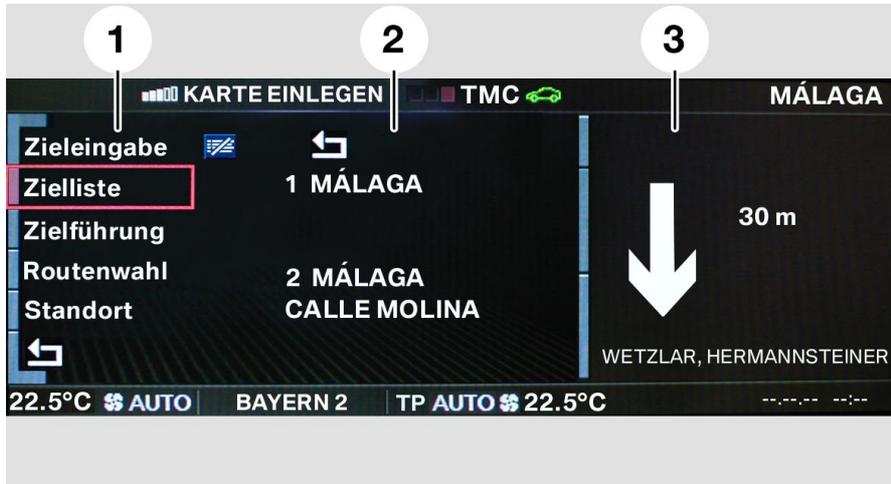
Fig. 5:   Individual destinations/grouped in destinations list   KT-9675

Index	Description
1	Destination input Destinations list Route guide Route selection Location
2	1 MÁLAGA 2 MÁLAGA CALLE MOLINA
3	30 m WETZLAR, HERMANNSTEINER

Information displayed in the instrument cluster

KT-9366

Fig. 6:   Information displayed in the instrument cluster

Index	Description
1	Name of street
2	Distance
3	Route indicator arrow

Route information arrows, distance and name of the next street are shown in instrument cluster

Extended voice output

Following information for example:
"Continue straight ahead. Follow the A9."

In this case, the extended voice output is: Follow the A9.

Message list of traffic delays

Fig. 7: Message list in control display   KT-9628

Index	Description
1	TMC station
2	Traffinfo Plus
3	Switch off
4	Message list A9: Nuremberg -> Munich A99: Salzburg (A) -> Stuttgart A8: Salzburg -> Munich
5	BMW ASSIST

For further information see chapter Telematics.

Direct destination

The direct destination "home" can now be selected by voice command.
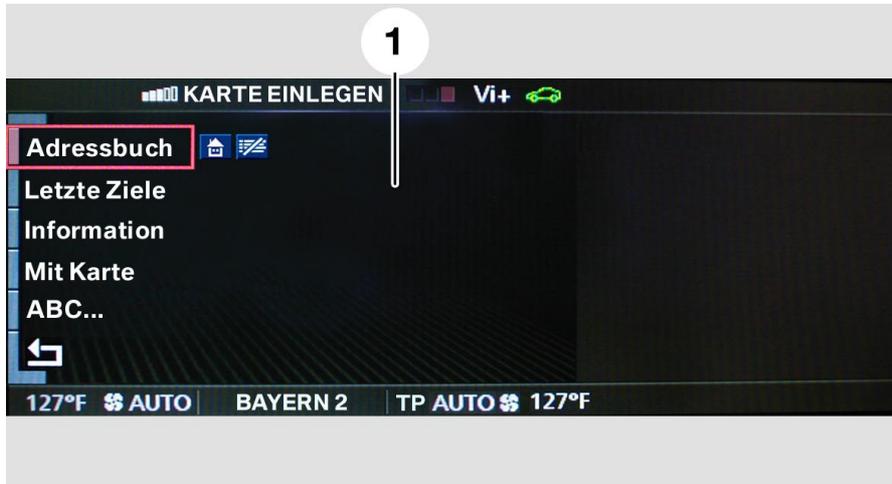
Fig. 8:   Direct destination home   KT-9676

Index	Description
1	Address book Last destinations Information With map ABC...
KT-9638	Show and change home address
KT-9639	Delete previous destinations list (active if list present)

Avoiding sections/routes

Fig. 9:   Avoiding sections/routes   KT-9695

Index	Description	
1	View	Avoid sections
	Destinations	Avoid route
	Route guide	
	New route	
	Detour	

Sections of a route that the customer does not wish to drive can be barred.

The term "avoiding route" makes it possible to recalculate a route with indication of the distance of the barred route from the current location.

Help texts

Fig. 10:   Help texts to the menu items in the assistance window (right)   KT-9737

Index	Description
1	Journey Start route guidance. Destinations entered in the destinations list will be reached in order.
2	View Destinations Route guide New route Detour

Destination by voice input

If the destination was programmed by voice input, this desti-
nation can also be selected by voice command.

Browser

- Introduction

The browser is part of BMW's Online car project.
The browser makes available to the driver information, services and e-mail facilities.

Extensive and new services will be offered at high speed in further project stages to comply with customer requirements for more information and flexibility on the road.

As of the E65 series production launch, this function will be available as an optional extra and initially in Germany only.
The market launch in all other European countries (with GSM networks) is planned for the end of 2002.

This application is implemented in the software of the navigation computer (in the same way as telematics, BMW ASSIST).
Apart from the required navigation system and telephone there are no further hardware components.

- System overview
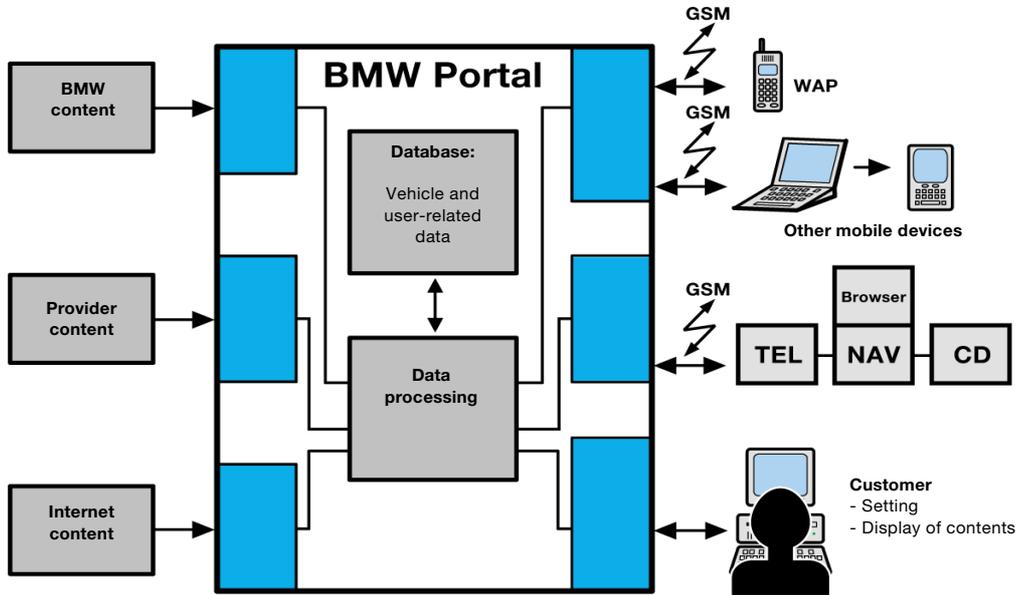
Fig. 11:   Browser system overview   KT-9313

Index	Description
BMW Portal	BMW Portal
CD	Control display
GSM	Global standard for mobile communications
NAV	Navigation system
TEL	Telephone
WAP	Wireless application protocol
Browser	Browser
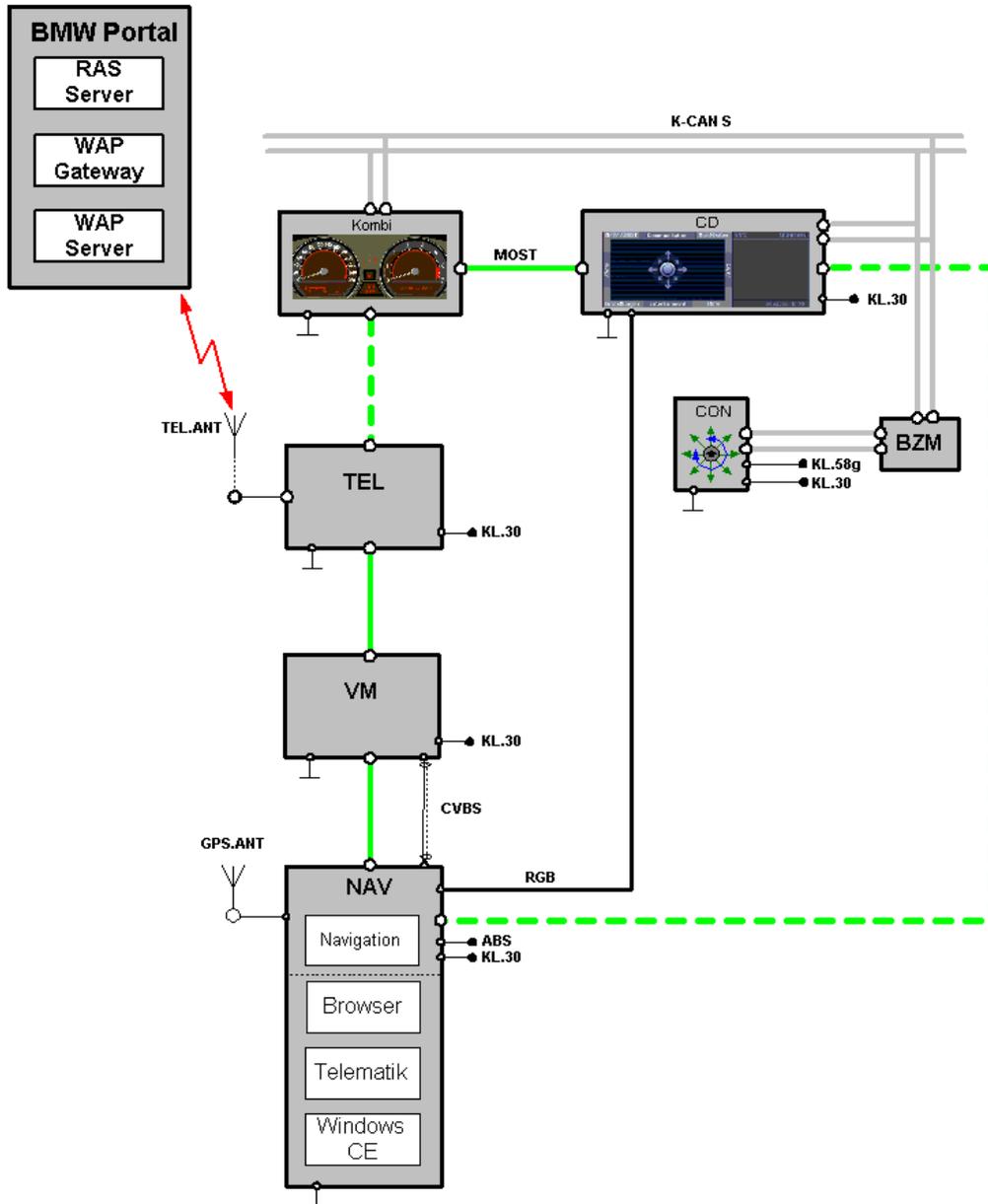
Fig. 12:   Block diagram - Integration of browser in BMW Online car project   KT-9653

Index	Description
ABS	Wheel speed signal
BMW Portal	BMW Portal
BZM	Centre console control centre
CON	Controller
CD	Control display
CVBS	Composite video burst sync signal
GPS.ANT	Global positioning system aerial
K-CAN S	Body controller area network system
KL.30	Terminal 30, power supply
KL.58g	Terminal 58g, lighting
Kombi	Instrument cluster
MOST	Multimedia oriented system transport
NAV	Navigation system
RAS	Remote access service
RGB	Colour information cable for video signals (red, green, blue)
TEL	Telephone
TEL.ANT	Telephone aerial
VM	Video module
WAP	Wireless application protocol

- Control philosophy

Screen configuration

The screen is divided into 3 windows:

- Button bar (left)

- RGB image (centre)

- Assistance window (right)

KT-9734

Fig. 13:   Screen configuration

Index	Description
1	Button bar
2	RGB image
3	Assistance window

Assistance window

The assistance window contains information on another applications, for example, data relating to the navigation system.
The assistance window cannot be accessed by the browser and will therefore not be described in more detail here.

Button bar

The button bar contains buttons for navigating in the browser.
The following buttons are required:

KT-9445	**Backward:**	To scroll backward in WAP cards
KT-9446	**Reload:**	To reload current WAP cards
KT-9447	**Home:**	To load start page of BMW portal (this is currently the login page)
KT-9456	**Stop:**	To end loading or the action
KT-9457	**Settings:**	To load a page for changing the browser configuration. "Standard" is the only option available at this time. "Standard" empties the cache memory and resets the factory setting.
KT-9448	**Exit:**	To exit the application

Forward scrolling in the WAP cards is not possible.

RGB image

The RGB image contains the information obtained by the browser (login information, contents of WAP services, etc.). An RGB object includes links, input fields, buttons for browsing through a card, and softkeys. These elements are known as hotspots.

Softkeys are not shown in the button bar but rather in the bottom-most line of the RGB object. Bear in mind, too, that softkeys are shown only when they are needed.

List of hotspots:
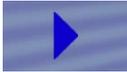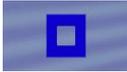
KT-9449	Link
KT-9450	Checkbox
KT-9451	Checkbox, selected
KT-9452	Radio button
KT-9453	Radio button, selected
KT-9454	Page Up button, selected
KT-9455	Page Down button, not selected

The cursor is represented by a red border.

Cursor and cursor movement

The cursor on the button bar has a defined structure.

Turning the controller moves the cursor.
The cursor moves in the direction of rotation: After starting at the top of the button bar and

- turning the controller to the right, the cursor moves to the first hotspot from the top in the RGB image.

- turning the controller to the left, the cursor moves to the button below.

Only one hotspot is permitted per line (with the exception of the bottom-most line).
Therefore, the cursor can be moved as if in a circle.

Scrolling

Scrolling is not possible. Its place is taken by Page Up/Down control. If the content of a card is too large to be represented completely on the screen, the rendering engine of the browser will divide it into windows. Each window can then be shown complete on the control display.
The Page Up and Page Down buttons in the bottom line of the RGB image are for switching from window to window. Consequently, the last line of the RGB image cannot be used for displaying information.

KT-9645

Fig. 14:   Page Up/Down buttons used for logging in to BMW Online

Index	Description
1	Moerchen Mail Administrator Kurt Schwaiger Registration Guest login
 KT-9622	Fig. 15: Page Up/Down buttons

Haptics

The browser informs the control display (terminal interface) how many buttons are shown in the button bar and how many hotspots there are in the RGB image. Only one hotspot is permitted per screen line (with the exception of the bottom-most line). As many hotspots as fit are permitted in the bottom line.

Buttons and hotspots are selected with the controller. The haptics of the controller is determined by the number of hotspots and buttons. The haptic resistance of the controller increases at the end of the selection list for the hotspots and buttons.

Only rotary and push/press actions are used. The controller can be used as follows:

- **Push:** change over to another application

- **Rotate:** cursor movements

- **Press:** select a menu item

The push function is used only for changing over to another application.

By rotating, the cursor is moved from button to button in the button bar and from hotspot to hotspot in the RGB image or from the button bar to the RGB image and back.

Pressing starts the action triggered by a button, actuates a link, or activates an input field.

- Function

The browser is started under the menu item BMW Online of BMW ASSIST. The browser facilitates online from the vehicle to a BMW portal.

In the vehicle, the browser is implemented in the navigation control unit. The browser communicates with the telephone via the MOST bus. The telephone functions as a modem.

The data for the browser are transmitted via the MOST to the browser. The RGB image is generated from the data in the navigation control unit. The RGB image is generated by the graphics software that is also implemented in the navigation control unit. The RGB image is transmitted by the navigation control unit via the RGB cable to the control display.

The browser can be operated both while the vehicle is stationary as well as while driving.

BMW Online

- Using BMW Online

The technical prerequisites for using the online services are:

- BMW ASSIST

- Vehicle with ECE navigation

- Permanently installed ECE telephone

In the same way as for BMW ASSIST the customer must make an application to subscribe to BMW Online.

The procedure for acquiring approval to use the services is as follows:

1. Customer files the application.

2. As a result, BMW receives the customer's first name and surname, the vehicle identification number, the MSISDN telephone number (MSISDN Mobile Subscriber Integrated Services Digital Network) and what services are subscribed to.

3. BMW passes the data on to the provider who processes the implementation for BMW. The customer sees only BMW as the service provider.

4. The application is completed.

Service users

A differentiation is made between three different service users:

- Customers

- Associate users

- Guests

User concept for customers and associate users

By filing the application, the customer data are stored in the database of the BMW portal.

Associate users can only be registered by the customer.
The customer can register several associate users and define an individual service configuration for each associate user. Each of these associate users is linked to the customer.
The telephone number of the associate user must differ from the telephone number of the customer.

Administration of the associate users takes place via the PC access to the BMW portal. In addition to access from the vehicle to the BMW portal, the customer can also access the BMW portal via a WAP mobile phone or via his/her computer and choose the corresponding services.

User concept for guest users

Guest access is required for vehicles that are used only occasionally or once by different persons, e.g. hired cars.

The guest must be registered as the customer (with another vehicle) in the BMW portal in order to be able to log on.

After logging in, all services are made available to the customer (in the same way as in his/her own vehicle). Each user has

- a private user name

- a private password

- a private e-mail address

- a telephone number (MSISDN) as per application

- Registration

The dealer hands over the vehicle to the customer. At this point, apart from a unique VIN (vehicle identification number), the vehicle does not feature user-specific configuration. The VIN, the corresponding name as well as the telephone number of the customer are stored (after filing the application) in the BMW portal.

Initial registration can take place in the vehicle or via an Internet PC.

Initial registration in vehicle

The customer selects BMW Online.

Fig. 16:   Service menu

KT-9623

Index	Description	Index	Description
1	BMW Service:	6	Nearest dealer
2	BMW Info	7	Hotline
3	Your BMW dealer	8	Traffic info
4	Mobile Service	9	Info Plus
5	BMW ASSIST Contact the Mobile Service of the BMW Group	10	BMW Online
		11	Status

Initially, the legal disclaimer appears on the control display. The legal disclaimer is confirmed with "Accept."

KT-9651

Fig. 17: Initial customer configuration: legal disclaimer

Index	Description
1	Only enter data when the car is stationary, to avoid putting the car's occupants and other road users at risk.
	Accept

The legal disclaimer appears on the control display every time the customer logs in to BMW Online and must be accepted.

A wireless link is set up to the BMW portal (via GSM) and the VIN transmitted.

Fig. 18:   Link to BMW portal of the browser   KT-9652

Index	Description
1	The link to the portal is being set up.
2	BMW ASSIST End online services

The customer's user name is transmitted to the vehicle. If no further users are defined at this point, only the user name of the customer will appear in the user list.

The login mask appears.

Registration

The customer selects registration and confirms the registration by pressing the controller.

Fig. 19:   Selecting registration   KT-9646

Index	Description
1	Moerchen Mail Administrator Kurt Schwaiger Registration Guest login

The BMW portal searches in the database for the customer entry and transmits the stored customer's telephone number that the customer specified in the application to the vehicle.

The customer must now select and confirm the telephone number. This procedure ensures that only the registered customer is sent the password.
After a short time, the customer receives an SMS with the password on the specified telephone.
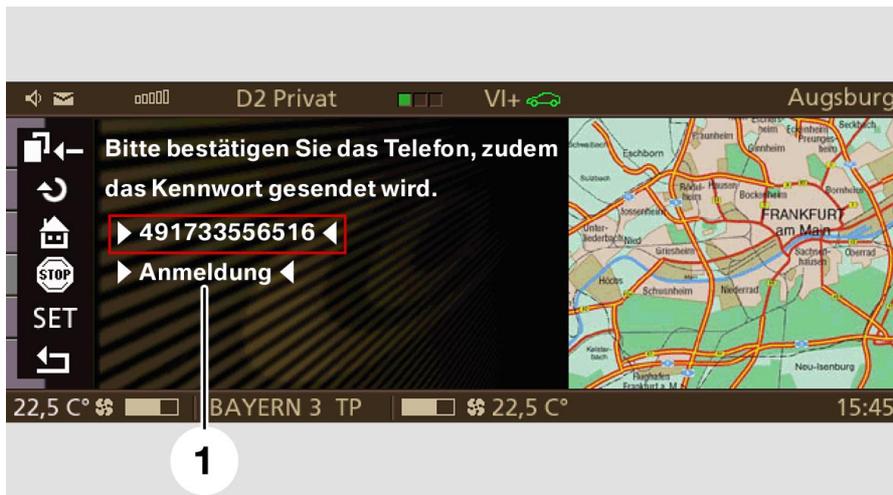
KT-9647

Fig. 20:   Confirming telephone number

Index	Description
1	Please confirm the telephone to which the password is sent. 491733556516 Login

Successful registration is shown on the control display.

Fig. 21:   Registration was successful   KT-9648

Index	Description
1	Registration was successful Login

Registration is not required the next time the customer logs on to BMW Online.

Login

The customer selects the "login" menu item in the login mask and confirms the selection by pressing the controller. After confirming the "internal testers" menu item, the customer is requested to enter the password.
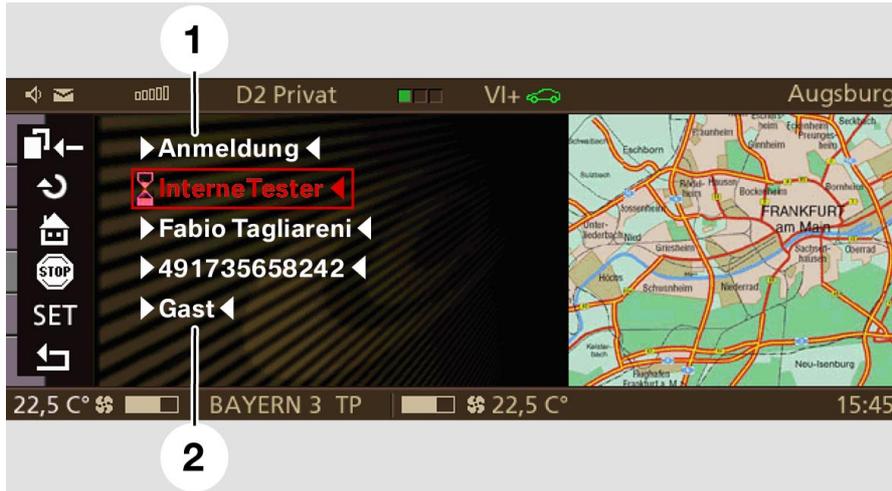
Fig. 22:   Login (internal testers)

KT-9656

Index	Description
1	Login Internal testers Fabio Tagliareni 491735658242
2	Guest
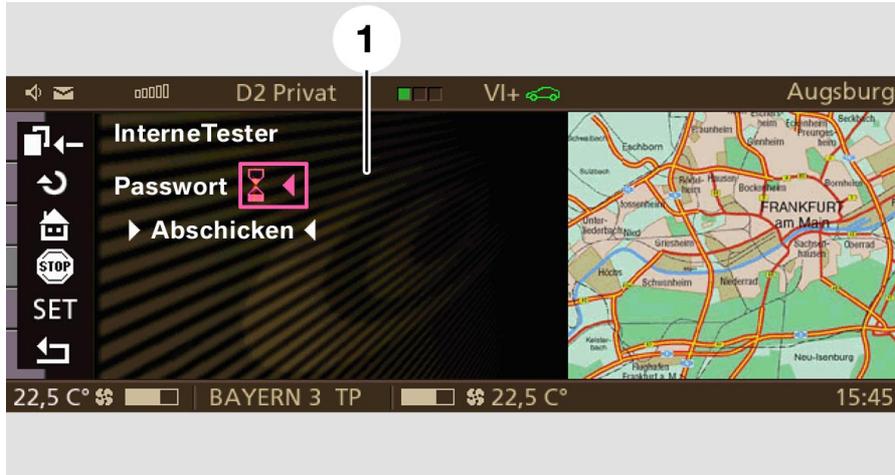
Fig. 23:   Select password

KT-9657

Index	Description
1	Internal testers Password Send

The customer can now enter the password with the typewriter (virtual typewriter).
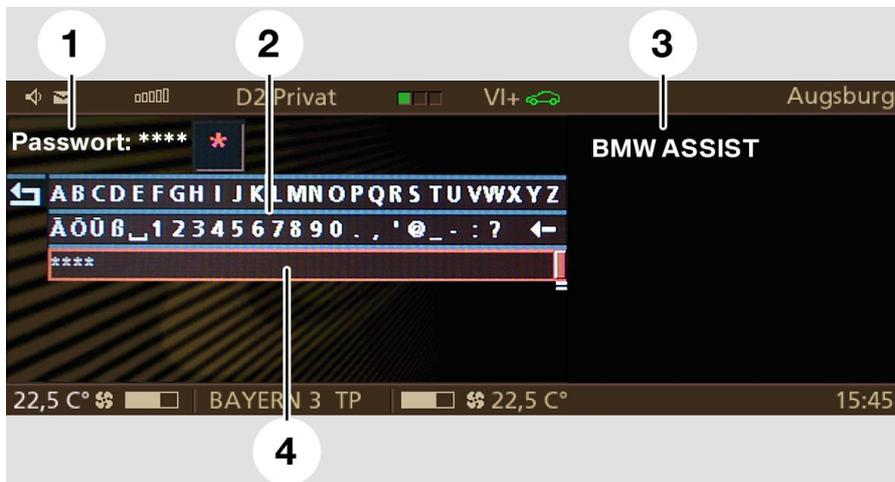
Fig. 24:   Typewriter for password

KT-9658

Index	Description
1	Password: **** * (zoom function on *)
2	Typewriter
3	BMW ASSIST
4	Cursor position for confirming password

After entering the password, the customer confirms the password and sends it off by confirming "Send:"
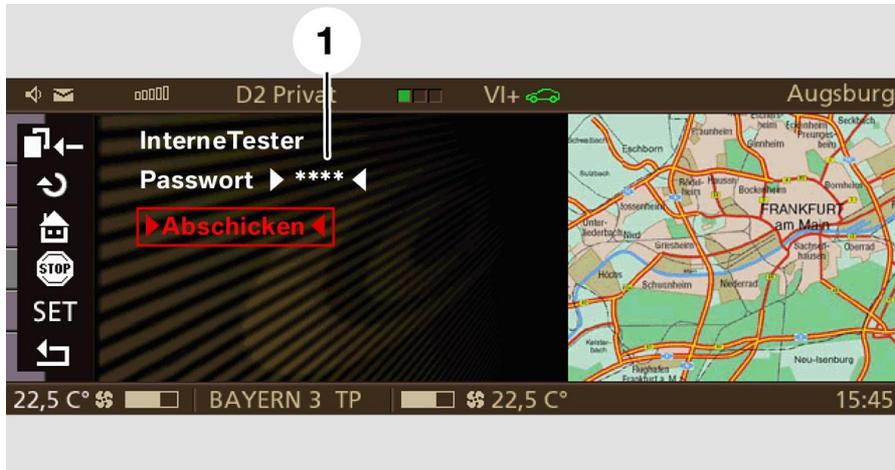
Fig. 25:   Sending password

KT-9659

Index	Description
1	Internal testers Password: **** Send

The BMW Online start page appears.

Fig. 26: BMW Online start page

KT-9660

Index	Description
1	Bookmarks BMW Online mailbox Address manager BMW financial services News

Login failed

Corresponding information is shown on the display if login failed:

Fig. 27:   Login failed   KT-9688

Index	Description
1	Login failed Wrong user name and/or wrong password. Login
2	BMW ASSIST

Possible errors

Errors during password transmission:

- Initial configuration was not initiated from the customer but by another person.
The password, however, is sent to the customer (who cannot do anything with it at the moment).
At the same time, the BMW portal sets a timer for the period within which the password must be entered (approx.
3 to 5 minutes).
Login will fail if the correct password is not entered within this period of time.
The BMW portal cancels the initial configuration in order to allow the customer to repeat the login procedure.

- Although the initial configuration was initiated by the customer, he/she failed to enter the correct password in time (see above). Login will fail if the correct password is not entered within this period of time. The BMW portal cancels the initial configuration in order to allow the customer to repeat the login procedure.

Cancellation of initial configuration: The system will react as follows if the customer cancels initial configuration (e.g. by selecting the start page during login):

- BMW portal cancels the initial configuration

- Information is sent to user

Associate users

The customer can name further users (so-called associate users) of BMW Online services for his/her vehicle. To do so, the customer uses an Internet PC to access his/her personal home page on the BMW portal and creates a list of registered associate users. The list contains a phone number for each user name. The services can be configured separately for each associate user.

Configuration of the associate users remains the reserve of the customer. Associate users cannot change their configuration.

When associate users are created the login list in the vehicle is updated. The procedure for initial login of an associate user is the same as that for the customer.

See previous section for possible errors.

- Registration via Internet PC

The procedure for registering via the Internet is as follows:

1. The customer subscribes to BMW Online by way of initial registration.

The customer enters the network code of his/her telephone card. The customer then enters the number of the mobile phone to which the password is to be sent.
The registration is sent of by clicking on "register."
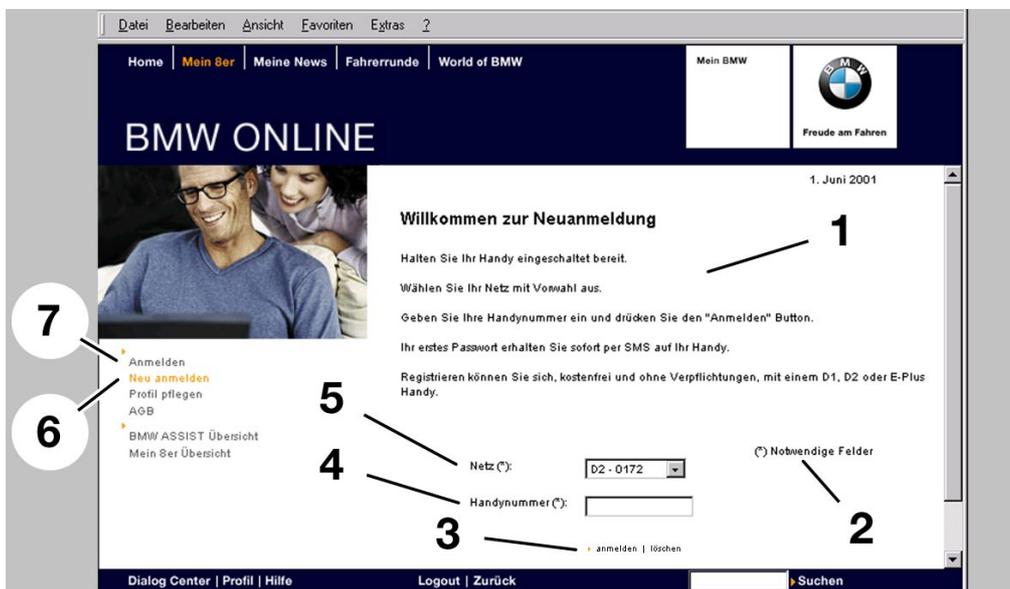
Fig. 28:   Registration page in the Internet

Index	Description
1	Welcome to our registration form Make sure that your mobile phone is switched on. Select your network and network dialing code. Enter your mobile phone number and press the "register" button. Your initial password will be sent immediately in an SMS that you will receive on your mobile phone. You can register at no charge and without obligation with a D1, D2 or E-Plus mobile phone.
2	(*) Mandatory boxes
3	register I delete
4	Mobile phone number (*)
5	Network (*)
6	New registration
7	Registration

2. The customer receives the password
   When the BMW portal receives the date (incl. MSISDN), the password is generated automatically and sent as an SMS text to the specified telephone number.

3. The customer must confirm the acceptance window "Acceptance of SMS terms and conditions of use" by pressing accept.

The BMW portal creates an initial start page. This page informs the customer of successful (or unsuccessful) registration and facilitates initial login.

4. Initial login
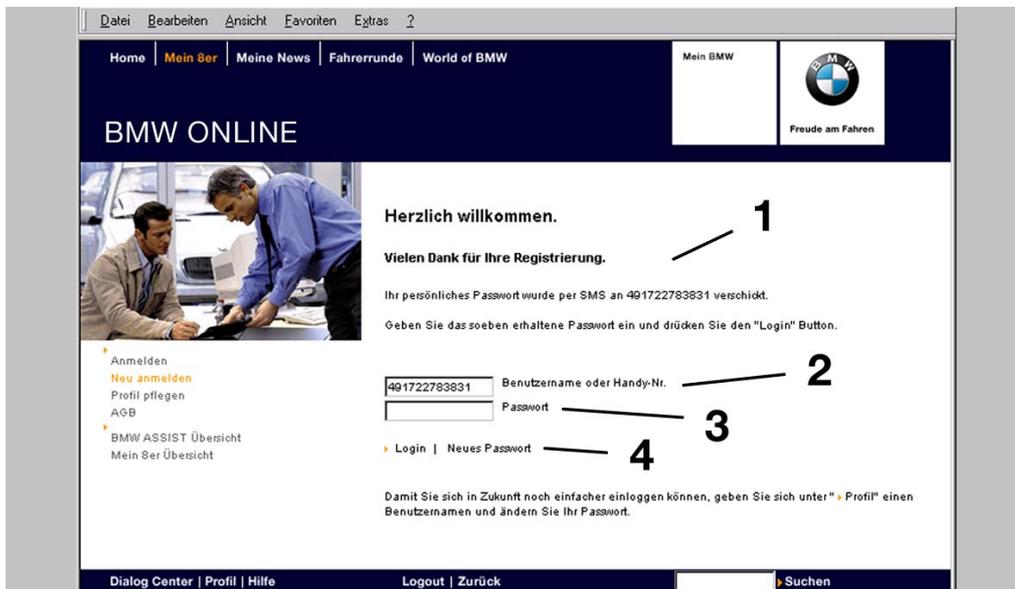
Fig. 29:   Page for initial login

KT-9460

Index	Description
1	Welcome. Thank you for registering. Your private password has been sent by SMS to 49172.... Please enter the password you just received and press the login button.
2	User name or mobile phone number
3	Password
4	Login I New password

On receipt, the customer must enter the password.

The user name need not be entered as the BMW portal enters the user name automatically.
The customer must then press the login button. This sends the login data to the portal.

An e-mail account is set up if all data are valid. The e-mail account contains the customer's first name and surname. The e-mail account has to have a unique name, so additional letters are inserted. Example: hugo.ab.mueller@bmw-online.de.

Once the e-mail account has been created, the BMW portal will set up a private start page. Initial registration is now completed.

- Login as guest

Guest login is required for vehicles that are used only occasionally or once by different persons, e.g.

- company fleet cars

- rental cars

- etc.

Precondition:

The user must be a customer (with another vehicle) and therefore registered in the BMW portal.

A login screen appears for the guest.

The guest selects the guest link and confirms the login. He/she is then requested to enter his/her user name with the aid of the typewriter.
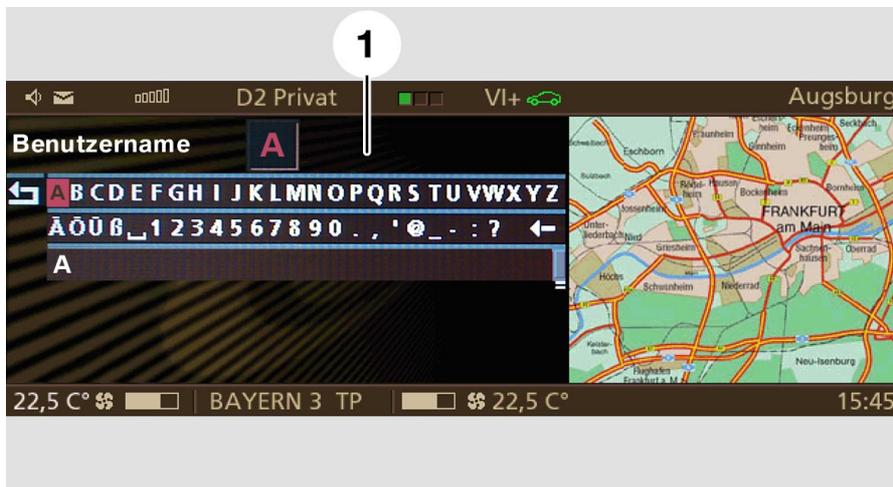
Fig. 30:   Using typewriter to enter user name

KT-9736

Index	Description
1	User name

The guest confirms the user name.
The login mask appears and the guest is requested to enter his/her password.

The guest enters his/her password with the typewriter.

On confirmation, the BMW portal checks whether the customer exists and whether the entered password matches the user name.

- If the results of this check is positive, the BMW portal transmits the guest or customer start page (home page) to the vehicle.

- The guest in a hired car uses the same customer profile that he has available in his/her own vehicle.
  As a result, the BMW customer can enjoy the full scope of services in any vehicle.

- If the password and/or user name is incorrect, the guest will be informed accordingly by an information page. Login is terminated.
  The login mask reappears and the guest can try again.

Possible errors:

- The guest enters a user name that is now stored in the BMW portal database: The BMW portal will bar guest access if incorrect entries are made.

- The guest enters an incorrect password: The BMW portal cancels the initial configuration in order to allow the guest to repeat the login procedure.

- Update of customer data

An update of the configuration is necessary under the following conditions:

- The vehicle is taken off the road or sold.

- The customer has purchased a new or an additional vehicle and wishes to use BMW Online services in this vehicle.

- The customer no longer wishes to use BMW Online services.

The customer notifies the BMW portal operator.
The BMW portal operator must adapt the data record in the database as follows:

1. The customer sells his/her vehicle but still owns other vehicles with BMW Online services:
   The existing data record is retained. The link to the VIN of the sold vehicle is deleted.

2. The customer purchases a new vehicle:
   Either: The customer has sold his/her previous vehicle and purchased a new vehicle.
   The BMW portal deletes the existing link of the previous VIN to the corresponding data record and links the data record to the new VIN.
   Or: The customer has purchased an additional new vehicle.
   The existing data record with VIN and customer data is retained in the database. The customer places an order for BMW Online services for his/her new vehicle.
   The BMW portal does not create a new data record but rather it links the new VIN to the existing data record.

3. The customer no longer wishes to use BMW Online services:
   The BMW portal deletes the corresponding data record from the database: A customer is no longer stored assigned to the VIN of the vehicle.

The **purchaser** of a BMW vehicle must make a new application for the use of BMW Online services.
Consequently, the BMW portal creates a new data record in the database. This new data record contains the VIN, customer's name and telephone number.

The purchaser of a BMW vehicle who registers at the BMW portal for the first time must compile a new application.

If a BMW ASSIST customer attempts to use BMW Online services in another car, he/she will be denied access as the VIN registered for the customer does not agree with the VIN of the vehicle.

- Settings

The configuration has to be changed if, for example, the vehicle is sold. The SET button is located in the left button bar:
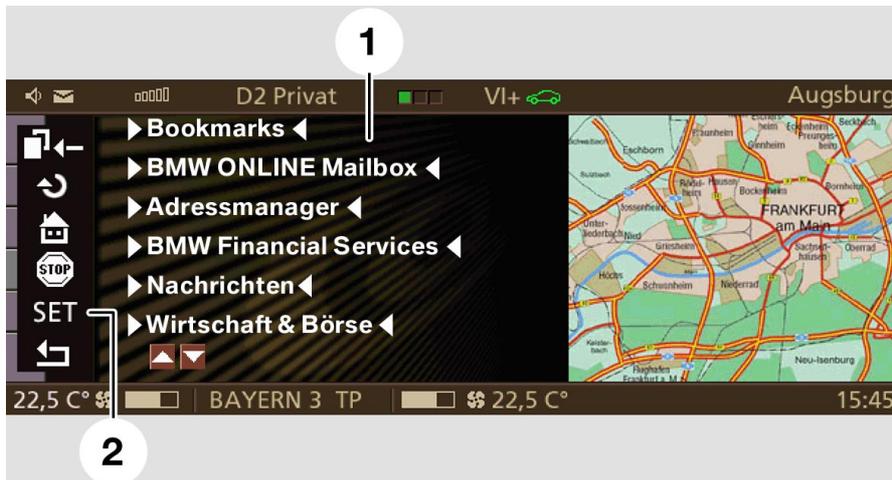
Fig. 31:   SET button

KT-9694

Index	Description
1	Bookmarks BMW Online mailbox Address manager BMW financial services News Business & stock exchange
2	SET

Since all users have access to the SET menu item, only the following actions can be carried out:
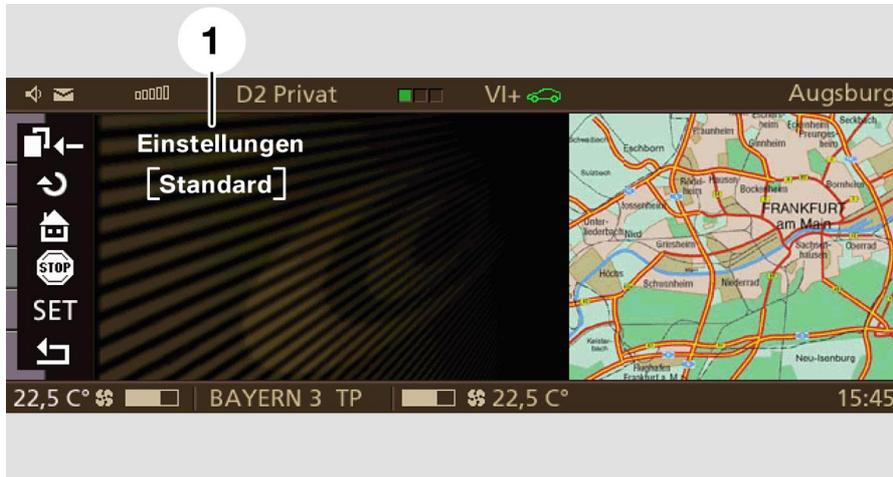
Fig. 32:   SET menu item

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Index	Description
1	Settings: Standard

Explanations:

[Standard]   Deletion of cache memory and reset of parameters sent from BMW portal to vehicle

This resets the parameters to their factory defaults.
The factory setting is useful in the case of problems with the browser or when reloading software on the navigation computer.
The factory setting should always be reset when selling the vehicle.

All actions are executed only locally in the vehicle. No link is set up to the BMW portal. This, in turn, means that these actions can be performed after the customer has logged off.

- Logging off

The browser application is closed by the following actions:

- Pressing the Exit button on the button bar

- Ignition off

- As of 03/2002: pressing the "hang-up" telephone button

- GSM connection interrupted

- Browser timeout (in other words no user action for 5 minutes)

- Emergency call

The browser stores the page last displayed (except when pressing the Exit button) and displays it when the connection is set up again.
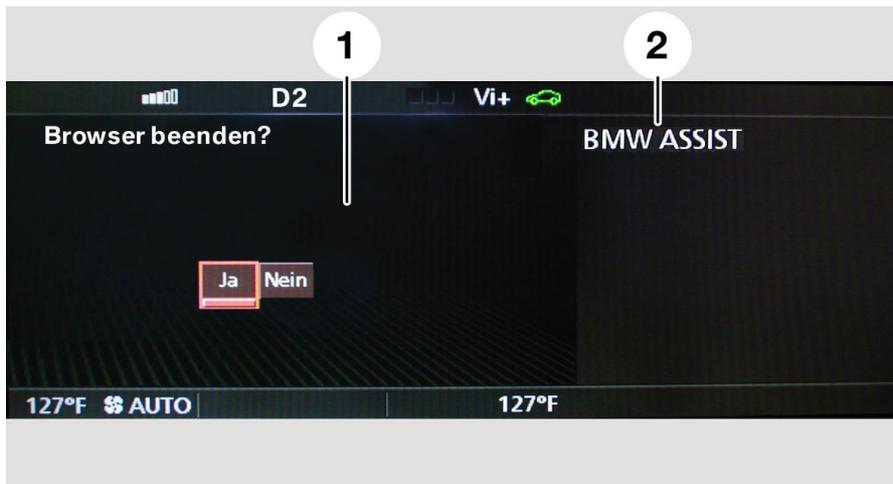
KT-9687

Fig. 33:   Exiting browser application

Index	Description
1	Exit browser Yes No
2	BMW ASSIST

- Example of BMW Online mailbox

Example of "Select mail," "Read e-mail" and "Answer e-mail."

Fig. 34: BMW Online start window (BMW Online mailbox selected) KT-9685

Index	Description
1	Bookmarks BMW Online mailbox Address manager BMW financial services News

Fig. 35:   Selecting incoming mail

KT-9667

Index	Description
1	BMW Online mailbox Incoming mail Write e-mail Start page You have 1 new e-mail
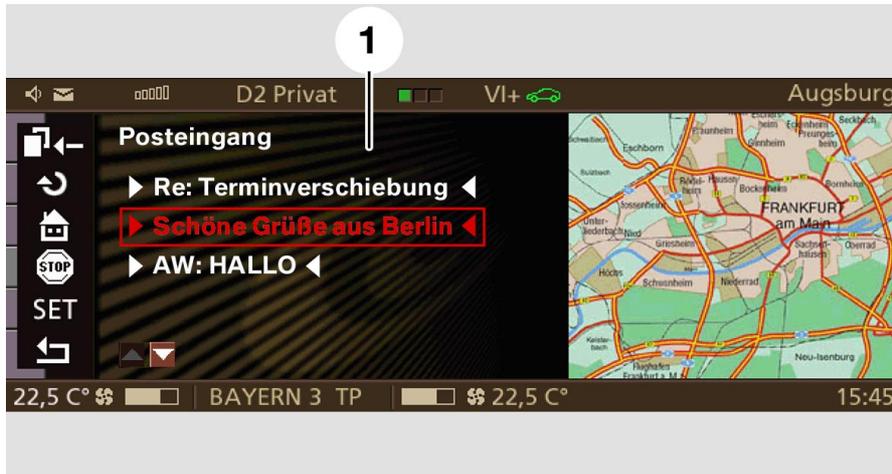
Fig. 36:   Select Greetings from Berlin   KT-9666

Index	Description
1	Incoming mail Re: Change in appointment date Greetings from Berlin AW: HELLO

Fig. 37:   Read Greetings from Berlin   KT-9668

Index	Description
1	Date: 27.08.2001 15:11:37 From: Axel Möring Axel.Moering@bmw.de Greetings from Berlin ... and enjoy working;-)
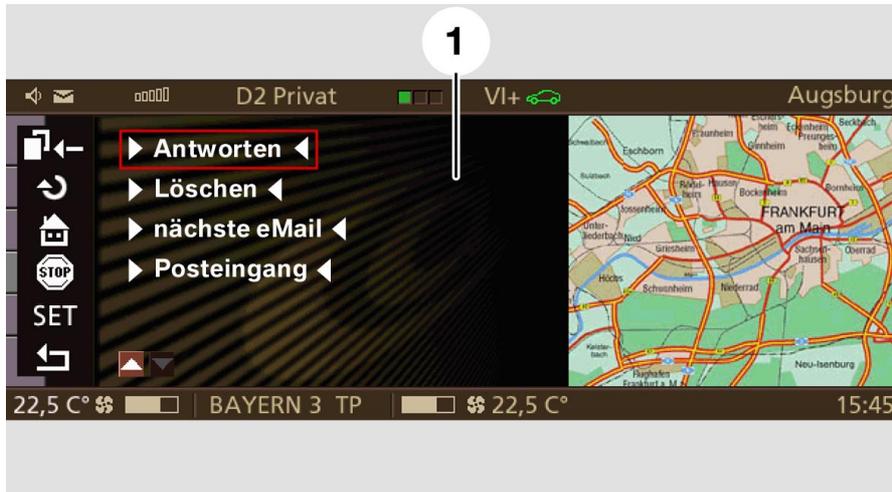
Fig. 38:   Replying to e-mail

KT-9669

Index	Description
1	Reply Delete next e-mail Incoming mail

Fig. 39:   Selecting CC

KT-9670

Index	Description
1	Reply to e-mail Axel.Moering@bmw.de CC BCC Re: Re: Greetings from Berlin
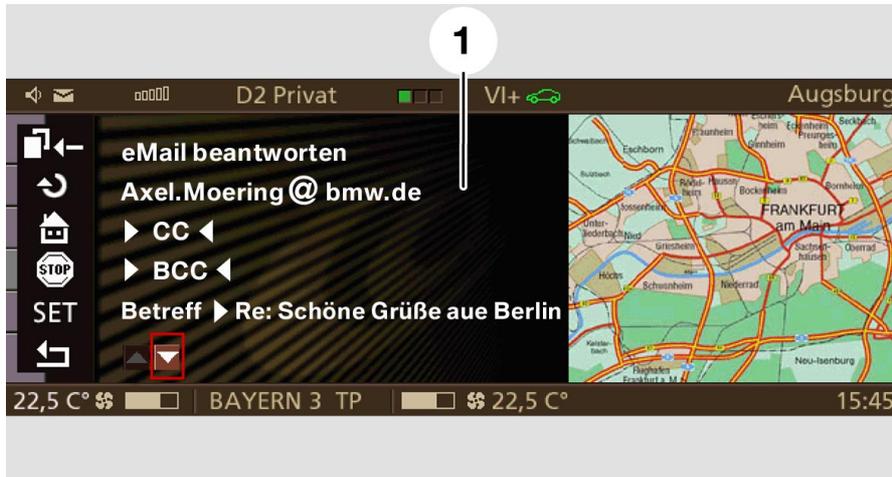
Fig. 40:   Scrolling with the Page Up/Down button

KT-9671

Index	Description
1	Reply to e-mail Axel.Moering@bmw.de CC BCC Re: Re: Greetings from Berlin

- Example of BMW Online services

Weather information

Several WAP pages are also interactive and allow the user to enter data.
An example of weather information and data entry via the typewriter (virtual typewriter) is provided in the following.
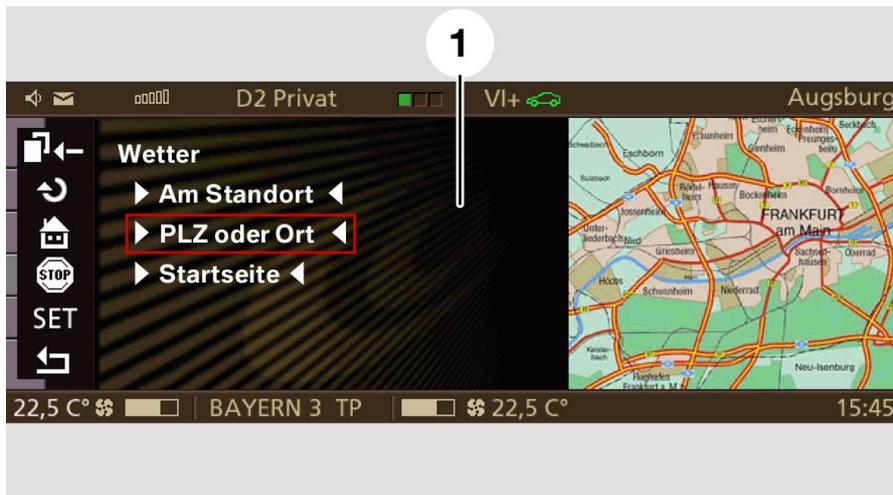
Fig. 41:   Weather information - cursor on postal code or place   KT-9626

Index	Description
1	**Weather** At location Postal code or place Start page

Typewriter and input line
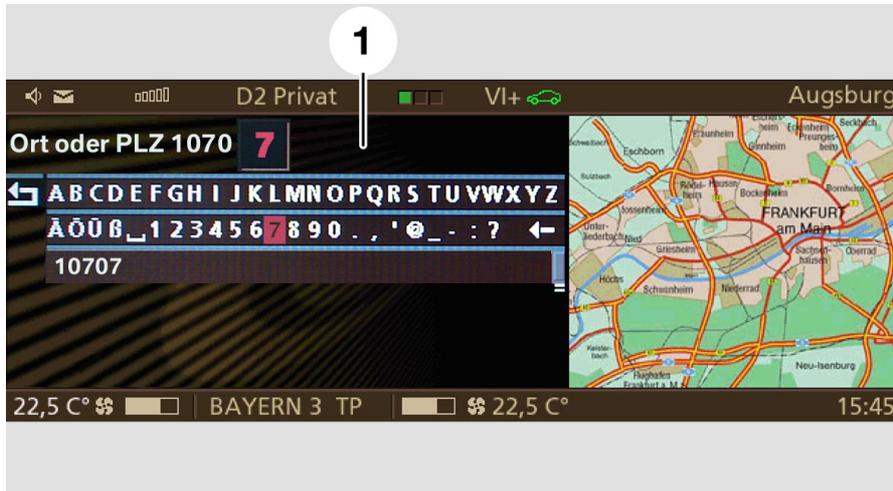
Fig. 42:   Entering postal code   KT-9627

Index	Description	Content
1	Input line	Place or postal code 1070 7 (zoom function on 7)
	Typewriter	ABC....
	Entered postal code	1070

Input confirmation

Fig. 43:   Postal code entered, cursor positioned on postal code   KT-9684

Index	Description
1	Cursor on postal code to confirm entered postal code

Fig. 44:   Menu item Weather information   KT-9740

Index	Description
1	Weather Today Tomorrow Trend New entry Start page

The weather information is shown after confirming the entry.

Fig. 45:   Weather information   KT-9689

Index	Description
1	Weather The weather will remain fair in the south, low Angelika will develop to a full-scale autumn storm.

News

The BMW Online services are accessed via the controller. The services can be selected specific to customer requirements. A specific service (e.g. news) is selected by turning the controller.
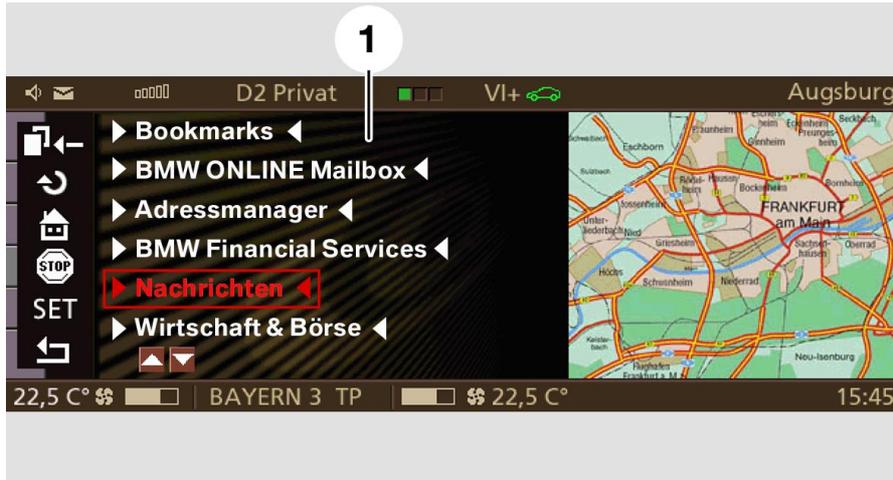
Fig. 46: Selecting services (news)

KT-9690

Index	Description
1	Bookmarks BMW Online mailbox Address manager BMW financial services News Business & stock exchange

The service is selected by pressing the controller.
The first information page is displayed.

Fig. 47:   First page of News service   KT-9693

Index	Description
1	News Latest news Headlines Business Sport

The links in the bottom-most line are WAP-related (via simple
simulation) and not a constituent part of the planned
BMW Online services for the E65. Instead, links for paging from
one screen to the next will be provided.

A second news page may have the following appearance (the last line is not repeated at the top of the next page):
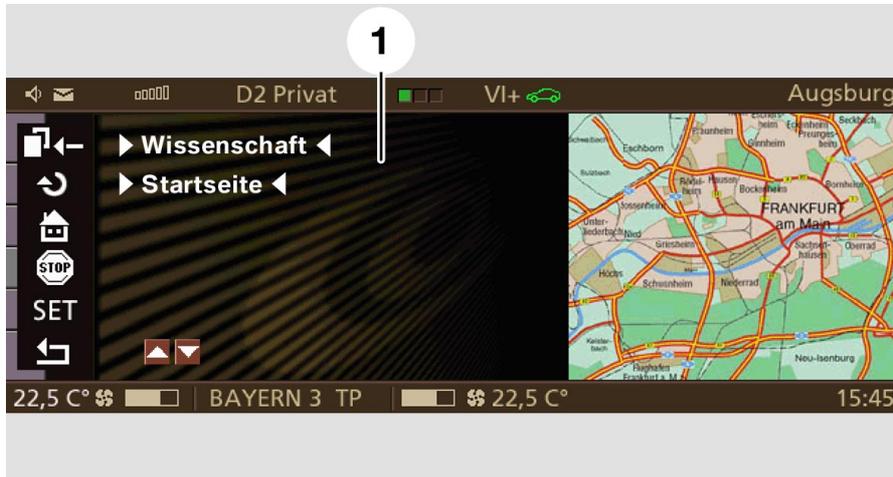
Fig. 48:   Second page of News service   KT-9692

Index	Description
1	Business Start page

As can be seen from the following screen extract, an item of information does not always fit in the window, making scrolling necessary.
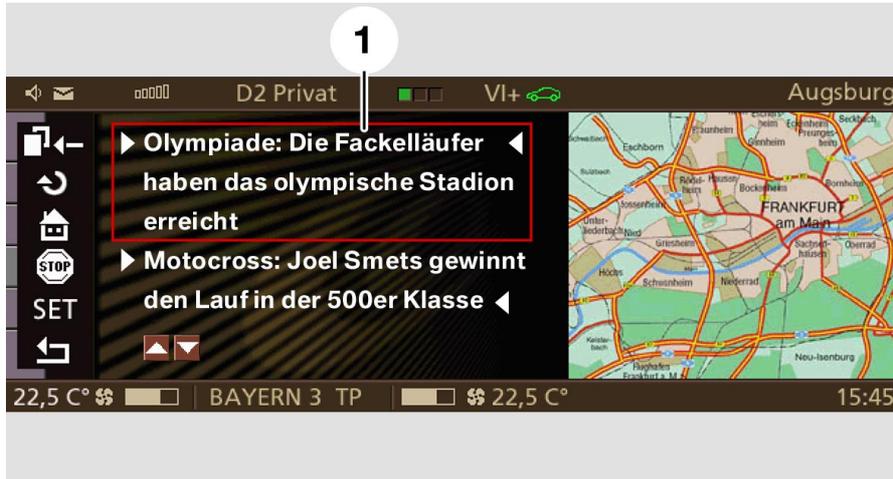
Fig. 49: Screen showing part of the information available in News service

KT-9691

Index	Description
1	Olympics: The torchbearers have just reached the Olympic stadium Motocross: Joel Smets wins the 500 cc race

Message box

A few examples of the message box are provided in the following.
The message box utilizes the left-hand side of the screen after fading out the button bar.
The assistance window (on right) remains unchanged.
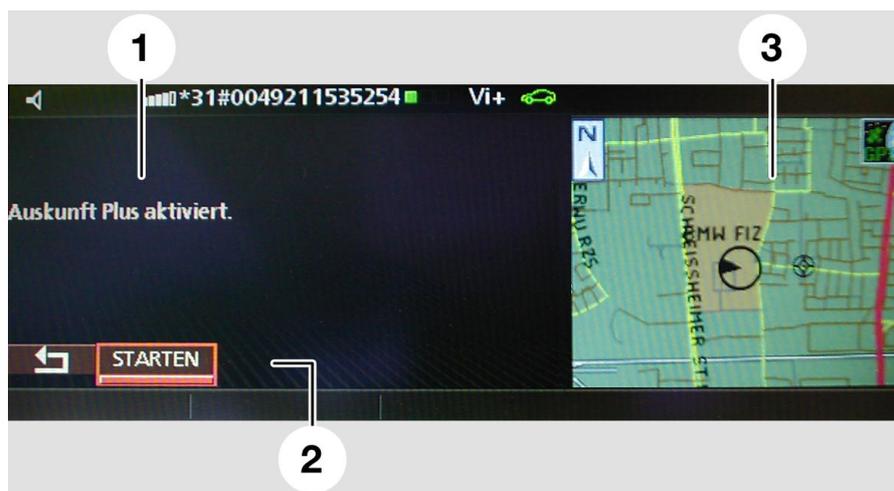
KT-9649

Fig. 50:   Message box "Information activated"
             (Function: Info Plus from BMW ASSIST)

Index	Description
1	Info Plus activated
2	Start
3	Map

Fig. 51: Message box "arrow" (function: navigation)   KT-9683

Index	Description
2	9800 m Munich Neuhauserstrasse Marienplatz 6500 m Weinstrasse
3	Map presentation
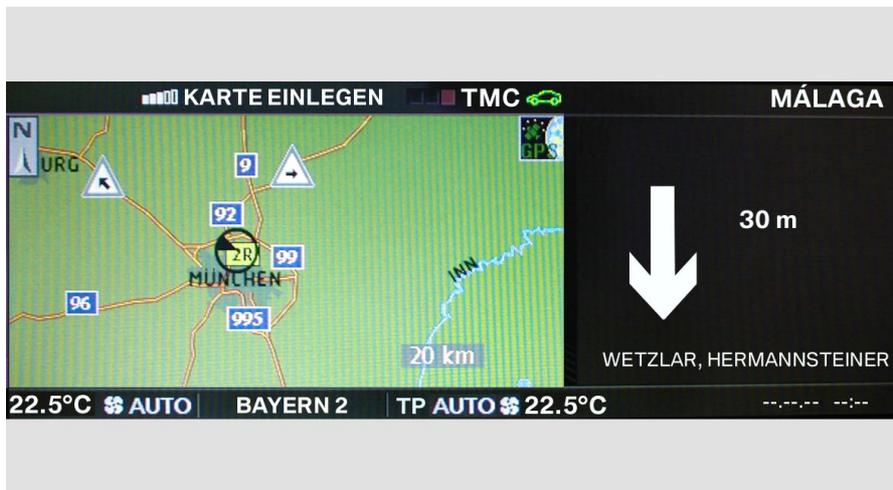
Fig. 52: Message box "map" (function: navigation)   KT-9673
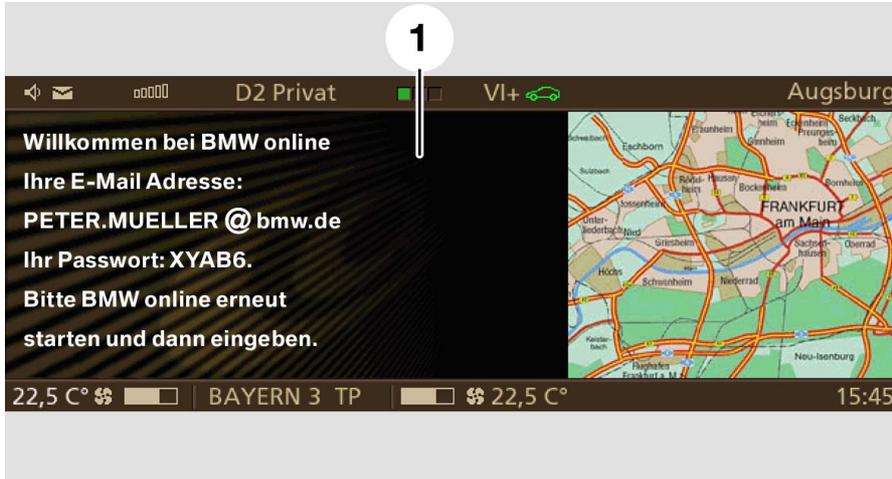
Fig. 53:   Message box "Welcome to BMW Online" (function: BMW Online)   KT-9686

Index	Description
1	Welcome to BMW Online Your e-mail address: PETER.MUELLER@bmw.de Your password: XYAB6. Please restart BMW Online and enter password.
2	BMW ASSIST

- Notes for Service

BMW Online services

Since BMW Online services (such as telephone) utilize the mobile network via the wireless interface they are subject to the same laws of physics and problems. For example, in the same way as for the telephone, cell overload or poor network supply will lead to termination of the services.

The customer can use only one service at a time, i.e. either telephone or BMW Online services. The corresponding previous connection must then be reestablished.

Example: Customer is online.
In this case, the customer can neither receive telephone calls nor use the telephone himself. The browser has to be actively closed before the telephone can be used.

Costs are incurred the whole time the customer is online. The system, however, incorporates a timeout function (approx.
5 minutes) after which the connection is automatically shut down if there are no user inputs.
The green telephone connection indicator on the control display flashes as soon as a BMW Online data link has been established. This allows the customer to see at a glance whether or not a data connection has been established.

The function is always incorporated in the navigation system 01, but has to be encoded if it was not ordered as an option ex factory. The login procedure as already described can now be started.

Telematics services

- Introduction

Telematics services are a constituent part of the BMW Online car project.

The aim was to adopt the telematics functionality of the Mk-3 navigation computer in the first stage (status 09.00) and to adapt it to E65 ergonomics.

A further objective was to simplify operation for the customer.

- Functions

The groundwork of the telematics functionality in the E65 is the same as that of the E38.

All functions of the Mk-3 navigation computer (status 09/00) that were realized up to this point are also incorporated in the E65.

In addition, the following new functions were implemented:

- Diversion recommendation
- Automatic emergency call
- Destinations list
- Message list of traffic information
- Roadside assistance, dealer, Hotline
- Emergency call option dropped (in control display)
- Configuration update

Detour recommendation

The recommended detour is at least as long as the route in question.

Automatic emergency call

When the telephone is not logged in, the automatic emergency call functions dials the number 112.

Destinations list

Up to 20 destinations can be saved in the navigation system and picked up one after the other. If a new destination is requested via the provider, the new destination will be entered as the first destination in the destinations list.

Message list of traffic information

After selecting Traff.info Plus traffic news is transmitted by the provider. After selecting the individual messages, up to two pages of additional information are shown.

Fig. 54:   Message list in control display

KT-9628

Index	Description
1	TMC station
2	Traff.info Plus
3	Switch off
4	Message list A9: Nuremberg -> Munich A99: Salzburg (A) -> Stuttgart A8: Salzburg -> Munich
5	BMW ASSIST

KT-9625

Fig. 55: First additional information page

Index	Description	
1	**A99: Aschheim/Ismaning -> Munich North** Traffic queue Length: 3 km	
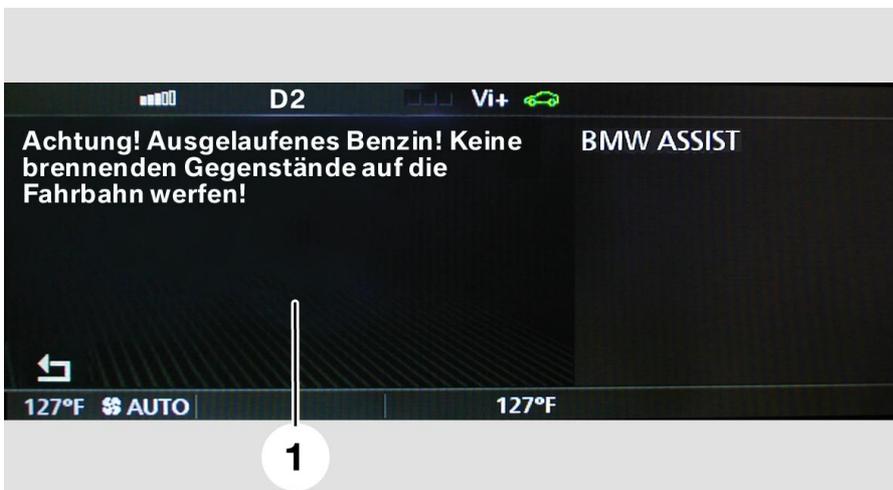
KT-9665

Fig. 56: Second additional information page

Index	Description
1	Caution! Spilt fuel! Do not throw hot or burning objects onto the road!

Roadside assistance, dealer, Hotline

The user can now also select roadside assistance, the local dealer or the nearest dealer or a Hotline number.

Fig. 57:   Service menu   KT-9623

Index	Description	Index	Description
1	BMW Service:	6	Nearest dealer
2	BMW Info	7	Hotline
3	Your BMW dealer	8	Traffic info
4	Mobile Service	9	Info Plus
5	BMW ASSIST Contact the Mobile Service of the BMW Group	10	BMW Online
		11	Status

Roadside assistance - Mobile service

The procedure for BMW roadside assistance service has not changed (key data and, if possible, the position of the vehicle are transferred). A new feature is that the BMW roadside assistance service is no longer linked to the navigation system (GPS data).

Local dealer

The key data are read out of the car access system (CAS) after pressing the "local dealer" button on the control display. These data are sent to the telephone and the local dealer's telephone number is dialled.

The local dealer's telephone number is entered with the DISplus as part of the pre-delivery inspection conducted at the dealer. If the local dealer changes (e.g. due to sale of the vehicle or for any other reasons) the local dealer's telephone number can be changed in DISplus.

Nearest dealer

Together with the telephone number, the nearest dealer is transferred as the navigation destination from the navigation CD to the control display.
A data link between the vehicle and the service provider is not set up.
The menu item "nearest dealer" is not shown if no navigation system is installed.

Hotline

A call to a programmed telephone number is initiated.

Emergency call option dropped in control display

The emergency call can no longer be selected in the
BMW ASSIST menu as, in the event of an accident, it can be
triggered automatically or manually via the emergency call
button.

Configuration update

The automatic configuration update features a repeat
mechanism involving 3 attempts at 2 minute intervals. Service
configuration takes place automatically in connection with
roaming.
Automatic services configuration is necessary as the various
providers offer different services.
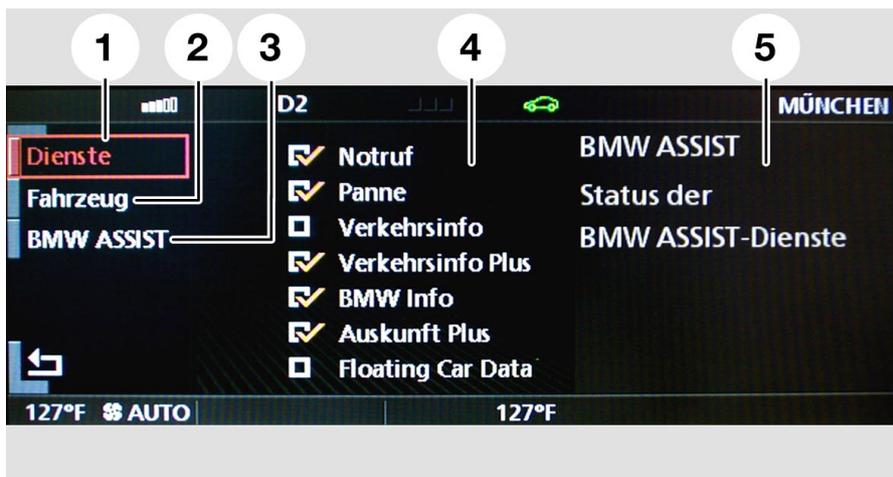
KT-9624

Fig. 58:   Configuration update

Index	Description
1	Services
2	Vehicle
3	BMW ASSIST
4	SOS Breakdown Traffic info Traffic Info Plus BMW Info Info Plus Floating Car Data
5	BMW ASSIST Status of BMW ASSIST services

Glossary

Index	Description
AM	Amplitude modulation/Frequencies for long, medium, and short waves
ARD	Public work group of the Radio Authority of the Federal Republic of Germany
ASC	Automatic stability control
ASK	Audio System Controller
AVT	Aerial amplifier tuner
BIT2	Basic Interface Telephone 2
Browser	Program for searching, retrieving and displaying on a computer screen data and documents on the Internet.
CAN	Controller area network data bus system
CC	Compact cassette/Audio cassette
CD	Control display/Display unit in the Comfort Area
CD	Compact disc/Audio diskette
CDC	Compact disk changer/Audio CD changer
CVBS	Composite Video Burst Sync.
DAB	Digital Audio Broadcast/Digital radio reception
DECT	Digital Enhanced Cordless Telecommunications
DISplus	Diagnosis and information system of 2nd generation
DSC	Dynamic stability control
DSP	Digital sound processor
ECE	European Commission for Europe, European standard
FABS	Colour image control and synchronisation signal, carrying colour, brightness and synchro pulses on a signal line.
FBD	Remote control services
FM	Frequency Modulation = Very high frequency wave (VHF)
GAL	Speed-dependent volume regulation
GPS	Global Positioning System
GSM	Global System for Mobile Communications
HF	High frequency
HTML	Hypertext Markup Language HTML is a programming language for developing web pages.
ISM	Industrial Science Medical Band
JBIT2	Japan Basis Interface telephone 2
JBUF	Japan Mobile Phone Buffer, compensator for mobile phone antennas
Kombi	Instrument cluster
LA	Country-specific version

Index	Description
Links	Links that lead from the page currently used to other pages in the Internet.
LOGIC7	TOP HiFi amplifier
MD	Mini disc/Mini audio diskettes
MoDiC	Mobile Diagnosis Computer
MOST	Media Oriented System Transport/Multimedia network
NAV	Navigation system
NF	Audio frequency
OCN	On Chip Navigation. The OCN-plug-in card in the navigation computer allows a quicker screen or map display.
Password	A password is a personal identification code
PDC	Park Distance Control
PDC Standard	Personal Digital Communication Standard Japanese standard similar to GSM
Pin	Personal Identity Number / Secret number
Portal	Home page of a provider who offers various programs; e.g. T-online, YAHOO, etc.
PTT button	Push to talk button / Pushbutton to activate the speech processing system
RAS	Remote Access Service. A software which enables other users to select the BMW Portal.
RDC	Tyre inflation pressure control
Rendering Engine	Part of the browser, which defines the layout of the display.
RGB	Colour definition via the values for Red, Green and Blue. With 24-bit graphics, each colour component may have 256 levels.
RGBC	Colour definition via the values for Red, Green and Blue. With 24-bit graphics, each colour component may have 256 levels. Additionally, a fourth line is provided to transmit a separate synchronisation signal.
SA	Option
SBDH	Cordless keypad handset
Server	Computer, which handles applications and documents so that they can be accessed by other computers.
SIM	Safety Information Module
SIM card	Subscriber Identity Module / Telephone identification card
S-Video	Analog video signal, which independently processes the brightness and the colours and provides a higher resolution and colour mapping.
SVS	Voice processing system
SWF3	Südwestfunk 3 (German broadcasting channel)
SZL	Switching centre for steering column

Index	Description
TEL	Telephone
TMC	Traffic Message Channel
TV	Television
VICS	Traffic information announcements in Japan
VM	Video module
WAP	Wireless Application Protocol. A technology standard, enabling the transmission of specially programmed Internet pages to a mobile terminal device (mobile phone).
WAP Cards	The WAP card is the section to appear on the display. A WAP card is a part of a WML page. (Deck)
WAP deck	The WAP deck is the complete WML page which is transmitted.
WAP mobile phone	Mobile phone equipped with a special Internet software to navigate on the Internet and display the retrieved pages.
WDCT	Worldwide Digital Cordless Telephone
WML	Wireless Markup Language, is a programming language for showing images and texts in mobile phone displays.
ZDF	Second German TV channel
ZGM	Central gateway module