



Vehicle Management

Application

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Impressum

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Preface

FleetBoard from Mercedes-Benz is an Internet service making use of the latest in telematics system technology. It provides effective and efficient fleet management, focusing on both technical issues and logistics.

The FleetBoard hardware consists of a GPS receiver, a GSM modem, an on-board computer, and an interface to the vehicle electronics. Data is collected from the vehicle systems and then sent back to the central FleetBoard server via mobile radiocommunications (GSM/GPRS).

What Is Vehicle Management?

FleetBoard Vehicle Management comprises individual services, which contain evaluations and functions used for modern fleet management. The data behind it is provided by way of Telligent technology. FleetBoard Vehicle Management provides in-depth knowledge by way of the following services and information:

- **Messaging:** communication between the dispatch office and the driver.
- **Trip Records:** evaluation of trip data, such as driving and pause times, positions, current driving times.
- **Performance Analysis:** evaluation of the gear usage, braking technique and driving style of the driver, degree of difficulty of the transport, and the resulting consumption values.
- **Service:** evaluation of the condition of your vehicles and vehicle maintenance scheduling.
- **Telediagnosics:** technical data for vehicle condition diagnosis.

Further FleetBoard Services

Mapping and Logistics are further FleetBoard modules. Mapping allows you to view the position of vehicles in the form of a digital road map. Logistics allows for an efficient planning of trips and helps you manage your orders.

Accessing FleetBoard Vehicle Management

System Requirements

To access FleetBoard, you require:

- A computer with Internet access.

The speed with which you can access the FleetBoard data is influenced by the performance of your computer and the transmission rate of your Internet connection.

- An Internet browser.

Microsoft Internet Explorer, version 6.0 and higher, or Mozilla Firefox, version 2.0 and higher, are recommended.



Note: For technical reasons, you should always use the latest browser version.

Necessary Browser Settings

Several settings in your Internet browser are necessary to work with FleetBoard. That means you have to activate *Java* and *JavaScript* in your Internet browser to access all FleetBoard functions purchased by you in an optimal manner. This is a special programming or script language, which is required for numerous FleetBoard functions.

Depending on the browser in use, the following settings must be made:

In Internet Explorer:

1. From the *Tools* menu, select *Internet Options*.
2. Click on the *Security* tab.
3. Click on the *Custom Level* button.
4. Under *Cookies*, enable the acceptance of cookies.
5. Under *Scripting*, activate the options *Active scripting* and *Scripting of Java applets*.

About this Documentation

The documentation at hand refers to version FBSC 1.4.1 of the FleetBoard Vehicle Management module.

Notation and Symbols

The following document conventions are used:

- References to other manuals, chapters, and sections are displayed on the screen in [blue](#).

Example:

Refer to [Section Necessary Browser Settings](#).

- Navigation paths, buttons, text fields within the Internet interface, system messages, etc. are presented in *italics*.

Example:

Click the *Help* button.

- Individual parts of a navigation path are separated from each other with ">".

Example:

Select *Messaging > Inbox Mail List*.

Important Text Segments

Important text passages are accentuated by icons in the margin which have the following meanings:



Note: Contains important general or additional information on a specific topic.



Prerequisite: Defines requirements which have to be fulfilled before you can carry out the next steps.

Additional Documentation

You can find further information in the manuals on the Logistics service, on Time Management, on Administration, and on Mapping, as well as in the online help provided with these services.

Contacting FleetBoard Support

If you have further questions or need information about our products, you can contact FleetBoard support under the following phone number:

+49/711/17-91999

FleetBoard Support is available from Monday to Friday from 08:00 a.m. to 06:00 p.m., as well as on Saturdays from 08:00 a.m. to 04:00 p.m.

Chapter 1

Navigating the Interface

Starting FleetBoard..... 1-2

The FleetBoard Services 1-3

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1.1 Starting FleetBoard

To start FleetBoard, proceed as follows:

1. Enter the address *www.fleetboard.com* into the address line of your browser.

This will call the FleetBoard homepage. Here, you can find information on the FleetBoard product group.



Note: You can create a bookmark or favourite for this page in your browser.

2. To log in at FleetBoard, enter your *Fleet*, your *User Name*, and your *Password*. You will receive this data from your fleet administrator.

Fleet	<input type="text" value="My fleet"/>	User	<input type="text" value="Miller"/>	Password:	<input type="password" value="*****"/>	Login
-------	---------------------------------------	------	-------------------------------------	-----------	--	-------

3. Click *Login*.

You are led to the service portal. There, you can start the individual FleetBoard services.

1.2 The FleetBoard Services

When starting FleetBoard Vehicle Management, you are initially led to the service portal.



There, you can start the individual FleetBoard services.



Note: You are only permitted to start the services you have ordered. Services which you have not ordered are faded out in the service portal.

Vehicle Management comprises the following services:

Messaging

Here, the messages which the driver has sent to the dispatch office or vice versa are displayed and collected. For further information, refer to [Section Messages, Page 2 - 1](#).

Trip Records

Provides you with a simple log book of your vehicles. For instance, driving and stop times, drive consumption and idle consumption, the current position of the vehicles, as well as the working and standby time of the drivers are evaluated. For further information, refer to [Section Trip Records, Page 3 - 1](#).

Performance Analysis

The Performance Analysis provides analyses on the fuel consumption and the wear level of your vehicles. The evaluations can be made either by vehicle or by driver. Thus, it is an efficient instrument for reducing fuel costs and wear. For further information, refer to [Section Performance Analysis, Page 4-1](#).

Service

FleetBoard takes the data from the Telligent service system and indicates when the next maintenance work for the individual positions will be due, as well as the current technical condition of the vehicles of your fleet. For further information, refer to [Section Maintenance, Page 5-1](#).

Telediagnosics

The Telediagnosics service will only be activated for you on request.

Here, you can find technical data, such as wear ratings, filling levels, pressures, etc. This information is available for the service technicians in the workshops, e. g. in the event of errors. For further information, refer to [Section Telediagnosics, Page 6-1](#).

Logistics

By clicking the *Logistics* button, you will get to the independent Logistics service.

Service for the complete support of the Logistics process. In combination with the FleetBoard driver workstation, i.e. the corresponding hardware in the truck, it permits direct communication between the vehicle and the central server and, thus, permits the efficient planning of trips and order management. For further information, refer to the Logistics manual.

Cooling Data

The Cooling Data Management service is a FleetBoard telematics service to monitor the storage temperature in trailers. To use this service, the trailer has to be equipped with a cooling engine, a temperature scanner, and a telematics unit. For more information, please refer to the documentation on Cooling Data Management.

Mapping

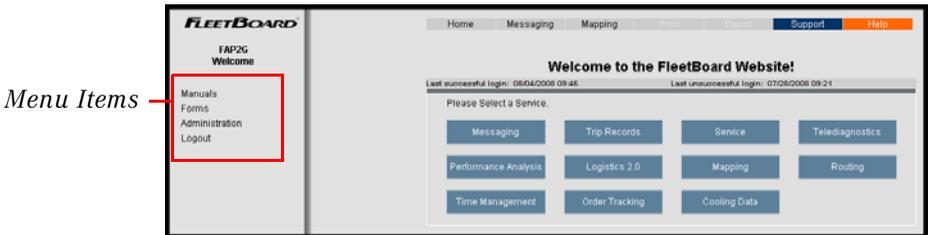
Shows the position of your vehicles on a map. For further information, please refer to the Mapping documentation.

Routing

Calculates the route for a trip from the start and destination location.

Menu Items

In addition, menu items are available in the service portal:



- *Manuals*

Under *Manuals*, you will find information on the FleetBoard user documentation. You can display this documentation directly in your browser or download it to your computer:

- **To display a manual directly in your browser**, left-click the corresponding link.

- **To download a manual to your computer**, right-click the link. Select *Save Target As* and indicate where you want to store the file.



Note: The documentation is available as PDF files. To be able to read and print it, you must have Acrobat Reader installed on your PC.

- *Forms*

Here, you will find important forms, such as the Vehicle Activation Form.

- *Logout*

Use this menu item if you wish to log out. You will then return to the FleetBoard home page. To gain access to FleetBoard again, you will have to log in once more.

1.3 User Interface Structure

The Vehicle Management interface is divided into three sections:

- [Navigation bar](#)
- [Buttons](#)
- [Text Section](#)

1.3.1 Navigation bar

On the navigation bar, the following information is displayed from the top downwards:

- Fleet name
- Selected service
- Menu items for the selected service

In the *Messaging* service, for instance, the menu items *Inbox Mail List*, *Outbox Mail List*, and *Send Freetext Message* are available.



Some of these menu items contain submenu items, which you can also reach via mouse click.

The position of the orange arrow tells you which menu you are currently in.



In our example, the user is working in the *Messaging* service under *Inbox Mail List*.

1.3.2 Buttons

The upper part of the interface comprises seven buttons, which have the following meaning.

1.3.2.1 The Services Button

Services

Takes you to the service portal.

1.3.2.2 The Messaging Button

Messaging

Takes you to the inbox mail list of the Messaging service.

The button is displayed in red when a new service call or alarm is received. The button is displayed in green when a new home call or event call is received. As soon as you go to your inbox mail list and read the new message, the button will be displayed in grey again.

1.3.2.3 The Mapping Button

Mapping

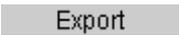
You can start the *Mapping* service via this button.

1.3.2.4 The Print Button

Print

Creates a print preview.

1.3.2.5 The Export Button

Export

Via this button, you can export data from FleetBoard. Please refer to [Section Exporting Data, Page 1 - 16](#).

1.3.2.6 The Support Button

Support

If you click the *Support* button, you go to another window. Here, you can find the telephone number of FleetBoard Support. In addition, you can send an e-mail to FleetBoard Support directly from this page.

1.3.2.7 The Help Button

Help

If you click the *Help* button, the online help will be activated.

1.3.3 Text Section

In the text section, information is displayed which you have selected via the navigation bar or via the buttons.

1.4 General Information on How to Use FleetBoard

The general procedure when working in FleetBoard Vehicle Management is:

1. Select a service. First, you get to an information page.
2. Select a menu item. You get to an overview table.
3. Set filters.
4. Click *View*.
5. The overview table now displays the data you have selected via the filters.
6. Click the magnifying glass symbol to go to the detail view for individual data sets. .

A blue rectangular button with the word "View" written in white text.

1.4.1 The Information Pages

If you select a service, you are initially led to a page with general and up-to-date information on this service. Use the menu items of the navigation bar to navigate within the selected service.

1.4.2 The Overview Tables

If you select a menu item, you are initially led to an overview table.

Filter section →

Vehicle or Vehicle Group All	Year 2006	Period Year		
Vehicle Search	Telematic Group All	Driving Style (Grade) All	Degree of Difficulty (Grade) All	
Average Weight [t]	Average Speed [mph]	Average Overall Consumption [mpg]		
Reset				View

Vehicle	Vehicle Group	Telematic Group	Driving Style [Grade]	Degree of Difficulty [Grade]	Total Distance [miles]	Average Weight [t]	Average Speed [mph]	Average Overall Consumption [mpg]	Average Drive Consumption [mpg]
39813	Metrux	MB	7.6	3.9	6,881	23	41	7.8	7.9
AD06 BLU	Western Com...	MB	7.2	4.2	17,318	24	39	7.4	7.6
AY05ERU	DHL	MB	7.6	4.9	65,276	31	39	7.5	7.7
AY06 6JJ	Dwell Truc...	MB	7.6	4.0	23,962	25	42	8.1	8.2
BU06 EWT	Gerard Mann...	MB	7.6	4.2	15,946	26	40	7.8	8.0
BU54ADX	TNT	MB	8.1	3.3	118,801	22	44	8.9	9.0
BU54ADY	TNT	MB	7.8	3.3	67,666	21	39	9.1	9.2
BU54ADZ	TNT	MB	7.8	3.4	106,928	22	43	8.5	8.7
BU54BWM	TNT	MB	7.0	3.3	54,882	20	41	8.4	8.5
BU54BWN	TNT	MB	8.6	3.7	115,536	24	47	8.7	8.8
Sum and Average Values (Related to Corresponding Filtered Records)									
∅			8.1	3.8	25,484	24	42	8.6	8.7
Sum					1,605,463				

→ *Data section*

- The top section allows you to set filters. In this way, you can determine which data is to be displayed in the table beneath.
- In the bottom section of the page, the most recent data of all the vehicles of your fleet is displayed in the form of a table.

1.4.2.1 How to Filter the Data in the Overview Tables

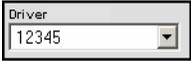
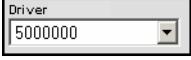
By default, the most recent data sets of all vehicles are displayed. The tables can, therefore, become very complex. Moreover, you may sometimes want to display only data for

a specific vehicle or a specific time range. For this purpose, you have to filter the overview tables. You can set the filters in the top section of each overview table.

Filtering Drivers, Vehicles, and Telematics Groups

Most overview tables allow you to filter vehicles, drivers, and telematics groups and, thus, reduce the number of data sets to be displayed.

- **Vehicle** means the tractor unit. It is identified by means of the vehicle name.
- The **driver** is identified by means of his FleetBoard DriverCard, the DTCO-ID, or the driver name. If the option *Show ID for Driver Name* has been checked in Customer Administration under *Fleet > Master Data*, the number of the FleetBoard DriverCard and the DTCO-ID will always be displayed in the filters.

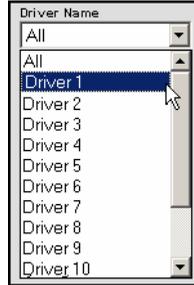
Identification of the Driver by Means of	Display in Filters
FleetBoard DriverCard No. 12345	
DTCO-ID 5000000	
FleetBoard DriverCard and DTCO-ID	

- During the installation process, your vehicles will be assigned to **telematics groups**. Mercedes-Benz vehicles will be assigned to the MB telematics group, while other vehicles will be assigned to the all-makes telematics group. For technical reasons, all-makes vehicles can transfer less data than Mercedes-Benz vehicles. By

means of the telematics groups filter, you can differentiate between Mercedes Benz vehicles and other vehicles.

To set filters, proceed as follows:

1. Select a driver or a driver group, for instance.



You can also combine several filters.



2. Then, click the *View* button. The overview table will now be filtered. Only the selected data will be displayed.

Filtering Date Time

By default, the most recent data sets of each vehicle are displayed. The filter *Date Time* is therefore set to *Recent Message*.

- If you wish to view data from earlier dates, select another filter from the drop-down list *Date Time*.



View

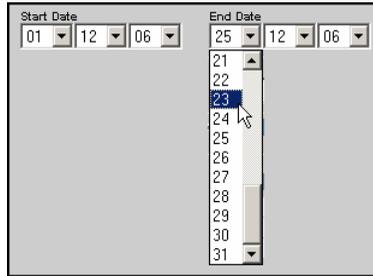
Then, click the *View* button. Only data from the selected time range will be displayed.



Note: It is not possible to set both the filters *Vehicle* and *Date Time* to *All* at the same time. One of the two filters has to be set and, thus, must limit the amount of data displayed.

- You can also enter a freely selected time range. To do so, click the calendar symbol  .

Enter a *Start Date* and an *End Date*.



View

Click *View*. Only data from the selected time range will be displayed.

1.4.2.2 How to Undo the Filtering Function in the Overview Tables

Reset

Click *Reset*. By default, the most recent data sets of each vehicle are displayed.

1.4.2.3 How to Sort the Data in the Overview Tables

Click the terms in the header line of the table.



The table is now sorted by the contents of the column in which you have clicked the header line.

The sorting order (forward or backward) is indicated by an arrow symbol.

Backward sorting: the vehicle with the highest number is displayed on top.



1.4.2.4 How to Navigate between Data Sets

The overview tables show a maximum of 12 data sets. If more data sets are available, you have to navigate between several pages with overview tables. The following symbols are available for navigation:

Icon	Meaning
	Go to the first page of the overview table
	Previous page
	Here, you can select a page with specific data sets (1-12 or 13-24 etc.). Subsequently, click to go to the page.
	Next page
	Go to the last page of the overview table.

1.4.2.5 How to Go to the Detail View of an Individual Data Set

Click the magnifying glass symbol  .

You are led to the detail view of the data set.

1.4.3 The Detail View of an Individual Data Set

In the detail view, detailed data is displayed for each data set.

Back

You can go back to the overview table by clicking the *back* button.

1.4.4 Exporting Data

You can export data from FleetBoard in order to import it into other programs and to evaluate it there.

1.4.4.1 How to Export Data from FleetBoard

To export data from FleetBoard and to import it, for instance, into Microsoft Excel, proceed as follows:

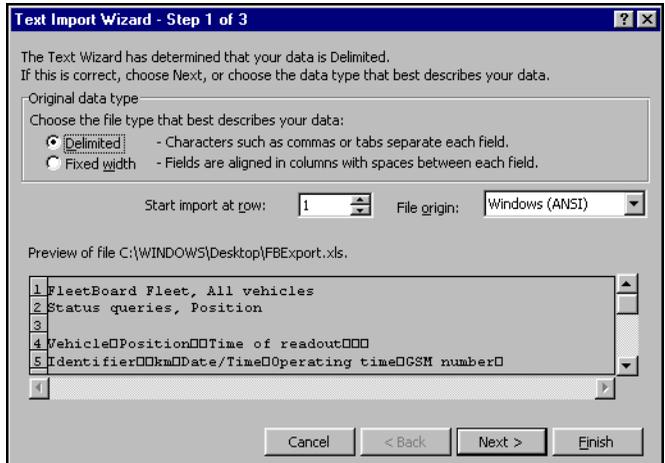
Export

1. On the FleetBoard page from where you wish to export the data, click the *Export* button.
2. If you are working with the Microsoft Internet Explorer, the *Download File* dialogue box will be opened.
3. In this dialogue box, you have to confirm that you wish to store the file on your computer.
4. Save the file. The .csv format is used automatically.



You can now open the file in Microsoft Excel, for instance, and edit it there.

1. Start Microsoft Excel.
2. Via *File > Open*, open the file you have just exported from FleetBoard. Follow the instructions of the Text Import Wizard to separate the columns correctly.



The file can now be saved and processed in Microsoft Excel.

1.4.4.2 How to Proceed in the Case of Export Errors

All contents are displayed in an individual cell.

Probably, Excel has not separated the columns correctly.

To display the contents correctly, proceed as follows:

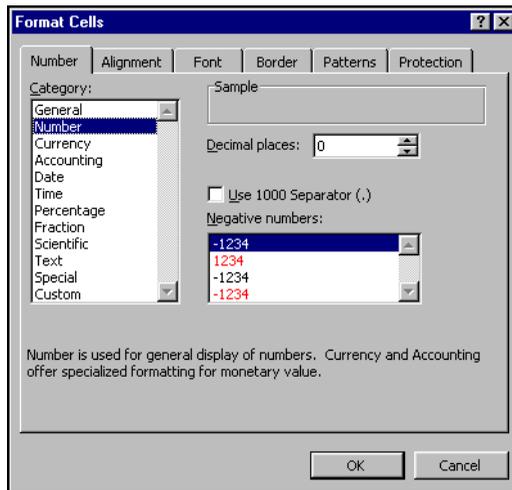
1. In Excel, select *Data > Text to Columns*.
2. Follow the instructions of the Text Import Wizard to separate the columns correctly.

Numbers are displayed incorrectly.

Sometimes, numbers are displayed incorrectly in Excel.

To correct this error, proceed as follows:

1. Select the column in question.
2. In the *Format* menu, select *Cells*.
3. As category, select *Number* and choose 0 decimal places. Click *OK*.



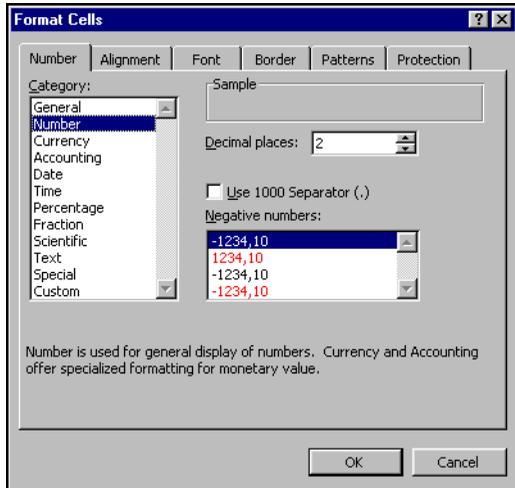
The numbers will now be displayed correctly.

The columns cannot be added up.

The cells of the column are probably formatted as text.

To correct this error, proceed as follows:

1. Select the column in question.
2. In the *Format* menu, select *Cells*.
3. As category, select *Number* and choose 2 decimal places. Click *OK*.



4. Allocate the new format to each cell. To do so, select each cell and press F2 and Enter.

It should now be possible to add up the values of the column.



Note: If you are using an English version of Microsoft Excel, you should replace the commas of the decimal numbers by points and format the content as numbers in the way described above. Only then will you be able to add up the columns.

Chapter 2

Messages

General Information on Messaging 2-2

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Outbox Mail List 2-7

Send Freetext Message 2-10

Forwarding Received Messages 2-12

2.1 General Information on Messaging

In FleetBoard Vehicle Management, the *Messaging* service provides information on messages exchanged between the dispatch office and the driver. In detail, the following messages can be displayed:

- *Inbox Mail List*

Messages which the dispatch office has received from the drivers.

- *Outbox Mail List*

Messages which have been sent by the dispatch office to other vehicles via the *Send Freetext Message* button.

Along with the message, you will receive further useful information on the current vehicle position, error code, etc.



Note: The Mapping service displays the vehicle position at the time a message is sent in a digital road map. You can open Mapping by clicking the *Mapping* button.

For further information, please refer to the Mapping documentation.

2.2 Inbox Mail List

The *Inbox Mail List* provides an overview of all messages received from your fleet. The following message types are possible:

- Home Calls/Event Calls/Service Calls

The messages are sent by the drivers by means of the three buttons installed in the vehicle. These buttons enable the driver to transmit various messages automatically. The *Service Call* button is meant to be used by the driver to indicate a breakdown.

You can homogeneously define the meaning of the calls for the fleet under *Administration > Fleet > Messages*. The message stored here will then be displayed in the inbox.

- Alarm

An alarm is either triggered by the electronic anti-theft system or when the data memory of the vehicle is full. When the data memory is full, you receive a message asking you to start a vehicle update and, thus, to empty the data memory.

These messages are then displayed in the FleetBoard *inbox*. They can also be forwarded to you as an SMS to your mobile phone or as an e-mail to your mail program. This way, the messages reach you independent of whether or not you are currently working at your desk. In the *Customer Administration* module, your fleet administrator can determine telephone numbers or addresses for message forwarding.

You can check for incoming messages at one glance by clicking the *Messaging* button in the top line of the navigation bar.

Messaging

- Button is displayed in *grey*: There are no new messages.

Messaging

- Button is displayed in *green*: A home or event call has been received.

Messaging

- Button is displayed in *red*: A new service call or alarm has been received.

2.2.1 Inbox Mail List, Overview Table

The *Inbox Mail List, Overview Table* page gives you an overview of all messages which have been received. They are displayed in columns and can be sorted and filtered according to various criteria.

The screenshot shows a web interface for viewing messages. At the top, there are several filter controls: 'Vehicle or Vehicle Group' (set to 'All'), 'Date Time' (set to 'Recent Messages'), 'Vehicle Search' (empty), 'Telematic Group' (set to 'All'), 'Driver Name' (set to 'All'), and 'Message Type' (set to 'All'). Below these filters are 'Reset' and 'View' buttons. The main area contains a table with the following data:

Vehicle	Telematic Group	Vehicle Group	Date Time	Driver	Message Type
🔍 CN55 AXK	MB	Euro Commercials	12/12/2006 04:58	Driver 1	Event Call
🔍 DK06 NRZ	MB	Enza Motors, AdBlu...	12/12/2006 00:07	Driver 3	Home Call
🔍 FJ06 YRG	MB	Mertux, Avior	12/11/2006 17:12	Driver 7	Event Call
🔍 DK56 EBL	MB	Road Range, AdBlue...	12/09/2006 07:46	Driver 9	Event Call
🔍 YN06 KAG	MB	H & L Garage, Cent...	12/08/2006 06:18	Driver 2	Home Call
🔍 BU06 EWT	MB	Gerard Mann, AdBlu...	12/07/2006 15:46	Driver 10	Home Call
🔍 YE06 HYP	MB	Northside Truck & ...	12/06/2006 21:58	Driver 5	Event Call
🔍 HX56 LCZ	MB	Pentagon	12/02/2006 12:57	Driver 4	Home Call
🔍 BU54A0Z	MB	TNT	12/02/2006 09:53	Driver 6	Home Call
🔍 YN05AKX	MB		12/01/2006 10:18	Driver 8	Event Call

At the bottom of the table, there are navigation controls including arrows and a page indicator '1-50'.

- In the *Vehicle* column, all vehicles are listed.
- *Telematic Group* specifies the telematics group the vehicle is assigned to.
- The *Vehicle Group* column indicates the group to which a vehicle is assigned.
- The *Date Time* column indicates the date and time the message was sent.
- The *Driver* column specifies the name of the driver. The entry „-“ means *not available*, i.e. FleetBoard was not able to identify a driver. This will be the case if you use telematics platform 1004 or if you have not assigned a driver card (FleetBoard DriverCard or DTCO driver card) to a driver.

- The *Message Type* column contains the type (home call, event call, service call, alarm) of the messages recently received, as well as the first characters of the message defined under *Administration > Fleet > Messages*.

2.2.1.1 How to Filter the Inbox Mail List

By means of the drop-down list in the top section of the window, you can filter the table in order to display only selected data sets.



If you wish to view only messages of the *Service Call* type, select *Service Call* from the drop-down list.

View

Then, click the *View* button.

2.2.2 Inbox Mail List, Detail View

2.2.2.1 Home, Event, and Service Call

- In the top section of the page, the data listed on the page *Inbox Mail List, Overview Table* is displayed more clearly.

Vehicle DK06 NRZ	Vehicle Group Enza Motors, AdBlue	Date Time 12/12/2006 00:07	
Telematic Group MB	Driver Driver 8	Message Type Home Call	
Mileage [miles] 23,476	Operating Time [h] 697	Trailer -	Content of Home Call -
Position 14 miles W of Airport East Midlands(GB-SG18)	Latitude 52°48.5412	Longitude -2°22.1681	PA_Fzg_Sprache 235.0
PA_Fzg_Erztzulassungssda			

- In the bottom section of the page, the following details are given:
 - The *Mileage* of the vehicle at the time of the message.
 - The *Position* of the vehicle at the time the message was sent.
 - The parameter *PA_Fzg_Erstzulassungsdatum* specifies the date the vehicle was registered for the first time. This parameter is only displayed for service calls or home calls.
 - The *Operating Time* of the vehicle in hours at the time of the message.
 - *Latitude*: Geographical latitude of the vehicle position at the time the message was received.
 - Name of the *Trailer*, if available.
 - *Longitude*: Geographical longitude of the vehicle position at the time the message was received.
 - *PA_Fzg_Sprache* designates the language selected in the Telligent maintenance system, informing you of the language in which you can communicate with the driver. This parameter is only displayed for service calls or home calls.
- In the case of a service call: further vehicle data. You can find a description of this data in [Section Technical Data, Page 6 – 15](#).



Note: Only vehicles belonging to the MB telematics group are able to supply data for trailers, language, and vehicle registration date. For technical reasons, vehicles belonging to other telematics groups are not able to supply this data. For this reason, “-“ will be displayed instead of a value for these vehicles.

2.3 Outbox Mail List

Vehicle 48	Vehicle Group All Vehicles	Date Time 16.07.2003 13:35	
Telematic Group MB	Driver -	Message Type Alarm	
▼			
Trailer -	Position 2 miles N of Darmstadt		
Alarm Content		<div style="border: 1px solid black; padding: 5px;"> The TP Memory for Tour Events is Almost Full. Please Request the Tour Events of Your Vehicle in Tour Records (Alarm Type 5). </div>	
<input type="button" value="Back"/>			

The *Outbox Mail List* provides an overview of all messages you have sent to your fleet using the *Send Freertext Message* option.

2.3.1 Outbox Mail List, Overview Table

The *overview table* displays the messages sent to the fleet.

Vehicle or Vehicle Group All	Time Period Recent Messag				
Vehicle Search	Telematic Group All				
<input type="button" value="Reset"/> <input type="button" value="View"/>		▼			
Vehicle	Telematic Group	Vehicle Group	Date Time	Subject	Confirmation
YN06 KBJ	MB	Short distances	11/27/2006 14:05	Call back	Reply not Requested
					<input type="button" value="1-50"/>

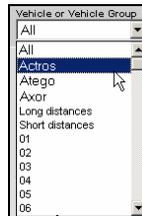
- The columns *Vehicle*, *Telematic Group*, and *Vehicle Group* correspond to the identical columns in the *Inbox Mail List*.
- The *Date Time* column indicates the date and time the message was sent.
- The *Subject* column specifies the first 20 characters of the message title.
- The entry in the *Confirmation* column tells you whether a message has already been read and confirmed.

- *Reply not Requested* means that the checkbox *Request for Read Confirmation* was not checked when the message was sent.
- *Reply Requested* means that the checkbox was activated, but the confirmation has not yet been sent by the vehicle.
- *Message Read* means that the message has been read and the confirmation has been sent by the vehicle.

2.3.1.1 How to Filter the Outbox Mail List

Use the drop-down lists in the top section of the page to filter the table and to view only those data sets you are interested in.

For example, if you wish to view all messages you have sent to a specific vehicle, select this vehicle under *Vehicle/Group Name*.



View

Then, click the *View* button.

2.3.2 Outbox Mail List, Detail View

The top section of the *Outbox Mail List, Detail View* page displays the data listed on the page [Outbox Mail List, Overview Table](#).

Vehicle YN06 KBJ	Vehicle Group Central Demonstrators, Actros	Date Time 11/27/2006 14:05	
Telematic Group MB	Title What is the damage?	Confirmation Message read 11/27/2006 14:09	
▼			
Sender Wayne Cooper	Text <input type="text" value="Can you make it to the next workshop (20 km)?"/>		
Back			

The bottom section of the page indicates the sender and the contents of the sent message.

2.4 Send Freetext Message

Under *Send Freetext Message*, you can write and send messages.

1. Under *Addressee*, indicate whether you wish to send the message to a specific vehicle, to a vehicle group, or to the entire fleet.



Note: You can only send free text messages to vehicles belonging to the *MB* telematics group. Therefore, only vehicles belonging to this telematics group are displayed under *Addressee > Vehicle*. Accordingly, only vehicle groups containing vehicles of the *MB* telematics group are displayed under *Addressee > Vehicle Group*.

2. Enter the title of the message next to *Title*. The first 20 characters of this title are displayed in the overview table of the outbox mail list in the *Title* column.
3. Use the *Text* field to write your message. The text length is limited to 140 characters. The number of characters remaining is displayed below the text field on the right-hand side.

The screenshot shows a window titled "Send Freetext". It has two main input areas: "Title" and "Text". The "Title" field contains the text "What is the damage?". The "Text" field contains "Can you make it to the next worksho (20 km)?". Below the "Text" field, there is a checkbox labeled "Request Read Confirmation" which is currently unchecked. At the bottom right of the window, a status bar indicates "You have 77 characters left.".

4. Check the checkbox next to *Request for Read Confirmation* if you wish to receive a confirmation as soon as the recipient has read your message.

After you have made all your entries, the window may look like this:

Submit

5. To send the message, click the *Submit* button.

You will receive a message asking you whether you really want to send the message.

6. Click *Yes* to confirm that you really want to send the message.



Note: You can only send free text messages to vehicles belonging to the *MB* telematics group. If one of your addressees is a vehicle belonging to the all-makes telematics group, you will receive a message informing you that no SMS can be sent to the all-makes vehicle.

The message will now be sent.

2.5 Forwarding Received Messages

By default, all messages sent by the drivers are received by the FleetBoard system. That means that you can track new messages only from your FleetBoard computer. But you can also have all incoming messages forwarded to your mobile phone via SMS or to your mail address via e-mail. This way, new messages will reach you even if you are not currently working in FleetBoard Vehicle Management.

Your fleet administrator will set up your forwarding details for you in the FleetBoard Customer Administration module. You will find further information in the documentation on FleetBoard Customer Administration.

Chapter 3

Trip Records

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Single Trips	3-6
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3.1 General Information on Trip Records

The *Trip Records* service provides an overview of the driving and stop times of your vehicles. The Trip Records service of FleetBoard automatically records the relevant transport sections (driving times and pauses).

A trip is defined as follows:

- A trip starts when the vehicle moves for more than 2 minutes. This delay was defined on purpose to prevent short shunting manoeuvres from being erroneously interpreted as a trip.
- A drive ends when the vehicle stops for more than 5 minutes (speed = 0 mph). In this instance, a pause starts.
- A trip is automatically terminated if the ignition is turned off.



Note: A trip is not displayed in FleetBoard until the following pause has been terminated.

Example: The driver pauses from Friday evening over the weekend. On Monday he starts off again. It is only then that the data can be transmitted from the vehicle and that the trip made on Friday is displayed in FleetBoard. The time of transmission depends on the settings in the scheduled tasks (see the Customer Administration documentation for further information). If requested, the parameters for the detection of trips and pauses can be modified by FleetBoard Support.

3.2 Positions

With *Positions*, you can locate the vehicles of your fleet. This is either done by means of the scheduled tasks sent automatically according to the configurations made in the Customer Administration module or via manual vehicle queries.

3.2.1 Positions, Overview Table

The page *Positions, Overview Table* gives you an overview of the most recent positions of your fleet's vehicles.

Vehicle	Telematic Group	Vehicle Group	Date Time	Driver	Driver Group	Position	Mileage [mi]
Dash_FMS_RDL_DTCD	All-Makes	pal_group	08/11/2008 13:00			0 miles E of FleetBoard	
Dash_PSM_RDL_DTCD	MB		07/21/2008 07:30	S 0000700111682000,		0 miles E of FleetBoard	
Dash_MP2_RDL_DTCD	MB		07/18/2008 14:30			0 miles E of FleetBoard	
Dash_ATETP02	All-Makes		07/17/2008 06:14			0 miles E of FleetBoard	
Eder21	MB		07/15/2008 10:25			1 miles SE of FleetBoard	11,825
WDBDispoKofferPLY	All-Makes		05/20/2008 10:05			0 miles E of FleetBoard	

- In the *Vehicle* column, the vehicles are listed with the names specified by you.
- *Telematic Group* specifies the telematics group the vehicle is assigned to.
- The *Vehicle Group* column indicates the group to which a vehicle is assigned.
- The *Date Time* column indicates the date and time the query was made.

- The *Driver* column specifies the name of the driver.



Note: A driver ID or a driver name will only be displayed if the DCTP telematics platform is used together with a FleetBoard driver card or a DTCO driver card.

- The *Position* column contains the position of the vehicle at the time of the query.
- *Mileage* specifies the mileage of the vehicle at the read-out time of the query.

3.2.1.1 How to Filter Position Messages

By means of the drop-down list in the top section of the window, you can filter the table in order to display only selected data sets (e.g. those of a specific vehicle). The available filters are *Vehicle*, *Driver*, *Telematic Group*, and *Time Period*.

By clicking the magnifying glass symbol  , you can go to the detail view.

3.2.2 Positions, Detail View

The page *Positions, Detail View* provides an overview of the exact condition of the vehicle at the readout time of the query.

In the top section of the page, the data displayed in the overview table is shown again.

Vehicle YN06 KEU	Vehicle Group Actros	Date Time 12/12/2006 10:58	
Telematic Group MB	Driver Driver 3	Position 12 km SE of Norwich (GB-NR13 4)	Mileage 26,036
▼			
GPS Date Time 12/12/2006 10:53	Latitude 52°27.7021	Longitude 1°24.5951	Heading [°] 324
Ignition On	Engine Off	Speed [mph] 0	Trailer -
FB-GSM-Number +447800250993			
Back			

In the bottom section of the page, the following information is given:

- The *GPS Date Time* indicates the time when the last successful GPS locating took place. This value normally corresponds to the time the displayed position request was made. Due to locating interferences, however, it may also have been created at an earlier point of time.
- The condition of the *Ignition* (on/off).
- The *FB-GSM-Number* is the telephone number of the vehicle.
- *Latitude*: geographical latitude of the vehicle position.
- The condition of the *Engine* (on/off).
- *Longitude*: geographical longitude of the vehicle position.
- The *Speed [km/h]* of the vehicle at the readout time of the query.
- The direction the vehicle was heading towards, stated in degrees under *Heading [°]*.
- Name of the *Trailer*, if available.

3.3 Single Trips

Under *Single Trips*, you can find an overview of all trips and pauses of your fleet, as well as the option to evaluate the average speed, the average duration, and the total duration of specific trips.

3.3.1 Single Trips, Overview Table

The page *Single Trips, Overview Table* displays all recorded trips and pauses of your fleet in the form of a table.

Vehicle	Telematic Group	Vehicle	Driver	Status	Start	End	Duration	Distance [km]	Weight [t]	Total consumption [l]	Fuel Level [%]
YN55 OEL	MB	Central De...		Trip	12/12/2006 09:16	12/12/2006 09:20	0:03	0	30	0.0	90
AY05ERU	MB	DHL		Trip	12/12/2006 08:19	12/12/2006 09:56	1:36	75	15	7.2	48

Sum and Average Values (Related to Corresponding Filtered Records)											
#								0.49	75		3.8
Sum								1.39	75		7.2
								Sum (driving)			7.2
								Sum (pausing)			0.0

- In the *Vehicle* column, the vehicles are listed with the names specified by you.
- *Telematic Group* specifies the telematics group the vehicle is assigned to.
- The *Vehicle Group* column indicates the group to which a vehicle is assigned.
- The *Driver* column specifies the name of the driver.



Note: A driver ID or a driver name will only be displayed if the DCTP telematics platform is used together with a FleetBoard driver card or a DTCO driver card.

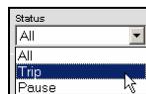
- The *Status* column indicates whether the trip section displayed is a trip or a pause.
- The columns *Start* and *End* indicate the start and end time of each trip or pause.
- The *Duration* column specifies the duration of a trip or pause.
- The *Distance* column shows the distance covered in miles during a trip or pause.
- The *Weight [t]* column contains the weight of the vehicle including freight at the readout time of the query.
- *Total consumption* indicates the total consumption for the individual trip or pause.
- *Fuel Level [%]* at the time of the query.

In the bottom lines of the table, average values and sums are displayed for distance, duration, and consumption. Moreover, the total duration and total consumption for all trips and pauses are specified.

3.3.1.1 How to Filter Single Trips

To view only selected data sets (e.g. those of a specific vehicle), filter the data.

- The available filters are the drop-down lists *Vehicle*, *Driver*, *Telematic Group*, *Date Time*, and *Status*.



- To filter for *Distance*, *Driving Duration*, *Total Consumption*, and *Weight*, you have to enter value ranges.

Distance [km]
10 - 150

View

Click *View*. The desired data sets will be displayed.

3.3.2 Single Trips, Detail View

The page *Single Trips, Detail View* provides an overview of further details regarding the state of the vehicle at the readout time of the query.

In the top section of the page, the data displayed in the overview table is shown again.

Vehicle AY0SERU	Vehicle Group Actros		
Telematic Group MB	Driver -	Status Trip	Start 12/12/2006 08:19
End 12/12/2006 09:56	Duration 1:36	Distance [km] 75	Weight [t] 15
Total consumption [g] 7.2	Fuel Level [%] 48		
▼			
Average Speed [mph] 46	TCO Chart Changes 0	Odometer Reading [km] 115,507	Trailer -
Position 20 km W of Slough (GB-SL13)	Latitude 51°25.5472	Longitude -2°58.1222	

In the bottom section of the page, the following information is given:

- The entry under *Average Speed* indicates the average speed of the vehicle within this trip or pause.
- *Position* indicates the position of the vehicle at the time of the query.
- *TCO Chart Changes* indicates the number of TCO chart changes within this trip or pause.

- *Latitude* is the geographical latitude of the vehicle position at the time of the query.
- *Odometer Reading* of the vehicle at the time of the query.
- *Longitude* is the geographical longitude of the vehicle position at the time of the query.
- *Trailer* states the name of the trailer.

3.4 Trip Records, Vehicle Query Form

The *Vehicle Query Form* allows you to start a query for a vehicle or vehicle group at any time by sending an appropriate message.

1. In the top section of the page, select *Request Type*. Queries regarding the *Positions* and the *Single Trips* are available. The results of the queries correspond to those described on the previous pages.

2. Subsequently, specify the *Addressee* to whom you want to send the data. You can select either an individual *Vehicle* or a complete *Vehicle Group*.

Submit

3. Click *Submit*.

A message will be displayed asking you whether you really want to send the query.

4. Click *Yes* to submit the query.

Chapter 4

Performance Analysis

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Information on How to Use the Performance Analysis 4-3

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4.1 General Information on the Performance Analysis

The Performance Analysis allows you to evaluate characteristic trip data of your vehicles. It takes the difficulties of the trip into account and enables you to gather information on the driving features of the vehicle, as well as the driving style of the particular driver.

In this way, the Performance Analysis makes your vehicle pool more transparent. You are able to monitor characteristic trip data of your vehicles, make out weak points, and react to them.

The Performance Analysis, thus, provides useful information for a trip recalculation and assists you in particular to reduce the fuel consumption of your fleet. Moreover, it helps you to minimise the wear level of your vehicles.

MB Vehicles and All-Makes Vehicles

Mercedes-Benz vehicles and vehicles of other makes send different data sets to FleetBoard. Because of that, FleetBoard distinguishes the Performance Analysis for Mercedes-Benz vehicles and the Universal Performance Analysis for so-called all-makes vehicles (i.e. vehicles of all other makes). If your fleet consists of Mercedes-Benz vehicles and vehicles of other makes and if you wish to compare the values obtained for all vehicles, you can have your Mercedes-Benz vehicles configured by FleetBoard support in such a way that they additionally provide data for the Universal Performance Analysis. Within the Universal Performance Analysis, you can then compare all vehicles with each other.

4.2 Information on How to Use the Performance Analysis

The Performance Analysis allows you to request data in a targeted manner. The procedure to be applied is:

1. Set filters.
2. Click *View*.
3. You are led to the overview table which gives you an overview of the data of the selected vehicles.
4. Click the magnifying glass symbol to go to the detail view for individual data sets.

4.2.1 Navigating the Performance Analysis

The following options are available for the navigation between the data sets:

Symbol	Meaning
	Leads you to the detail view of the data set.
	Leads you to the graphical display of the analysis.
	Takes you back to the overview table.

You can find further general navigation options in [Section How to Navigate between Data Sets, Page 1 – 15](#).

4.3 Performance Analysis for MB Vehicles

MB vehicles provide other and more data sets than vehicles of other makes. These data sets are evaluated in the performance analysis for MB vehicles.

4.3.1 Evaluations in Performance Analysis MB

FleetBoard evaluates the driving style of the driver, the degree of difficulty of the trips, and the driving features of the vehicle with the help of a grading system. The evaluation is done via a scale between 1 and 10.

The grades have the following meaning:

1	2	3	4	5	6	7	8	9	10
very bad			average				very good		

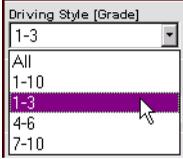
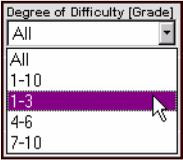
For example, in the evaluation of the degree of difficulty, *1* stands for easy and *10* stands for difficult. In the evaluation of the average slope gradient, *1* means low and *10* means high.

4.3.2 Overview Tables in Performance Analysis MB

Overview tables offer comprehensive filter options and give a first overview of the evaluation of the performance analysis.

4.3.2.1 Filtering

The following filtering options are available:

Filter	Meaning
	<p>Filters for evaluations of the driving style. By default, data sets with evaluations from 1 to 10 are displayed. Here, you can search for vehicles with a very bad (1-3), average (4-6), or very good (7-10) grade.</p>
	<p>Filters for evaluations of the degree of difficulty. By default, data sets with evaluations from 1 to 10 are displayed. Here, you can search for vehicles with a very low (1-3), average (4-6), or very high (7-10) degree of difficulty.</p>
	<p>Corresponds to the average overall consumption in l/100 km.</p> <p>By default, data sets with an average fuel consumption between 0-50 l/100 km are displayed. You can search for vehicles with a very high or very low average fuel consumption.</p>
	<p>Average Speed in km/h.</p> <p>By default, data sets with an average speed between 0-100 km/h are displayed. You can search for vehicles with a very high or very low average speed.</p>
	<p>Average weight in t including freight.</p> <p>By default, data sets with an average weight between 0-50 tons are displayed. You can search for vehicles with a very high or very low average weight.</p>

You can find further filtering options under

- [Vehicle Analysis, Predefined Period\(s\)](#), Page 4 - 19
- [Vehicle Analysis, Period Breakdown](#), Page 4 - 40

4.3.2.2 Contents

The overview table may look as follows:

Vehicle	Vehicle Group	Telematic Group	Driving Style [Grade]	Degree of Difficulty [Grade]	Total Distance [km]	Average Weight [t]	Average Speed [km/h]	Average Overall Consumption [l/100km]	Average Drive Consumption [l/100km]
YND6 KAK	Central Dem...	MB	9,6	0,0	47.779	-	80	28,5	28,4
YND6 KAD	H & L Garag...	MB	9,4	0,0	28.700	-	64	31,5	31,1
YND6 KAU	Central Dem...	MB	8,5	3,5	28.412	20	66	31,5	31,1
YND6 KBE	Central Dem...	MB	8,1	3,4	2.930	17	64	29,2	28,8
YND6 KBF	Central Dem...	MB	7,6	4,0	33.805	24	66	34,6	34,0
YND6 KBJ	Central Dem...	MB	7,7	4,0	16.827	22	56	33,6	32,6
YND6 KBK	Central Dem...	MB	8,1	4,5	4.618	26	66	36,5	35,7
YNS6 QEK	Central Dem...	MB	7,7	3,5	12.175	20	64	30,2	29,7
YNS6 OEL	Central Dem...	MB	9,0	3,9	121.887	23	66	32,5	31,9
Sum and Average Values (Related to Corresponding Filtered Records)									
0			8,3	3,8	33.003	23	67	31,9	31,4
Sum					297.031				

The individual **columns** of the table have the following meaning:

Column	Meaning
<i>Vehicle</i>	Vehicle names of the selected vehicle group.
<i>Vehicle Group</i>	Name of the vehicle group.
<i>Telematic Group</i>	Designation of the telematics group to which the vehicle is assigned.

Column	Meaning
<p><i>Driving Style</i> <i>[Grade]</i></p>	<p>Evaluation of the driving style.</p> <p>An average value is calculated for the selected period. The evaluation is indicated by values between 1 (very bad) and 10 (very good):</p> <p>The overall evaluation of the driving style comprises the following items:</p> <ul style="list-style-type: none"> • Preventive driving in relation to the fuel consumption and the use of the brakes. The less fuel is consumed and the more careful the brakes are applied, the better the evaluation of the driving style. • Engine operation relating to the vehicle style map: The gear changing behaviour of the driver influences the evaluation. • Accelerator pedal movement: The less frequently the accelerator pedal is moved between two thresholds and the less strain is, thus, put on the engine, the better the evaluation of the driving style. • Uniform vehicle speed: The fewer speed changes are counted, the steadier and more fuel-saving the driver's driving style. In this case, the evaluation of <i>Uniform Speed</i> will lead to a positive result. • Number of stops: The fewer stops are counted, the better the driving style. • Deceleration: Represents the use of the brake during a trip. You can achieve a good evaluation if the brake pedal is handled "carefully", i.e., for example, if you avoid applying full braking pressure where it is not absolutely necessary.

Column	Meaning
<i>Degree of Difficulty [Grade]</i>	<p>Evaluation of the degree of difficulty.</p> <p>The evaluation is indicated by values between 1 (very easy) and 10(very difficult):</p> <p>The overall evaluation of the degree of difficulty comprises the following items:</p> <ul style="list-style-type: none"> • Average slope: Is calculated from the gradient surmounted during a trip. The higher the average slope, the more difficult the trip. • Number of stops: The more stops are counted, the more difficult the trip. • Weight: The higher the gross weight, the higher the degree of difficulty.
<i>Total Distance [km]</i>	Total distance covered in the selected time range.
<i>Average Weight [t]</i>	Average weight of the vehicle including freight, or, if applicable, average value of all vehicles of the selected group.
<i>Average Speed [km/h]</i>	Average speed of the vehicle, or, if applicable, average value of all vehicles of the selected group.
<i>Average Overall Consumption [l/100km]</i>	Average overall fuel consumption of the corresponding vehicle, or, if applicable, average value of all vehicles of the selected group. Includes the drive consumption and the idle consumption.
<i>Average Drive Consumption [l/100 km]</i>	Average fuel consumption of the vehicle, or, if applicable, average value of all vehicles of the selected group.
<i>Number of Vehicles</i>	Only available under Vehicle Analysis/Period Breakdown. If you have selected an analysis for a vehicle group, the number of vehicles in the corresponding group is displayed in this column.

Column	Meaning
<i>Number of Drivers</i>	Only available under Driver Analysis/Period Breakdown. If you have selected an analysis for a driver group, the number of drivers in the corresponding group is displayed in this column.

The last two **lines** of the table summarise the results of the analysis:

Line	Meaning
<i>Total</i>	The total distance covered by all vehicles of the selected group is displayed.
∅	Average values for driving style, degree of difficulty, distance, weight, speed, overall consumption, and drive consumption.

By clicking the magnifying glass symbol  , you can go to the detail view.

4.3.3 Detail View in Performance Analysis MB

The table on the top displays data which you have already seen under [Predefined Period\(s\), Overview Table - Contents](#). The bottom section displays more details.

Vehicle Name	Period	Driver	Trailer
BUS4A0X	Year 2006	Gordon, Ben	
Driving Style	Degree of Difficulty	Average Weight [t]	Average Speed [km/h]
8,1	3,3	22	71
Average Overall Consumption [l/100km]	Average Drive Consumption [l/100km]		
31,8	31,4		

Driving Style			
Driving Style (Consumption) [Grade]	8,1	Driving Style (Brake) [Grade]	8,2
Preventative Driving Style	7,2	Preventative Driving Style	7,2
Driving Style (Pedal Movements) [Grade]	8,5	Driving Style (Deceleration) [Grade]	9,2
Driving Style (Stops) [Grade]	9,5		

Degree of Difficulty			
Average Slope	3,1	Average Weight [Grade]	4,4
		Stops [Grade]	1,7

Additional Consumption Values		Additional Values		Diagrams	
Overall Consumption [l]	61.052,0	Total Distance [km]	191.823	Power Take Off 1 [min]	0
Drive Consumption [l]	60.261,6	Moving Time [Hour:min]	2:657:43	Power Take Off 2 [min]	0
Idle Consumption [l]	790,4	Idling Time (Engine On) [Hour:min]	2:28:56	Power Take Off 3 [min]	0
		Idling Time (Engine Off) [Hour:min]	9:2:23	Number of Stops	17.034
		Braking Distance/Total Distance [%]	3	Percentage Speed > 95 km/h / Total Distance [%]	71
		Braking Distance w/o Brake Wear / Total Distance [%]	2	Total Coasting Distance [km]	40.931
				Coasting Distance/Total Distance [%]	21
				Cruise Control / Total Distance [%]	57
				Speed Classification	
				Braking Distance [km]	5.953
				Retarder Braking Distance [km]	3.608
				Engine Operation M/h (Not Highest Gear)	7,9
				Highest Gear Torque	
				Total Torque Classification	

Back

Driving Style

The overall evaluation of the driving style consists of partial evaluations of the fuel-related and the brake-related driving style:

Consumption-Related Partial Evaluation	Meaning
<i>Preventive Driving Style</i>	<p>Preventive Driving is calculated from the relation of the distance the service brake was used and the overall distance covered.</p> <p>The lower the percentage, the better the evaluation. A positive evaluation signifies an economical use of the service brake and, thus, a fuel-saving driving style. It can be achieved by releasing the accelerator pedal in good time when there are obstacles. Obstacles are for example: red traffic lights, green lights which have lasted for a long time, slower road users, junctions.</p>
<i>Pedal Movements [Grade]</i>	<p>Evaluates how often the pedal was moved between two thresholds.</p> <p>The fewer pedal movements have been made, the lower are the various strains and workloads on the engine and the more favourable is the evaluation.</p>
<i>Stops [Grade]</i>	<p>Specifies the number of times the vehicle stopped during the trip or during the selected time period (speed = 0).</p> <p>A positive evaluation means that the vehicle was stopped only a few times.</p>
<i>Engine Operation M/n (Not Highest Gear) [Grade]</i>	<p>The value refers to the M/n style map for all gears except the highest gear.</p> <p>A positive evaluation indicates that the driver used an appropriate gear. The longer appropriate gears were used, the better the evaluation.</p>

Consumption-Related Partial Evaluation	Meaning
<i>Uniform Speed</i> <i>[Grade]</i>	Evaluates how often the vehicle has changed speed. The fewer speed changes are counted, the steadier and more fuel-saving is the driver's driving style and the more favourable is the evaluation.

Brake-Related Partial Evaluation	Meaning
<i>Preventive Driving Style</i>	Preventive Driving is calculated from the relation of the distance the service brake was used and the overall distance covered. The lower the percentage, the better the evaluation. A positive evaluation signifies an economical use of the service brake and, thus, a fuel-saving driving style. It can be achieved by releasing the accelerator pedal in good time when there are obstacles. Obstacles are for example: red traffic lights, green lights which have lasted for a long time, slower road users, junctions.
<i>Deceleration</i> <i>[Grade]</i>	Represents the use of the brake during a trip. You can achieve a good evaluation if the brake pedal is handled "carefully", i.e. if you avoid applying full braking pressure where it is not absolutely necessary.

Degree of Difficulty

The overall evaluation of the degree of difficulty consists of the following partial evaluations:

Evaluation of the Degree of Difficulty	Meaning
<i>Average Slope [Grade]</i>	<p>The Average Slope gives you an impression of the characteristics of the trip.</p> <p>A mountainous route corresponds to a rather difficult trip and is assessed with a high value for the <i>average slope</i> (e.g. 10, very mountainous route profile). A rather flat route corresponds to an easy trip and is assessed with a low value (e.g. 1, flat route).</p> <p>This evaluation is also taken into account in the overall evaluation of the degree of difficulty.</p>
<i>Average Weight [Grade]</i>	<p>Evaluation of the average weight of the vehicle including freight, or, if applicable, average value of all vehicles of the selected group.</p> <p>A low average weight corresponds to a rather easy trip and is evaluated with a low grade. A high average weight corresponds to a rather difficult trip and is evaluated with a high grade.</p> <p>This evaluation is also taken into account in the overall evaluation of the degree of difficulty.</p>
<i>Stops [Grade]</i>	<p>Specifies the number of times the vehicle stopped during the trip or during the selected time period (speed = 0).</p> <p>Few stops correspond to an easy trip and are evaluated with a low grade. Many stops correspond to a difficult trip and are evaluated with a high grade.</p> <p>This evaluation is also taken into account in the overall evaluation of the degree of difficulty.</p>

Additional Consumption Values

Consumption Value	Meaning
<i>Overall Consumption [l]</i>	The overall consumption includes the drive consumption and the idle consumption.
<i>Drive Consumption [l]</i>	The <i>Drive Consumption [l]</i> indicates the total amount of fuel consumed while driving.
<i>Idle Consumption [l]</i>	Corresponds to the idle fuel consumption of the vehicle.

Further Performance Features

Value	Meaning
<i>Total Distance [km]</i>	Corresponds to the total distance covered by the vehicle so far.
<i>Moving Time [hour:min], Idling Time (Engine On) [hour:min], Idling Time (Engine Off) [hour:min]</i>	The values indicate details regarding driving and standing times during the trip.
<i>Braking Distance/ Total Distance [%]</i>	<p>Indicates the usage of the service brake during the total distance in per cent.</p> <p>The lower the percentage, the more preventive the driving style. An economical use of the service brake and, thus, a fuel-saving driving style can be achieved by releasing the accelerator pedal in good time when there are obstacles. Obstacles are for example: red traffic lights, green lights which have lasted for a long time, slower road users, junctions.</p>

Value	Meaning
<i>Braking Distance w/o Brake Wear / Total Distance [%]</i>	<p>Specifies the share of the total distance which the vehicle has travelled without brake wear (engine brake, constant throttle valve, three retarder stages).</p> <p>The purposeful use of brakes without wear serves to achieve wear minimisation and an economic driving style.</p>
<i>Power Take Off 1 [min] , Power Take Off 2 [min], Power Take Off 3 [min]</i>	<p>Indicates the time in minutes with the power take-off switched on.</p>
<i>Number of Stops</i>	<p>Specifies the number of times the vehicle stopped during the trip or during the selected time period (speed = 0 km/h).</p>
<i>Percentage Speed >85km/h / Total Distance</i>	<p>Corresponds to the percentage of the route driven faster than 85 km/h.</p> <p>This means you can make out whether the vehicle was continuously driven at maximum speed or whether a economic driving style was chosen.</p>
<i>Total Coasting Distance [km]</i>	<p>Refers to the distance (in km) covered while coasting, i.e. the distance covered during the trip without the aid of the engine.</p>
<i>Coasting Distance/ Total Distance [%]</i>	<p>Indicates the percentage of the distance covered while coasting.</p>

Value	Meaning
<i>Cruise Control / Total Distance [%]</i>	<p>Specifies the share of the total distance travelled with cruise control.</p> <p>Each braking procedure requires renewed acceleration and a higher fuel consumption. It is, therefore, often more economical to use a more uniform driving style with an average speed which is as high as possible and oriented towards the traffic situation.</p> <p>This value is not considered in the evaluation of the driving style and of economic driving.</p>

Diagrams

Diagram	Meaning
<i>Speed Classification</i>	<p>FleetBoard utilises 7 speed categories. FleetBoard measures which section of a trip has been covered in which speed category.</p> <p>The speed classification allows you to make out whether a truck was continuously driven at maximum speed.</p> <p>By clicking the diagram symbol, you can go to a graphical evaluation of the speed classification (Section The Speed Diagram, Page 4-31).</p>
<i>Braking Distance [km]</i>	<p>Refers to the distance covered (in km) with the service brake applied.</p> <p>The braking distance influences the evaluation of the driving style. A good evaluation is achieved by handling the brake pedal “carefully” and in a preventive way.</p> <p>By clicking the diagram symbol, you are led to a graphical evaluation of the use of the service brake (Section The Main Brake Diagram, Page 4-32).</p>

Diagram	Meaning
<i>Retarder Braking Distance [km]</i>	<p>Distance covered with the retarder applied.</p> <p>An ideal distribution of the different brake types is: The percentage of the engine brake is high, the percentage of the retarder stages is low.</p> <p>By clicking the diagram symbol, you can go to a graphical evaluation of the retarder braking distance (Section The Retarder Diagram, Page 4-34).</p>
<i>Engine Operation M/n (Not Highest Gear)</i>	<p>The value refers to the M/n map for all gears except the highest gear.</p> <p>A good evaluation indicates that the driver used an appropriate gear. The longer appropriate gears were used, the better the evaluation.</p> <p>This evaluation is also taken into account in the overall evaluation of the driving style.</p>
<i>Highest Gear Torque</i>	<p>By clicking the diagram symbol, you can go to a graphical evaluation of the behaviour of the vehicle in the highest gear.</p> <p>The engine speed in the highest gear cannot be influenced by the driver. This evaluation, therefore, merely gives hints regarding the behaviour of the vehicle and is not included in the evaluation of the driving style (Section The Engine Operation M/n (Highest Gear) Diagram, Page 4-36).</p>

Diagram	Meaning
<i>Total Torque Classification</i>	<p>By clicking the diagram symbol, you can go to a graphical evaluation of the behaviour of the vehicle in all gears, i.e. including the highest gear.</p> <p>It is, therefore, a combination of <i>Highest Gear Torque</i> and <i>Engine Operation M/n (Not Highest Gear)</i>. The engine speed in the highest gear cannot be influenced by the driver. This evaluation, therefore, merely gives hints regarding the behaviour of the vehicle and is not included in the evaluation of the driving style (Section The Engine Operation M/n (All Gears) Diagram, Page 4-38).</p>

4.3.4 Vehicle Analysis, Predefined Period(s)

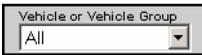
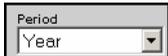
Provides an analysis for the vehicles of a specific vehicle group or for all vehicles of your vehicle pool. The evaluation is made for the time range you select (a whole year, half a year, a quarter, a month, a calendar week). The values displayed are average values achieved by the vehicle within the selected period. The results of the analysis enable you to compare the individual vehicles over the selected time range. This enables you to identify any areas for investigation (e.g. a very high fuel consumption).

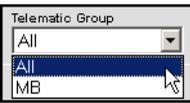
4.3.4.1 Overview Table Analysis for Predefined Time Period(s)

Overview tables offer comprehensive filter options and give a first overview of the evaluation of the performance analysis.

How to Filter Data Sets

The following special filters are available in addition to the general filters:

Filter	Meaning
	Filters for the data sets of vehicles of a specific vehicle group. By default, the vehicles of all vehicle groups are evaluated.
	Filters for data sets of a specific year. By default, data sets of the current year are displayed.
	Filters for a period, over which an average value of the analysed values is to be calculated. By default, an average value is calculated for all evaluations of the current year. You can, however, also view the average values for half a year, a quarter, a month, or a calendar week.

Filter	Meaning
	<p>The drop-down list <i>Calendar Week</i> will be displayed.</p>  <p>Use this drop-down list to filter the data sets for a specific calendar week.</p>
	<p>To search for data sets for a specific vehicle, enter the name of the vehicle here. Please check for upper and lower case.</p>
	<p>Filters vehicles according to a specific telematics group.</p>

You will find a description of the general filters in [Section Filtering, Page 4-4](#).

Predefined Period(s), Overview Table – Contents

Each vehicle of the vehicle group is displayed in an individual line of the overview table:

The screenshot shows the FleetBoard Performance Analysis interface. At the top, there is a filter panel with the following fields:

- Vehicle or Vehicle Group: Central Demonstra
- Year: 2006
- Period: Year
- Vehicle Search: (empty)
- Telematic Group: All
- Driving Style [Grade]: All
- Degree of Difficulty [Grade]: All
- Average Weight [t]: (empty)
- Average Speed [km/h]: (empty)
- Average Overall Consumption [l/100km]: (empty)

Below the filter panel is a table with the following columns:

Vehicle	Vehicle Group	Telematic Group	Driving Style [Grade]	Degree of Difficulty [Grade]	Total Distance [km]	Average Weight [t]	Average Speed [km/h]	Average Overall Consumption [l/100km]	Average Drive Consumption [l/100km]
YN00 KAK	Central Dem...	MB	9,6	0,0	47.779	-	80	28,5	28,4
YN00 KAO	H & L Garag...	MB	9,4	0,0	28.700	-	64	31,5	31,1
YN00 KAU	Central Dem...	MB	8,5	3,5	28.412	20	68	31,5	31,1
YN00 KBE	Central Dem...	MB	8,1	3,4	2.930	17	64	29,2	28,8
YN00 KBF	Central Dem...	MB	7,6	4,0	33.805	24	66	34,6	34,0
YN00 KBJ	Central Dem...	MB	7,7	4,0	16.827	22	56	33,6	32,6
YN00 KBK	Central Dem...	MB	8,1	4,5	4.518	26	65	36,5	35,7
YN55 DEK	Central Dem...	MB	7,7	3,5	12.175	20	64	30,2	29,7
YN55 DEL	Central Dem...	MB	8,0	3,9	121.887	23	65	32,5	31,9
Sum and Average Values (Related to Corresponding Filtered Records)									
Σ			8,3	3,8	33.003	23	67	31,9	31,4
Σ					297.031				

- Degree of Difficulty, Driving Style, Average Weight, Average Speed, Average Overall Consumption, and Average Drive Consumption: The average value for the selected period is displayed for each vehicle.
- Total distance: The total distance covered by each vehicle in the selected period is displayed.
- The average values and totals (in the bottom section of the table) are calculated in the following manner:
 - Degree of Difficulty, Driving Style, Average Weight, Average Speed, Total Distance, Average Overall Consumption, and Average Drive Consumption: Average values of all selected vehicles are shown.
 - Total distance: The sum of the total distances of all selected vehicles is displayed.

You can find the meaning of the values and their set-up in [Section Overview Tables in Performance Analysis MB, Page 4-4](#).

By clicking the diagram symbol  of a value, you can go to a graphical evaluation for this value.

4.3.5 Predefined Period(s) – Graphical Evaluation of the Overview Table

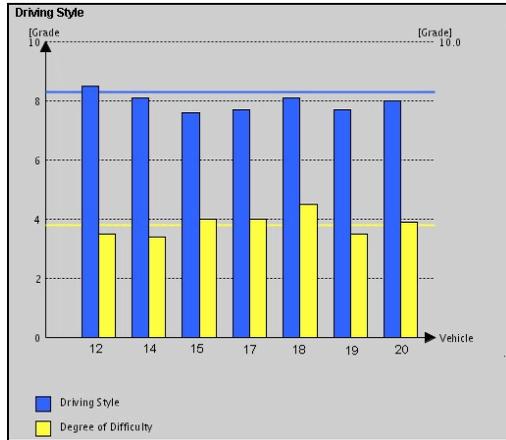
The graphical evaluation of the Vehicle Analysis and the Driver Analysis for Predefined Period(s) and the Trip(s) Summary provide identical diagrams (only the values are different, of course). These diagrams are, therefore, described together at the example of the Predefined Period(s).

4.3.5.1 The Driving Style Diagram – Predefined Period(s) / Trip(s) Summary

The *Driving Style* diagram provides an overview of the average driving style evaluation for individual vehicles/drivers. This allows the comparison of driving styles and the identification of irregularities.



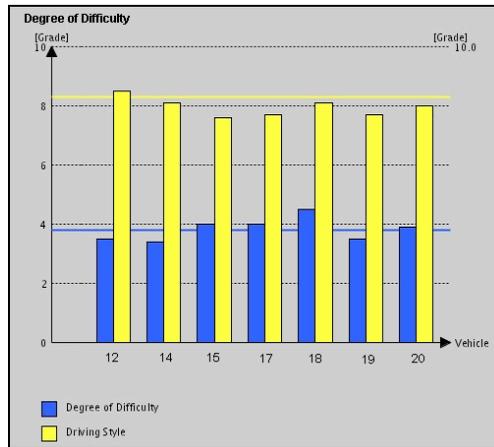
Note: Comparing driving styles makes no sense unless the degree of difficulty of the trips was similar in the period of comparison. This is why the degree of difficulty is indicated in the diagram, as well.



- The X-axis of the diagram indicates the vehicle names.
- The Y-axis of the diagram shows the evaluation of the driving style (10: very good, 1: unsatisfactory) and the degree of difficulty (10: very high, 1: very low).
- The blue line indicates the average evaluation of the driving style of the selected vehicle group.
- The yellow line indicates the average degree of difficulty.

4.3.5.2 The Degree of Difficulty Diagram – Predefined Period(s) / Trip(s) Summary

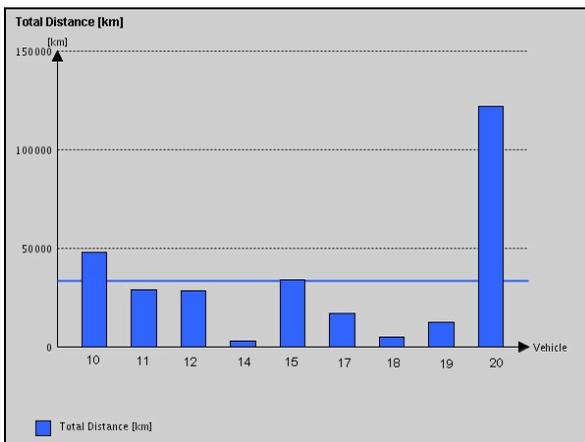
The *Degree of Difficulty* diagram provides an overview of the average difficulty of the selected vehicle group. Moreover, this diagram shows the evaluation of the driving style. This diagram, therefore, allows you to compare the individual driving styles while considering the degree of difficulty.



- The X-axis of the diagram indicates the vehicle names.
- The Y-axis of the diagram shows the evaluation of the driving style (10: very good, 1: unsatisfactory) and the degree of difficulty (10: very high, 1: very low).
- The blue line indicates the average evaluation of the degree of difficulty of the selected vehicle group.
- The yellow line indicates the average evaluation of the driving style.

4.3.5.3 The Total Distance Diagram – Predefined Period(s) / Trip(s) Summary

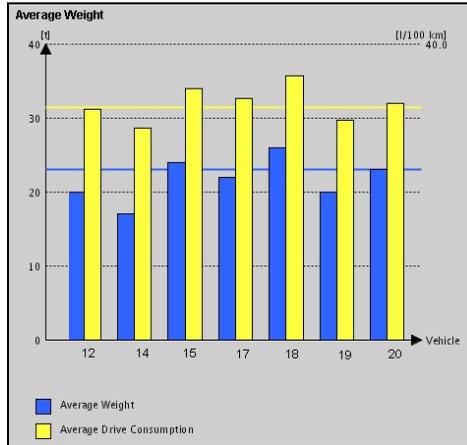
The diagram displays the total distance covered by the vehicles.



- The x-axis indicates the vehicle names.
- The y-axis indicates the distance covered in km.
- The blue line displays the average distance covered by all vehicles.

4.3.5.4 The Average Weight Diagram – Predefined Period(s) / Trip(s) Summary

The diagram displays the average weight of the vehicles.

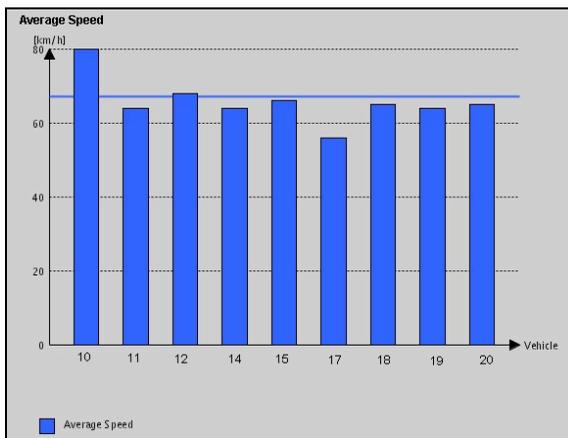


Note: The fuel consumption of a vehicle chiefly depends on the total weight of the vehicle. This is why the drive consumption is displayed in the *Average Weight* diagram, as well.

- The X-axis of the diagram indicates the vehicle names.
- The blue bars on the y-axis indicate the average weight in tons, while the yellow bars show the drive consumption in l/100 km .
- The yellow line displays the average drive consumption of the selected vehicle group.
- The blue line displays the average weight of the selected vehicle group.

4.3.5.5 The Average Speed Diagram – Predefined Period(s) / Trip(s) Summary

The diagram displays the average speed of the vehicles.



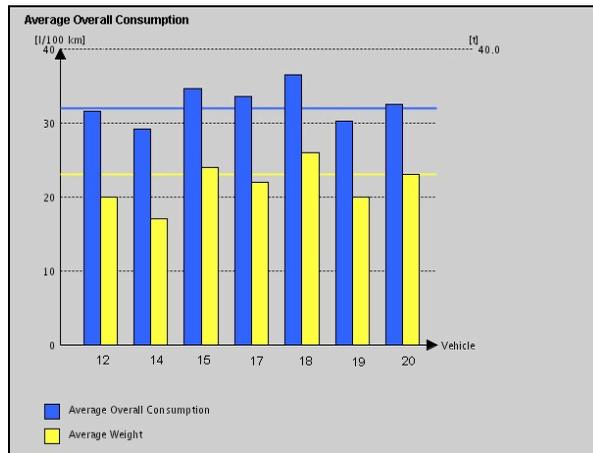
- The X-axis of the diagram indicates the vehicle names.
- The y-axis indicates the average speed in km/h (blue bars).
- The blue line indicates the average speed of the vehicles of the selected group.

4.3.5.6 The Average Overall Consumption Diagram – Predefined Period(s) / Trip(s) Summary

The diagram graphically displays the overall fuel consumption of the vehicle. The overall consumption includes the drive consumption and the idle consumption.



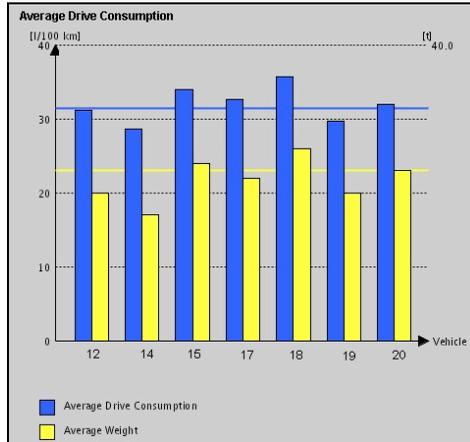
Note: The fuel consumption of a vehicle chiefly depends on the total weight of the vehicle. This is why the average weight is displayed in the *Average Overall Consumption* diagram, as well.



- The X-axis of the diagram indicates the vehicle names.
- The blue bars on the y-axis indicate the overall consumption in l/100 km (blue bars), while the yellow bars show the average weight in t.
- The blue line indicates the average overall consumption of all vehicles of the selected group.
- The yellow line indicates the average weight of all vehicles of the selected group.

4.3.5.7 The Average Drive Consumption Diagram – Predefined Period(s) / Trip(s) Summary

The diagram displays the drive consumption of the vehicles.



Note: The fuel consumption of a vehicle chiefly depends on the weight. This is why the average weight is displayed in the *Average Drive Consumption* diagram, as well.

- The X-axis of the diagram indicates the vehicle names.
- The yellow bars on the y-axis indicate the average weight in tons, while the blue bars show the drive consumption in l/100 km.
- The blue line indicates the average drive consumption of all vehicles of the selected group.
- The yellow line indicates the average weight of all vehicles of the selected group.

4.3.6 Predefined Period(s) – Detail View

Here, you will find detailed analysis data for the selected vehicle.

Driving Style			
Driving Style (Consumption) [Grade]	8,1	Driving Style (Brake) [Grade]	8,1
Preventative Driving Style	7,1	Preventative Driving Style	7,1
Driving Style (Pedal Movements) [Grade]	7,3	Driving Style (Acceleration) [Grade]	9,2
Driving Style (Stops) [Grade]	8,9	Driving Style (Uniform Speed) [Grade]	9,0
Degree of Difficulty			
Average Slope	4,7	Average Weight [Grade]	5,6
		Stops [Grade]	2,3
Additional Consumption Values		Additional Values	
Overall Consumption [l]	1,647,8	Total Distance [km]	4,518
Drive Consumption [l]	1,612,1	Moving Time [Hour:min]	83:38
Idle Consumption [l]	35,7	Idling Time (Engine On) [Hour:min]	12:37
		Idling Time (Engine Off) [Hour:min]	05:37
		Braking Distance/Total Distance [%]	3
		Braking Distance w/o Brake Wear / Total Distance [%]	4
		Power Take Off 1 [min]	0
		Power Take Off 2 [min]	0
		Power Take Off 3 [min]	0
		Number of Stops	688
		Percentage Speed > 85 km/h / Total Distance [%]	50
		Total Coasting Distance [km]	1,225
		Coasting Distance/Total Distance [%]	27
		Cruise Control / Total Distance [%]	44
		Speed Classification	
		Braking Distance [km]	149
		Retarder Braking Distance [km]	183
		Engine Operation Mh (Not Highest Gear)	8,9
		Highest Gear Torque	
		Total Torque Classification	

You can find the meaning of the values and their calculation in [Section Detail View in Performance Analysis MB, Page 4–10](#).

By clicking the diagram symbol of a value, you can go to a graphical evaluation for this value.

Which Driver or Trailer Was Involved?

You can use the *Driver* or *Trailer* drop-down lists to check whether a vehicle was driven by different drivers during the evaluation period or whether different trailers were hitched on.

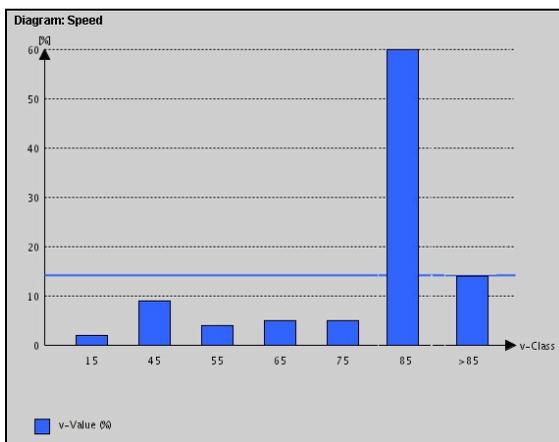
Driver Dean	Trailer
----------------	---------

The same applies to the Driver Analysis. Here you can additionally check vehicles or trailers.

4.3.7 Predefined Period(s) – Graphical Evaluation of the Detail View

4.3.7.1 The Speed Diagram

Provides a graphical overview of the speed categories within which the vehicles have moved. FleetBoard utilises 7 speed categories: up to 15 km/h, up to 45 km/h, etc.



The chart illustrates the speeds driven at during the trip. The x-axis shows 7 speed categories. The y-axis shows the share (in %) of the total distance covered within each speed category.

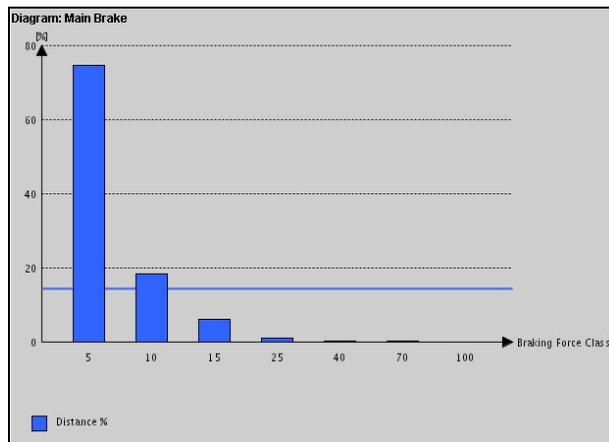
In our example, the speed driven at during the trip was mainly within the speed category between 75 and 85.

In the table, the contents of the chart are specified in numbers:

- The first line states the seven speed categories (up to 15 km/h, up to 45 km/h, etc.).
- The second line of the table specifies the distance covered in km within each speed category.
- The third line of the table displays the contents of the second line in per cent.

4.3.7.2 The Main Brake Diagram

The diagram displays the distance the main brake (service brake) was applied during the trip.



- The x-axis shows the braking power of the service brake in % (*Braking Force Class*).
- The y-axis shows the share (in %) of the total distance covered with the service brake applied.
- The blue line displays the average use of the service brake.

Ideally, the service brake should be applied only for short distances and with low braking power. In this case, the distribution will be as shown in our example of the chart.

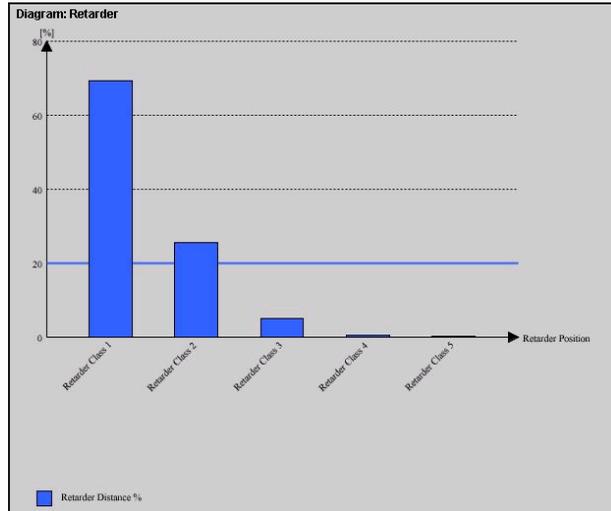
In the table, the contents of the chart are specified in numbers:

- The first line specifies the distance covered in km within each braking force class.
- The second line gives information on the share (in %) of the total distance travelled in the corresponding brake classification. This allows you to examine how much braking power the driver applied to the service brake.

If the service brake is used quite frequently, particularly in high braking force classes, this does neither indicate a fuel-saving driving style nor a careful handling of the brakes. Such a driving style ought to be questioned.

4.3.7.3 The Retarder Diagram

The diagram displays the distance the retarder was applied during the trip.



- The X-axis shows the retarder settings (1 to 5).
- The y-axis shows the share (in %) of the total distance covered with the corresponding brake type applied.
- The blue line displays the average distance covered with the retarder class applied.

In the table, the contents of the chart are specified in numbers:

- The first line specifies for how many km the brake type was used.
- The second line of the table displays the contents of the first line in per cent.

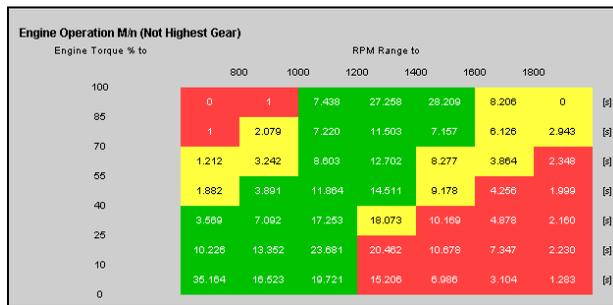
Our example displays an ideal distribution of the retarder settings.



Note: The values for the application of the different retarder settings depend on the settings made by the driver in the vehicle (operating lever at the steering column).

4.3.7.4 The Engine Operation M/n (Not Highest Gear) Diagram

This page provides an overview of the temporal distribution of the use of *all gears except the highest gear* within the M/n style map. *M* is the torque and *n* the engine speed. *Not Highest Gear* refers to all gears except the highest one. This page gives you an impression of the gear changing behaviour of the driver.



The chart can be interpreted in the following way:

- The x-axis displays the RPM range, divided into 6 sections. The engine speed is stated in RPM.
- The y-axis displays the engine torque in %. 100% stands for full speed.
- The coloured section displays how many seconds the truck moved at a specific engine torque and within a specific RPM range during the trip.

The above example illustrates that during the selected time range, the truck was operated for 14,511 seconds at an engine torque between 40 and 55% and an RPM range between 1200 and 1400/minute.

- The colours in the chart correspond to the Actros map. They have the following meaning:
 - Green: optimum range of the engine map
 - Yellow: less favourable range of the engine map
 - Red: unfavourable range of the engine map

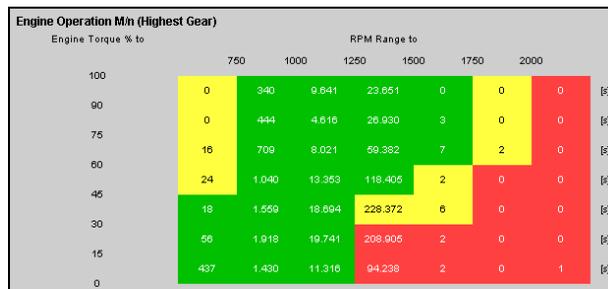
In the bottom section, the values are summarised in a table.

Sum:	286,938	64,48 %
Sum:	65,083	14,62 %
Sum:	93,108	20,92 %

With an optimum driving style, the values in the green section are as high as possible and the values in the red section are as low as possible. A favourable evaluation can be achieved by changing into the next gear in good time.

4.3.7.5 The Engine Operation M/n (Highest Gear) Diagram

Temporal distribution of the use of the *Highest Gear* within the M/n style map. M is the torque and n the engine speed. The page gives you an overview of the behaviour of the vehicle in the highest gear.



The chart can be interpreted in the following way:

- The x-axis displays the RPM range, divided into 7 sections. The engine speed is stated in RPM.

- The y-axis displays the engine torque in %. 100% stands for full speed.
- The coloured section displays how many seconds during the selected period the truck moved in the highest gear at a specific engine torque and within a specific RPM range.

The above example illustrates that the truck was operated for 18,694 seconds at an engine torque between 30 and 45% and an RPM range between 1000 and 1250/minute.

- The colours in the chart correspond to the Actros map. They have the following meaning:
 - Green: optimum range of the engine map
 - Yellow: less favourable range of the engine map
 - Red: unfavourable range of the engine map

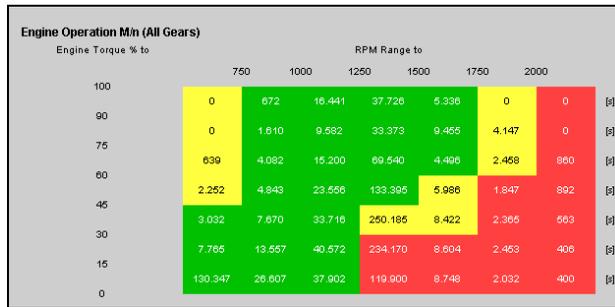
In the bottom section, the values are summarised in a table.

Sum:	321.710	37,70%
Sum:	228.423	26,77%
Sum:	303.149	35,53%

With optimum behaviour of the vehicle in the highest gear, the values in the green section are as high as possible and the values in the red section are as low as possible. The driver can influence this evaluation only by limiting the maximum speed. If the vehicle moves mainly in the red range, it does not fulfil the optimum prerequisites for the transporting purpose.

4.3.7.6 The Engine Operation M/n (All Gears) Diagram

This page provides an overview of the temporal distribution of *All Gears* within the M/n style map. M is the torque and n the engine speed. This page combines the results of [The Engine Operation M/n \(Highest Gear\) Diagram](#) and [The Engine Operation M/n \(Not Highest Gear\) Diagram](#).



The chart can be interpreted in the following way:

- The x-axis displays the RPM range, divided into 6 sections. The engine speed is stated in RPM.
- The y-axis displays the engine torque in %. 100% stands for full speed.
- The coloured section displays how many seconds during the trip the truck moved using all gears at a specific engine torque and within a specific speed range.

The above example illustrates that the truck was operated for 400 seconds at an engine torque between 0 and 15% and with more RPM than 2000/minute.

- The colours in the chart correspond to the Actros map. They have the following meaning:
 - Green: optimum range of the engine map
 - Yellow: less favourable range of the engine map
 - Red: unfavourable range of the engine map

In the bottom section, the values are summarised in a table.

Sum:	670.476	50,50%
Sum:	274.090	20,64%
Sum:	383.239	28,86%

With optimum behaviour of the vehicle in the highest gear and optimum gear changing behaviour of the driver, the values in the green section are as high as possible and the values in the red section are as low as possible.

4.3.8 Vehicle Analysis, Period Breakdown

Provides an analysis for individual vehicles or for all vehicles of your vehicle fleet. You can enter an interval for the evaluation. Accordingly, the data will be displayed in the form of weekly, monthly, quarterly, biannual, or annual average values. The results of the analysis enable you to compare the data from the selected time intervals. Consequently, you can see at a glance whether a poor evaluation for the driving style of a particular vehicle was just an exception during one week, or if the vehicle was continuously given poor evaluations for the driving style.



Note: A detail view is only available after selecting an individual vehicle.

4.3.8.1 Overview Table Period Breakdown

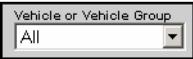
Overview tables offer comprehensive filter options and give a first overview of the evaluation of the performance analysis.

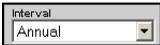
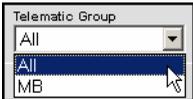
You will find further information under:

- [How to Filter Data Sets](#)
- [Period Breakdown, Overview Table - Contents](#)

How to Filter Data Sets

The following special filters are available in addition to the general filters:

Filter	Meaning
	Filters for the data sets of individual vehicles or for the data sets of vehicles belonging to a specific vehicle group. By default, the vehicles of all vehicle groups are evaluated.

Filter	Meaning
	<p>Enter the years of which you want data sets to be displayed.</p>
	<p>Define the intervals for which the data sets are to be displayed: annual, biannual, quarterly, monthly, or weekly.</p>
	<p>To search for data sets for a specific vehicle, enter the name of the vehicle here. Please check for upper- and lower case-spelling.</p>
	<p>Filters vehicles according to a specific telematics group.</p>

You will find a description of the general filters in [Section Evaluations in Performance Analysis MB, Page 4-4](#).

Period Breakdown, Overview Table – Contents

In the overview table, the data sets for each evaluated interval are displayed in a separate line. For example, if you have started an analysis with monthly evaluation, a separate line containing average values or sums will be displayed for each month.

The overview table may look as follows:

Period	Telematic Group	Driving Style [Grade]	Degree of Difficulty [Grade]	Total Distance [km]	Average Weight [t]	Average Speed [km/h]	Average Overall Consumption [l/100km]	Average Drive Consumption [l/100km]	Number of Vehicles
- Q 4 / 2006	All	8,1	3,9	1.014.784	25	67	34,1	33,5	58
- Q 3 / 2006	All	8,1	3,8	889.413	25	68	32,3	31,7	51
- Q 2 / 2006	All	8,2	3,8	499.001	25	69	31,9	31,4	32
- Q 1 / 2006	All	8,2	3,5	328.780	23	70	33,2	32,5	13
1-12									
Sum and Average Values (Related to Corresponding Filtered Records)									
∅		8,1	3,8	667.985	24	68	33,0		
Sum				2.671.939					

Individual Vehicle

If you have started an analysis for an **individual vehicle**, the values displayed refer to this vehicle.

- Degree of Difficulty, Driving Style, Average Weight, Average Speed, Average Overall Consumption, and Average Drive Consumption: The average values of the individual vehicle are displayed for every interval.
- Total Distance: The total distance covered by the selected vehicle in the corresponding interval is displayed.

- Sum and Average Values (the last two lines of the table):
 - Degree of Difficulty, Driving Style, Average Weight, Average Speed, Total Distance, Average Overall Consumption, and Average Drive Consumption: Average values of all intervals are displayed for the selected vehicle.
 - Total distance: Sum of the distances covered by the vehicle in all displayed intervals.

Vehicle Group

If you have started an analysis for a **Vehicle Group**, the values displayed refer to this vehicle group.

- Degree of Difficulty, Driving Style, Average Weight, Average Speed, Average Overall Consumption, and Average Drive Consumption: The average value calculated from all values of all vehicles is displayed.
- Total Distance: The total distance covered by all vehicles in the corresponding interval is displayed.
- Sum and Average Values (the last two lines of the table):
 - Degree of Difficulty, Driving Style, Average Weight, Average Speed, Total Distance, Average Overall Consumption, and Average Drive Consumption: Average values of all vehicles are shown.
 - Total Distance: Sum of the distances covered by all vehicles in all displayed intervals.

You can find the meaning of the values and their calculation in [Section Overview Tables in Performance Analysis MB, Page 4-4](#).

By clicking the magnifying glass symbol , you can go to the detail view.



Prerequisite: You can only reach the detail view for an individual vehicle from the overview table for the vehicle in question.

By clicking the diagram symbol  of a value, you can go to a graphical evaluation of this value.

4.3.9 Period Breakdown – Graphical Evaluation of the Overview Table

The Period Breakdown diagrams of the Driver Analysis and the Vehicle Analysis are set up identically (they indicate different values, of course). For this reason, they are described together at the example of the Vehicle Analysis.

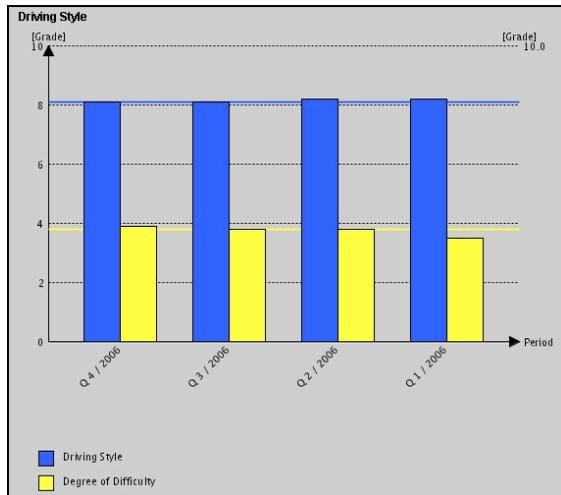
- [Driver Analysis, Predefined Period\(s\)](#)

4.3.9.1 The Driving Style Diagram – Period Breakdown

The diagram displays the average evaluation of the driving style and the degree of difficulty for the vehicle or driver.



Note: Comparing driving styles makes no sense unless the degree of difficulty is taken into account. This is why both parameters are always displayed together in a diagram.



- The x-axis of the diagram indicates the time.

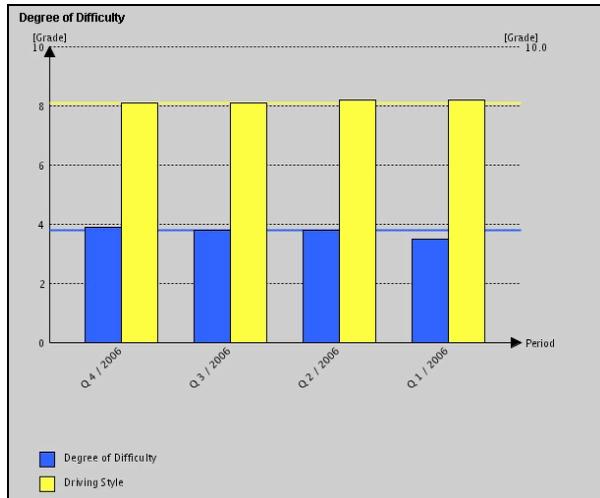
- The y-axis indicates the evaluation of the driving style and the degree of difficulty.
- The yellow line indicates the average degree of difficulty.
- The blue line displays the average evaluation of the driving style.

4.3.9.2 The Degree of Difficulty Diagram – Period Breakdown

The diagram displays the evaluation of the driving style and the degree of difficulty for the vehicle or driver.



Note: Comparing driving styles over a time range makes no sense unless the degree of difficulty is taken into account. This is why both parameters are always displayed together in a diagram.



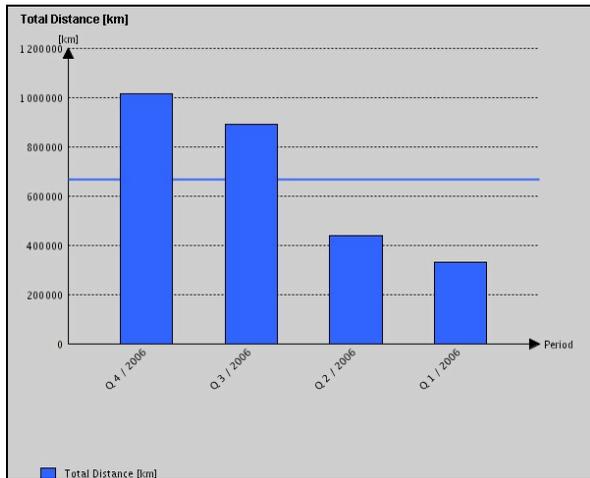
- The x-axis of the diagram indicates the time.

- The y-axis indicates the evaluation of the driving style and the degree of difficulty.
- The yellow line displays the average evaluation of the driving style.
- The blue line displays the average evaluation of the degree of difficulty.

4.3.9.3 The Total Distance Diagram – Period Breakdown

- If you have made an analysis for an **individual** vehicle or an individual driver:

The diagram graphically displays the distance covered by the vehicle in the individual intervals.



- The x-axis indicates the time.
- The y-axis indicates the distance covered in km.
- The blue line indicates the average distance covered by the vehicle in the corresponding time range.
- If you have made an analysis for **all** vehicles or **all** drivers:

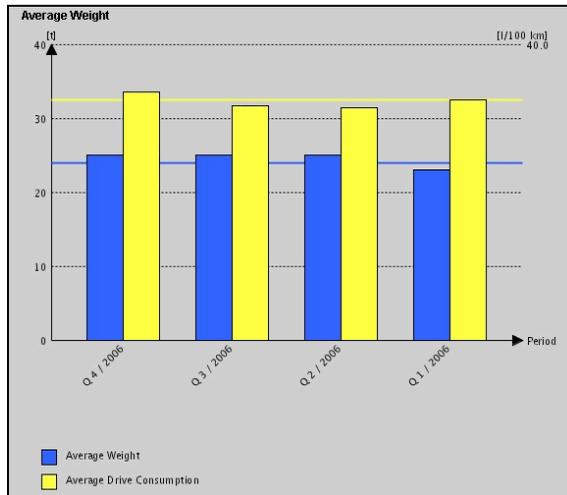
The diagram graphically displays the distance covered by all vehicles in the individual intervals.

- The x-axis indicates the time.
- The y-axis indicates the distance covered in km.
- The yellow line marks the average value of the distance covered by all vehicles.

4.3.9.4 The Average Weight Diagram – Period Breakdown

The fuel consumption of a vehicle chiefly depends on the total weight of the vehicle. This is why the fuel consumption is displayed in the *Average Weight* diagram, as well.

The diagram graphically displays the average weight of the vehicle or the vehicle group in the individual intervals.

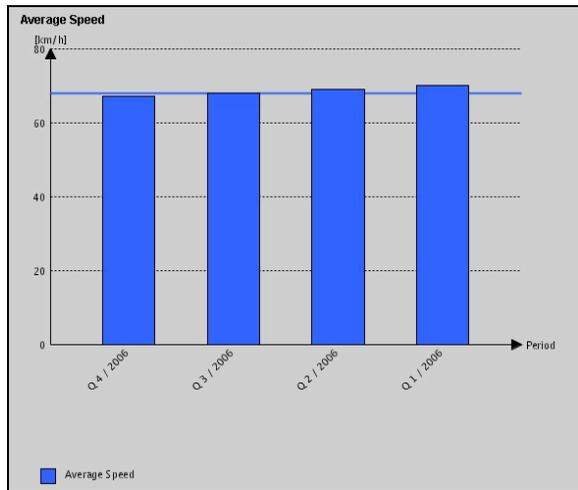


- The x-axis of the diagram indicates the time.
- The blue bars on the y-axis indicate the average weight in tons, while the yellow bars show the drive consumption in l/100 km .

- The yellow line marks the average drive consumption of the vehicle/of all vehicles in the corresponding time range.
- The blue line marks the average weight of the vehicle/of all vehicles in the corresponding intervals.

4.3.9.5 The Average Speed Diagram – Period Breakdown

The diagram graphically displays the average speed of the vehicle or vehicle group.



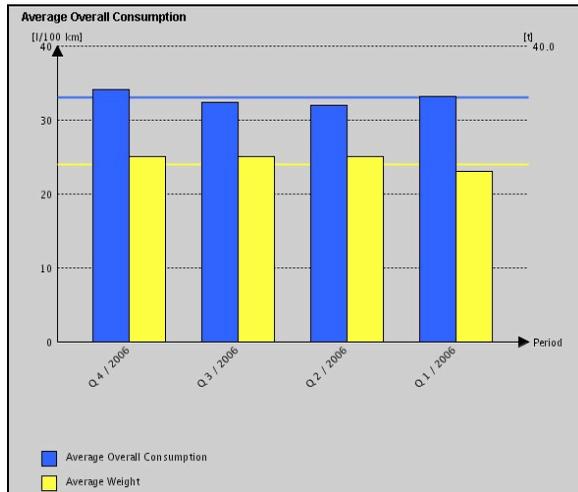
- The x-axis of the diagram indicates the time.
- The y-axis indicates the average speed in km/h.
- The blue line indicates the average speed of the vehicle in the corresponding time range.

4.3.9.6 The Total Consumption Diagram – Period Breakdown

The fuel consumption of a vehicle chiefly depends on the total weight of the vehicle. This is why the average weight is displayed in the *Average Overall Consumption* diagram, as well.

- If you have made an analysis for an **individual** vehicle or an individual driver:

The diagram graphically displays the total fuel consumption (sum of the drive consumption and the idle consumption) of the vehicle.



- The x-axis of the diagram indicates the time.
- The y-axis displays the overall fuel consumption in l/100 km as well as the average weight.
- If you have made an analysis for an **all** vehicles or all drivers:

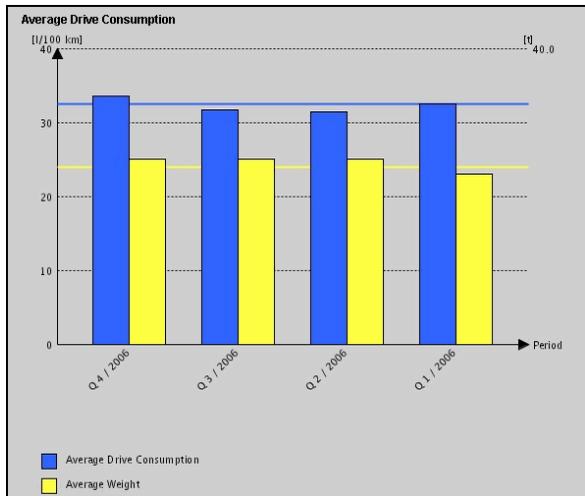
The diagram graphically displays the overall fuel consumption of **all** vehicles.

- The x-axis of the diagram indicates the time.
- The y-axis displays the total fuel consumption in l/100 km as well as the weight.
- The blue line marks the average overall consumption of all vehicles in the corresponding time range.
- The yellow line marks the average weight of all vehicles in the corresponding time range.

4.3.10 The Drive Consumption Diagram – Period Breakdown

The fuel consumption of a vehicle chiefly depends on the total weight of the vehicle. This is why the average weight is displayed in the *Average Drive Consumption* diagram, as well.

The diagram graphically displays the drive consumption of the vehicle or vehicle group.



- The x-axis of the diagram indicates the time.

- The blue bars on the y-axis indicate the average weight in tons, while the yellow bars show the drive consumption in l/100 km .
- The yellow line marks the average drive consumption of the vehicle/of the vehicle group in the corresponding time range.
- The blue line marks the average weight of the vehicle/of all vehicles in the corresponding intervals.

4.3.11 Period Breakdown – Detail View



Note: A detail view is only available after you have created an overview table for an individual vehicle with the help of the filters.

Here, you will find detailed analysis data for the selected time range.

- Engine Operation M/n (Not Highest Gear), Average Slope, Preventive Driving Style: The average values of the vehicle are displayed.
- Braking Distance, Braking Distance/Total Distance, Number of Stops, Overall Consumption, Drive Consumption, Idle Consumption, Moving Time, Stop Time (Engine On), Stop Time (Engine Off), Retarder Braking Distance, Total Coasting Distance, Coasting Distance/Total Distance, Percentage Speed > 85km/h: The values displayed are the total values of the vehicle within the selected time range.

You can find the meaning of the values and their calculation in [Section Detail View in Performance Analysis MB, Page 4-10](#).

Which Driver or Trailer Was Involved?

You can use the *Driver* or *Trailer* drop-down lists to check whether a vehicle was driven by different drivers during the evaluation period or whether different trailers were hitched on.



Driver	Trailer
Dean	

The same applies to the Driver Analysis. Here you can additionally check vehicles or trailers.

4.3.12 Period Breakdown – Graphical Evaluation of the Detail View

The diagrams correspond to the diagrams for the Predefined Period(s): Engine Operation M/n (Not Highest Gear), Braking Distance, Speed Classification, Retarder Braking Distance, Engine Operation M/n, Engine Operation M/n (Highest Gear), and Engine Operation M/n (All Gears) are graphically displayed for the selected vehicle and the selected time period. Please refer to the following sections:

- [The Main Brake Diagram](#), Page 4 - 32
- [The Speed Diagram](#), Page 4 - 31
- [The Retarder Diagram](#), Page 4 - 34
- [The Engine Operation M/n \(Not Highest Gear\) Diagram](#), Page 4 - 35
- [The Engine Operation M/n \(Highest Gear\) Diagram](#), Page 4 - 36
- [The Engine Operation M/n \(All Gears\) Diagram](#), Page 4 - 38

4.3.13 Vehicle Analysis, Trip(s) Summary

You can start an analysis for every single trip of your vehicles. In this way, you can make out irregularities with regard to high fuel consumption and poor driving style and investigate the causes.

4.3.13.1 What Is a Trip?

A trip, as defined under Performance Analysis, starts with the *turning on of the ignition and the inserting of a TCO chart* and ends with the *removing of the TCO chart and the turning off of the ignition*. In the case of vehicles with digital tachographs, a trip starts or ends with inserting or removing the DTCO driver card or FleetBoard driver card.

Internally, the FleetBoard System does not complete a trip before the TCO chart for the next trip has been entered. Only then can the completed trip be transmitted to the FleetBoard Server.

Ignition off at the end of a trip is very important for the full transmission of all data collected in the system to the FleetBoard Server. When there is a TCO chart change without *ignition off*, the data remaining in the system is assigned to the new trip.

If no chart change takes place for more than 24 hours, the trip can be completed automatically.

4.3.13.2 Overview Table Trip(s) Summary

Overview tables offer comprehensive filter options and give a first overview of the evaluation of the performance analysis.

How to Filter Data Sets

You will find a description of the general filters in [Section Evaluations in Performance Analysis MB, Page 4-4](#).

Trip(s) Summary, Overview Table – Contents

In the overview table, the data sets for each trip selected by means of the filters are displayed in a separate line. You can start an analysis for every single trip of your vehicles and, thus, identify any areas for investigation.

The overview table may look as follows:

Vehicle	Vehicle Group	Start Time	End Time	Driving Style [Grade]	Degree of Difficulty [Grade]	Total Distance [km]	Average Weight [t]	Average Speed [km/h]	Average Overall Consumption [l/100km]	Average Drive Consumption [l/100km]
YND6 KBE	Central ...	16.12.2006 08:35	16.12.2006 09:36	5,4	5,6	5	22	20	41,6	35,0
YND6 KAU	Central ...	16.12.2006 07:12	18.12.2006 08:48	8,3	4,9	78	28	55	39,6	38,5
YND6 KBF	Central ...	16.12.2006 03:56	16.12.2006 12:23	7,7	4,2	348	28	66	39,7	39,3
YNS5 DEL	Central ...	16.12.2006 20:49	18.12.2006 05:05	9,1	2,8	524	16	80	26,2	26,0
YND6 KAO	H & L 13.12.2006 04...	13.12.2006 09:13	14.12.2006 08:49	9,1	0,0	258	0	54	39,5	37,9
YND6 KBJ	Central ...	29.11.2006 09:36	29.11.2006 12:09	9,4	2,5	197	9	80	17,8	17,8
YNS5 DEK	Central ...	27.11.2006 08:06	27.11.2006 19:20	6,9	4,4	174	16	50	32,7	31,2
YND6 KBK	Central ...	31.10.2006 11:41	31.10.2006 12:50	6,7	6,6	47	42	48	59,3	57,9
YND6 KAK	Central ...	22.09.2006 09:00	22.09.2006 11:52	9,7	0,0	180	0	81	18,2	18,2
1-12										
Sum and Average Values (Related to Corresponding Filtered Records)										
∅				8,6	3,6	201	19	69	31,1	30,4
Sum						1.612				

- In addition to the evaluation of the vehicle data, the start time and end time of the trip are displayed.
- Degree of Difficulty, Driving Style, Average Weight, Average Speed, Average Overall Consumption, and Aver-

age Drive Consumption: For each trip, the average value is displayed.

- Total Distance: The total distance covered during the corresponding trip is displayed.
- Sum and Average Values:
 - Degree of Difficulty, Driving Style, Average Weight, Average Speed, Total Distance, Average Overall Consumption, and Average Drive Consumption: Average values are shown for all trips displayed in the table.
 - Total Distance: the sum of the distances covered in all displayed trips is additionally shown.

You can find the meaning of the values and their composition in [Section Overview Tables in Performance Analysis MB, Page 4-4](#).

By clicking the magnifying glass symbol  , you can go to the detail view.

4.3.14 Trip(s) Summary – Graphical Evaluation of the Overview Table

The graphical evaluation of the overview table under Trip(s) Summary corresponds to the one under Predefined Period(s). The x-axis shows the analysed vehicles, while the y-axis shows the analysis value for the selected trips. For more information, please refer to the following sections:

- [The Driving Style Diagram – Predefined Period\(s\) / Trip\(s\) Summary](#), Page 4-22
- [The Degree of Difficulty Diagram – Predefined Period\(s\) / Trip\(s\) Summary](#), Page 4-24
- [The Total Distance Diagram – Predefined Period\(s\) / Trip\(s\) Summary](#), Page 4-25
- [The Average Weight Diagram – Predefined Period\(s\) / Trip\(s\) Summary](#), Page 4-26
- [The Average Speed Diagram – Predefined Period\(s\) / Trip\(s\) Summary](#), Page 4-27
- [The Average Overall Consumption Diagram – Predefined Period\(s\) / Trip\(s\) Summary](#), Page 4-28
- [The Average Drive Consumption Diagram – Predefined Period\(s\) / Trip\(s\) Summary](#), Page 4-29

4.3.15 Trip(s) Summary – Detail View

Here, you will find detailed analysis data for the selected trip.



Note: Driver and trailer (if available) are displayed in the two drop-down lists. They cannot be modified within a trip. Because of that, you will only find a single entry.

You can find the meaning of the values and their calculation in [Section Detail View in Performance Analysis MB, Page 4-10](#).

4.3.16 Trip(s) Summary – Graphical Evaluation of the Detail View

The graphical evaluation of the detail view under Trip(s) Summary corresponds to the one under Predefined Period(s). The only difference is that the data do not refer to a specific time period, but to the selected trip. For more information, please refer to the following sections:

- [The Engine Operation M/n \(Not Highest Gear\) Diagram, Page 4-35](#)
- [The Main Brake Diagram, Page 4-32](#)
- [The Speed Diagram, Page 4-31](#)
- [The Retarder Diagram, Page 4-34](#)
- [The Engine Operation M/n \(Highest Gear\) Diagram, Page 4-36](#)
- [The Engine Operation M/n \(All Gears\) Diagram, Page 4-38](#)

4.3.17 Driver Analysis, Predefined Period(s)

Allows you to evaluate the driving style, degree of difficulty, and driving behaviour with respect to the driver. Thus, you can identify drivers with a fuel-saving driving style and those with a non-fuel-saving driving style. This allows you to train and support your staff according to their individual needs.

The Driver Analysis is started and evaluated just like the corresponding Vehicle Analyses. Please refer to the description of the Vehicle Analysis in [Section Vehicle Analysis, Predefined Period\(s\), Page 4-19](#).

The driver analysis for predefined periods provides an analysis for the drivers of a specific vehicle group or for all drivers of your vehicle pool. The evaluation is made for the time range you select (a whole year, half a year, a quarter, a month, a calendar week).

Just like in the Vehicle Analysis, you are initially led to an overview table containing the analyses for all selected drivers. For each driver, a separate line is displayed. The values displayed are average values achieved by the driver within the selected period. The results of the analysis enable you to compare the individual drivers over the selected time range. This enables you to identify any areas for investigation (e.g. a very high fuel consumption).

Subsequently, you can go to the detail view for an individual driver. There, you will find more detailed data.



Note: If a driver drove too many trucks in the selected time range, you cannot filter for vehicles in the detail view. The resulting amount of data would be too small to provide an informative analysis.

The Driver Analysis, Predefined Period(s) is started and evaluated analogously to the Vehicle Analysis, Predefined Period(s).

You will find further information under:

- [Overview Table Analysis for Predefined Time Period\(s\)](#), Page 4 - 19
- [Predefined Period\(s\), Overview Table - Contents](#), Page 4 - 21
- [Predefined Period\(s\) - Graphical Evaluation of the Overview Table](#), Page 4 - 22
- [Predefined Period\(s\) - Detail View](#), Page 4 - 30

4.3.18 Driver Analysis, Period Breakdown

Provides an analysis for individual drivers or for all drivers of your vehicle pool. You can enter an interval for the evaluation. Accordingly, the data will be displayed in the form of weekly, monthly, quarterly, biannual, or annual average values.

Just like in the Vehicle Analysis, you are initially led to an overview table with an individual line for each time interval. The results of the analysis enable you to compare the data from the selected time intervals. Consequently, you can see at a glance whether a poor evaluation for the driving style of a particular driver was just an exception during one week, or if the driver was continuously given poor evaluations for the driving style.

Subsequently, you can go to the detail view for an individual driver. There, you will find more detailed data.



Note: If a driver drove too many trucks in the selected time range, you cannot filter for vehicles in the detail view. The resulting amount of data would be too small to provide an informative analysis.

The Driver Analysis, Period Breakdown is started and evaluated analogously to the one of the Vehicle Analysis, Period Breakdown.

You can find further information under:

- [Overview Table Period Breakdown](#), Page 4 - 40
- [Period Breakdown, Overview Table - Contents](#), Page 4 - 42
- [Period Breakdown - Detail View](#), Page 4 - 52
- [Period Breakdown - Graphical Evaluation of the Overview Table](#), Page 4 - 45

4.3.19 Driver Analysis – Trip(s) Summary

You can start an analysis for every single trip of your drivers.

Just like in the Vehicle Analysis, you are initially led to an overview table with an individual line for each trip of the selected drivers. The results of the analysis enable you to compare the individual trips. In this way, you can make out irregularities with regard to high fuel consumption and poor driving style and investigate the causes.

Subsequently, you can go to the detail view for an individual driver. There, you will find more detailed data.

The Driver Analysis, Trip(s) Summary, is started and evaluated analogously to the Vehicle Analysis, Trip(s) Summary.

You will find further information under:

- [Overview Table Trip\(s\) Summary](#), Page 4 - 54
- [Trip\(s\) Summary, Overview Table - Contents](#), Page 4 - 55
- [Trip\(s\) Summary - Detail View](#), Page 4 - 57
- [Trip\(s\) Summary - Graphical Evaluation of the Detail View](#), Page 4 - 58

4.4 Performance Analysis Universal

Both MB vehicles and vehicles of other makes are able to provide data sets for performance analysis. Non-MB vehicles always send their data sets to the Universal Performance Analysis. For MB vehicles, you are free to decide whether these data sets will only be provided for MB Performance Analysis or also for Universal Performance Analysis. If you have a mixed vehicle fleet and wish to compare data sets of vehicles of different makes, you should have your MB vehicles configured by FleetBoard Support in such a way that they are also able to provide data for Universal Performance Analysis.

4.4.1 Evaluation in Performance Analysis Universal

FleetBoard evaluates the driving style of a driver, the stop time (engine on), the number and time of overrevs, economic driving, speeding, and the count of harsh brakes according to a point system. The evaluation is done via a scale between 1 and 100 points.

The points have the following meaning:

Points	1 - 70	71 - 85	86 - 100
Colour	red	black	green
Evaluation	poor result	average result	good result

4.4.2 The Various Types of Analyses

Vehicle Analysis Contains
Predefined period(s) Period Breakdown Trip(s) summary
Driver Analysis Contains
Predefined period(s) Period Breakdown Trip(s) summary

Vehicle Analysis

Provides a vehicle-related evaluation of the performance analysis.

Driver Analysis

Provides a driver-related evaluation of the performance analysis.

Example of Application:

You can identify drivers with a fuel-saving driving style and those with a non-fuel-saving driving style. This allows you to train and support your staff according to their individual needs.

Predefined Period(s)

Provides an analysis for the drivers/vehicles of a specific vehicle group or for all drivers/vehicles of your vehicle pool. The evaluation is made for the time range you select (a whole year, half a year, a quarter, a month, a calendar week).

The values displayed are average values achieved by the corresponding vehicle or driver within the selected period.

Example of Application:

Comparison of different vehicles and drivers over a selected period of time. This enables you to identify any areas for investigation (e.g. a very high fuel consumption).

Period Breakdown

Provides an analysis for individual drivers/vehicles or for all drivers/vehicles of your vehicle pool. You can enter an interval for the evaluation. Accordingly, the data will be displayed in the form of weekly, monthly, quarterly, biannual, or annual average and total values.

Example of Application:

The results of the analysis enable you to compare the data from the selected time intervals. In the case of a weekly evaluation, you can see at a glance whether a poor evaluation for the driving style of a particular driver was just an exception during one week, or if the driver was continuously given poor evaluations for the driving style.

Trip(s) Summary

Analyses for each individual trip of your vehicles/drivers.



Note: Only when a trip has been completed can the data sets be transmitted to the FleetBoard Server. Subsequently, you can query the data sets of the completed trip.

A trip can be completed, as follows:

- FleetBoard completes a trip if the driver changes, i.e. if the FleetBoard DriverCard is inserted into or removed from the on-board computer.
- If the FleetBoard DriverCard is inserted longer than 24 hours in the on-board computer, the trip is completed automatically.
- If no FleetBoard DriverCard has been inserted into the on-board computer, the trip is daily completed at 00:00 a.m. The point of time when the trip is completed is configured by FleetBoard Support.

Example of Application:

In this way, you can make out irregularities with regard to high fuel consumption and poor driving style and investigate the causes.

4.4.3 The Overview Tables in Performance Analysis Universal

The overview table may look as follows:

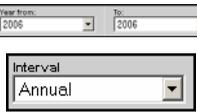
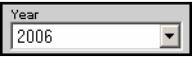
Vehicle or Vehicle Group Central Demonstro		Year 2006	Period Year							
Vehicle Search		Driv. Style [Points] All	Idling Time (Engine On) [Points] All		No. of Overvevs [Points] All					
Overrev Time [Points] All		Econ. Driving [Points] All	Speeding [Points] All		Harsh Brakes [Points] All					
Avg. Total Cons. [l/100km] -										
Reset View										
Vehicle	Vehicle Group	Env. Style [Points]	Env. Distance [km]	Idling Time (Engine On) [Points]	No. of Overvevs [Points]	Overrev Time [Points]	Econ. Driving [Points]	Speeding [Points]	Harsh Brakes [Points]	Avg. Total Cons. [l/100km]
YH05 KAC	Central Dem...	84	48.320	88	-45	00	98	91	94	28,5
YH05 KAD	H & L Garag...	67	28.755	67	15	76	92	84	77	31,5
YH05 KAU	Central Dem...	62	29.795	48	13	71	93	83	65	31,5
Sum and Average Values (Related to Corresponding Filtered Records)										
Avg.		73	35.623	65	-29	81	94	87	82	30,1
Sum			106.869							

Overview tables offer comprehensive filter options and give a first overview of the evaluation of the performance analysis.

4.4.3.1 Filtering

To find precisely those data sets you are interested in in an easy way, the following filters are provided in the overview tables:

Filter	Meaning
<div style="border: 1px solid black; padding: 2px;"> Vehicle or Vehicle Group Central Demonstro </div>	Vehicle/Vehicle Group/Driver Filters data sets of vehicles, vehicle groups, or drivers.

Filter	Meaning
	<p>Only available under period breakdown: year from/to and interval</p> <p>Here, you can specify for which year(s) you wish to display data sets and for which intervals: annually, biannually, quarterly, monthly, or weekly.</p>
	<p>Only available under period breakdown: Year</p> <p>Filters for data sets of a specific year. By default, data sets of the current year are displayed.</p>
	<p>Only available under period breakdown and trip(s) summary: Period</p> <p>Filters for a period, over which an average value of the analysed values is to be calculated.</p> <ul style="list-style-type: none"> • Predefined period(s): By default, an average value is calculated for all evaluations of the current year. • Trip(s) summary: By default, only the data sets of the last vehicle set or the last driver set are displayed.
	<p>Only available under period breakdown and trip(s) summary.</p> <p>The drop-down list <i>Calendar Week</i> will be displayed.</p>  <p>Use this drop-down list to filter the data sets for a specific calendar week.</p>
	<p>Vehicle Search</p> <p>Filters the data sets of the vehicle of which you have entered the name here.</p>

Filter	Meaning
<div data-bbox="84 300 277 363"> Driv. Style [Points] <input type="text" value="All"/> </div>	<p data-bbox="296 292 548 320">Driving Style [Points]</p> <p data-bbox="296 339 940 432">Filters vehicles or drivers with very good (86 to 100 points), average (71 to 85 points), or very poor (1 to 70 points) evaluation of the driving style.</p>
<div data-bbox="84 464 277 528"> Idling Time (Engine On) [Points] <input type="text" value="All"/> </div>	<p data-bbox="296 456 677 485">Idling Time (Engine On) [Points]</p> <p data-bbox="296 504 963 596">Filters vehicles and drivers with long (1 to 70 points), average (71 to 85 points), or short (86 to 100 points) stop time with engine on.</p>
<div data-bbox="84 628 277 692"> No. of Overrevs [Points] <input type="text" value="71-85"/> </div>	<p data-bbox="296 620 632 649">Number of Overrevs [Points]</p> <p data-bbox="296 668 963 761">Filters vehicles and drivers with numerous (1 to 70 points), average (71 to 85 points), or few (86 to 100 points) overrevs.</p>
<div data-bbox="84 793 277 857"> Overrev Time [Points] <input type="text" value="1-70"/> </div>	<p data-bbox="296 785 554 813">Overrev Time [Points]</p> <p data-bbox="296 833 929 925">Filters vehicles and drivers with long (1 to 70 points), average (71 to 85 points), or short (86 to 100 points) overrev times.</p>
<div data-bbox="84 957 277 1021"> Econ. Driving [Points] <input type="text" value="86-100"/> </div>	<p data-bbox="296 949 599 978">Economic Driving [Points]</p> <p data-bbox="296 997 929 1090">Filters vehicles and drivers with poor (1 to 70 points), average (71 to -85 points), or good (86 to 100 points) evaluation of economic driving.</p>
<div data-bbox="84 1121 277 1185"> Speeding [Points] <input type="text" value="1-70"/> </div>	<p data-bbox="296 1114 504 1142">Speeding [Points]</p> <p data-bbox="296 1161 901 1254">Filters vehicles and drivers with numerous (1 to 70 points), average (71 to -85 points), or few (86 to 100 points) speeding records.</p>
<div data-bbox="84 1286 277 1350"> Harsh Brakes [Points] <input type="text" value="71-85"/> </div>	<p data-bbox="296 1278 554 1307">Harsh Brakes [Points]</p> <p data-bbox="296 1326 901 1418">Filters vehicles and drivers with numerous (1 to 70 points), average (71 to -85 points), or few (86 to 100 points) harsh brakes.</p>

Filter	Meaning
	<p>Average Total Consumption [l/100km]</p> <p>Filters the average total consumption in l/100 km. You can search for vehicles or drivers with a very high or very low average fuel consumption.</p>

4.4.3.2 Contents

The individual **columns** of the table have the following meaning:

Column	Meaning
<i>Vehicle</i>	Only in Vehicle Analysis. Vehicle names of the selected vehicle group.
<i>Vehicle Group</i>	Only in Vehicle Analysis. Name of the vehicle group.
<i>Driver</i>	Only in Driver Analysis. Driver name
<i>Driver Group</i>	Only in the driver analysis. Name of the driver group.
<i>Period</i>	Only available under period breakdown and for trip(s) summary. Specifies the period of time for which the analysis was created.
<i>Start/End of Trip</i>	Only for trip(s) summary. Specifies the points of time when the selected trip starts and ends.

Column	Meaning
<i>Driving Style [Points]</i>	<p>Evaluation of the driving style.</p> <p>An average value is calculated for the selected period. The evaluation is made by means of points between 1 (very bad) and 100 (very good):</p> <p>The overall evaluation of the driving style comprises the following items:</p> <ul style="list-style-type: none"> • Number of overrevs • Time overrevs • Number of harsh brakes • Speeding • Economic driving • Idling time (engine on) <p>In general, the following applies: The evaluation of the driver improves the more fuel he saves by means of an economic driving style, the less the engine is strained by overrevs, and the more carefully the brakes are used.</p>
<i>Driv. Distance [km]</i>	Total distance covered in the selected time range.
<i>Stop time (engine on) [points]</i>	<p>Evaluation of the idling time with the engine on.</p> <p>The evaluation is obtained from the relation between idling time (engine on) / operating time [%]. The shorter the idling time with the engine on, the better the evaluation. For the purpose of evaluations points from 1 (very long idling time with engine on) and 100 (very short idling time with engine on) are assigned. A idling stop time with engine on leads to a low fuel consumption and, thus, to a positive evaluation of the driving style.</p>

Column	Meaning
<p><i>Number of Overrevs</i> [Points]</p>	<p>Evaluation of the number of overrevs (exceeding the optimum RPM range) in pull operation (i.e. using the accelerator pedal).</p> <p>The less overrevs, the better the evaluation. The evaluation is made by means of points between 1 (very frequent overrevs) and 100 (very few overrevs). Avoiding overrevs (exceeding the optimum RPM range) helps to reduce the fuel consumption and to reduce the strain on the engine. This evaluation is also taken into account in the overall evaluation of the driving style. A positive evaluation is reached by changing gears in good time and using the next higher gear.</p>
<p><i>Overrev Time</i> [Points]</p>	<p>Evaluation of the overrev time (exceeding the optimum RPM range) in pull operation (i.e. using the accelerator pedal).</p> <p>The shorter the overrev times, the better the evaluation.</p> <p>The evaluation is made by means of points between 1 (very long overrev times) and 100 (very short overrev times).</p> <p>Avoiding long overrev times (exceeding the optimum RPM range for a longer time) helps to reduce the fuel consumption and to reduce the strain on the engine. This evaluation is also taken into account in the overall evaluation of the driving style. A positive evaluation is reached by changing gears in good time and using the next higher gear.</p>

Column	Meaning
<i>Economic Driving [Points]</i>	<p>Evaluation of economic driving.</p> <p>The evaluation is made by means of points between 1 (very bad) and 100 (very good):</p> <p>The evaluation of economic driving refers to the v/n style map (speed/RPM style map). It is evaluated whether the vehicle is driven with appropriate RPM at different speeds. A good evaluation indicates that the driver drove economically, i.e. used an appropriate gear. The longer appropriate gears were used, the better the evaluation. This evaluation is also taken into account in the overall evaluation of the driving style.</p>
<i>Speeding [Points]</i>	<p>Evaluation of the time period during which the vehicle was driven with too high speed related to the total driving time.</p> <p>The shorter the driving time with speeding, the better the evaluation.</p> <p>The evaluation is made by means of points between 1 (very long driving time with speeding) and 100 (very short driving time with speeding).</p> <p>By default, FleetBoard identifies a speed of > 85 km/h as speeding and records the corresponding time period.</p> <p>The evaluation of speeding is then made in the relation of driving time with speeding / total driving time [%]. This evaluation speeding is also taken into account in the overall evaluation of the driving style.</p>

Column	Meaning
<i>Harsh Brakes</i> <i>[Points]</i>	Evaluation of the number of harsh brakes. The fewer the harsh brakes, the better the evaluation. The evaluation is made by means of points between 1 (very many harsh brakes) and 100 (very few harsh brakes). As few harsh brakes as possible lead to a low fuel consumption and a driving style which reduces the wear and tear of the vehicle parts.
<i>Average Total Consumption</i> <i>[l/100 km]</i>	Overall fuel consumption of the corresponding vehicle/driver, or, if applicable, total fuel consumption of all vehicles of the selected group. Includes the drive consumption and the idle consumption.
<i>Vehicle Count</i>	Only available under Vehicle Analysis/Period Breakdown. If you have selected an analysis for a vehicle group, the number of vehicles in the corresponding group is displayed in this column.
<i>Number of Drivers</i>	Only available under Driver Analysis/Period Breakdown. If you have queried an analysis for a time interval, the number of drivers in the corresponding analysis interval is displayed.

The last two **lines** of the table summarise the results of the analysis:

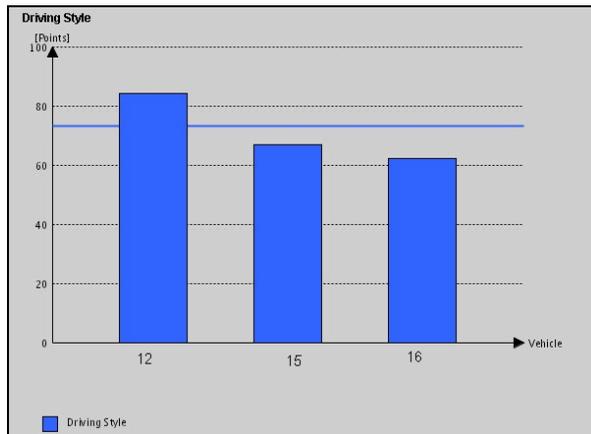
Line	Meaning
<i>Total</i>	The sum of the total distances of all selected vehicles/drivers in the selected analysis period is displayed.
Ø	Average values for driving style, total distance, stop time (engine on), number and time of overrevs, economic driving, speeding, harsh brakes, and average total consumption.

By clicking the magnifying glass symbol  , you can go to the detail view.

4.4.4 Graphical Evaluation of the Overview Tables

The graphical evaluation of the various analysis types provides similar diagrams. These diagrams are therefore described together at the example of the *Vehicle Analysis > Predefined Period(s)*.

4.4.4.1 Diagram Driving Style



Analysis of Predefined Period(s) and Analysis for Trip(s) Summaries

The *Driving Style* diagram provides an overview of the average driving style evaluation for individual vehicles/drivers. This permits the comparison of evaluations and the identification of irregularities.

Period Breakdown

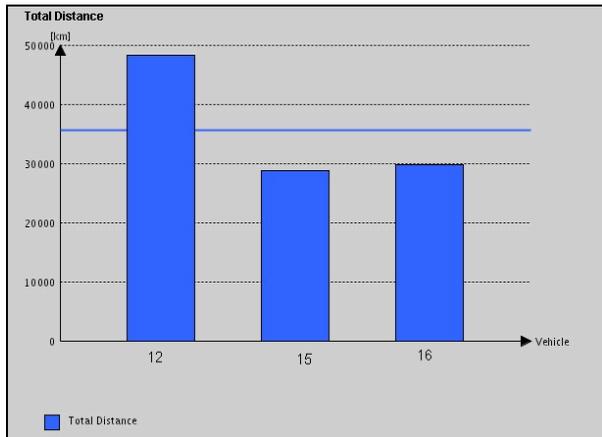
The *Driving Style* diagram provides an overview of the average driving style evaluation for the selected time intervals. This allows you to compare the evaluations of driving styles during predefined time periods.

How to Read the Diagram

- The X-axis shows the vehicles/drivers (for predefined period(s) and trip(s) summary) or the evaluation intervals (period breakdown).
- The Y-axis indicates the evaluation of the driving style (100 points: excellent, 0 points: unsatisfactory).
- The blue line indicates the average evaluation of the driving style.

In general, the following applies: A good evaluation of the driving style indicates a behaviour of your drivers which saves fuel and goes easy on the engine.

4.4.4.2 Diagram Total Distance



Analysis of Predefined Period(s) and Analysis for Trip(s) Summaries

The *Total Distance* diagram provides an overview of the average total distance for individual vehicles/drivers.

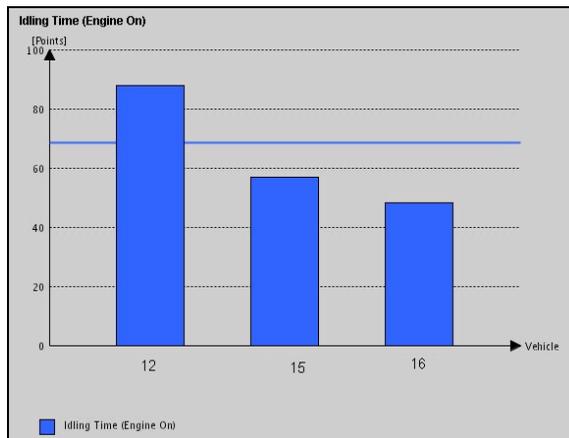
Period Breakdown

The *Total Distance* diagram provides an overview of the average total distance for the selected time intervals.

How to Read the Diagram

- The X-axis shows the vehicles/drivers (for predefined period(s) and trip(s) summary) or the evaluation intervals (period breakdown).
- The Y-axis indicates the total distance in km.
- The blue line indicates the average total distance.

4.4.4.3 Diagram Idling Time (Engine On)



Analysis of Predefined Period(s) and Analysis for Trip(s) Summaries

The *Idling Time (Engine On)* diagram provides an overview of the idling time (engine on) evaluation for individual vehicles/drivers. This permits the comparison of evaluations and the identification of irregularities.

Period Breakdown

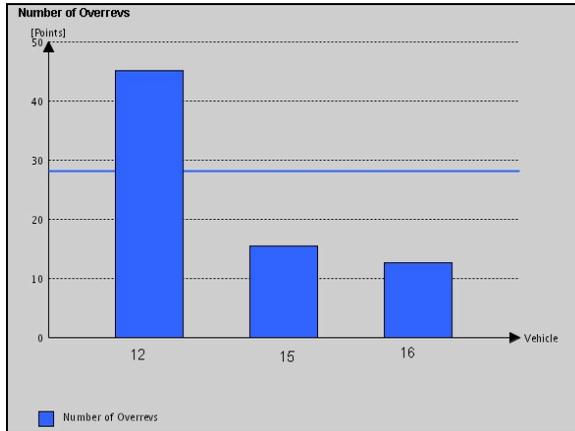
The *Idling Time (Engine On)* diagram provides an overview of the idling time (engine on) evaluation for the selected time intervals. This allows you to compare the evaluations during predefined time periods.

How to Read the Diagram

- The X-axis shows the vehicles/drivers (for predefined period(s) and trip(s) summary) or the evaluation intervals (period breakdown).
- The Y-axis indicates the evaluation of the idling time (engine on) (100 points: excellent, 0 points: unsatisfactory).
- The blue line indicates the average evaluation of the idling time (engine on).

In general, the following applies: The shorter the idling time (engine on), the better the evaluation and the lower the fuel consumption. This evaluation of the idling time (engine on) is also taken into account in the overall evaluation of the driving style.

4.4.4.4 Diagram Number of Overrevs



Analysis of Predefined Period(s) and Analysis for Trip(s) Summaries

The *Total Distance* diagram provides an overview of the average total distance for individual vehicles/drivers. This enables you to compare evaluations and identify irregularities.

Period Breakdown

The *Number of Overrevs* diagram provides an overview of the evaluation of the number of overrevs for the selected time intervals. This allows you to compare the evaluations during predefined time periods.

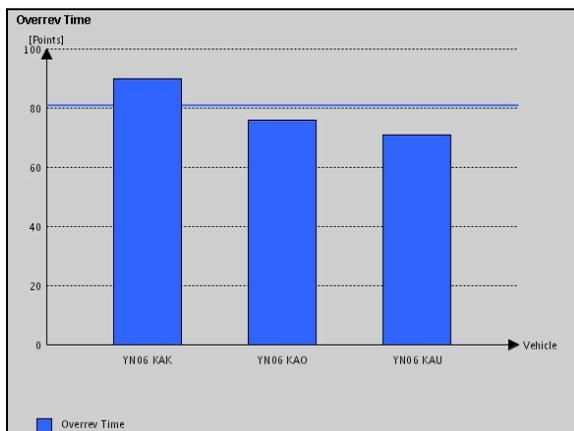
How to Read the Diagram

- The X-axis shows the vehicles/drivers (for predefined period(s) and trip(s) summary) or the evaluation intervals (period breakdown).

- The Y-axis indicates the evaluation of the number of overrevs (100 points: excellent, 0 points: unsatisfactory).
- The blue line indicates the average evaluation of the number of overrevs.

In general, the following applies: The fewer the overrevs, the better the evaluation and the lower the fuel consumption.

4.4.4.5 Diagram Overrev Time



Analysis of Predefined Period(s) and Analysis for Trip(s) Summaries

The *Overrev Time* diagram provides an overview of the evaluation of overrev times for individual vehicles/drivers. This permits the comparison of evaluations and the identification of irregularities.

Period Breakdown

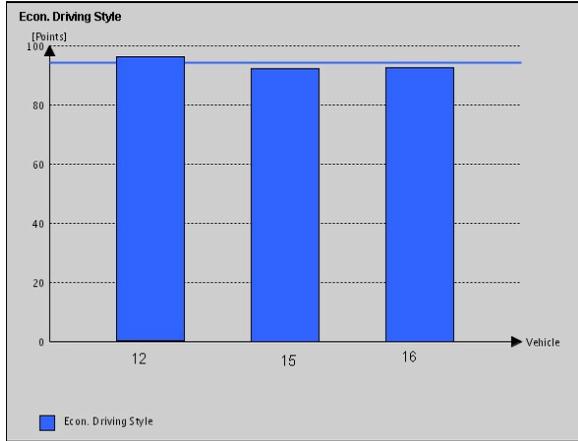
The *Overrev Time* diagram provides an overview of the evaluation of the overrev times for the selected time intervals. This allows you to compare the evaluations during predefined time periods.

How to Read the Diagram

- The X-axis shows the vehicles/drivers (for predefined period(s) and trip(s) summary) or the evaluation intervals (period breakdown).
- The Y-axis indicates the evaluation of the overrev times (100 points: excellent, 0 points: unsatisfactory).
- The blue line indicates the average evaluation of the overrev times.

In general, the following applies: The shorter the overrev times, the better the evaluation and the lower the fuel consumption.

4.4.4.6 Diagram Economic Driving Style



Analysis of Predefined Period(s) and Analysis for Trip(s) Summaries

The *Economic Driving Style* diagram provides an overview of the average economic driving evaluation for individual vehicles/drivers. This permits the comparison of evaluations and the identification of irregularities.

Period Breakdown

The *Economic Driving Style* diagram provides an overview of the average economic driving evaluation for the selected time intervals. This allows you to compare the evaluations of economic driving during predefined time periods.

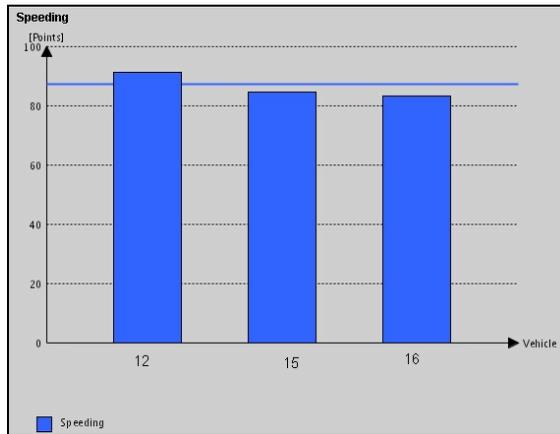
How to Read the Diagram

- The X-axis shows the vehicles/drivers (for predefined period(s) and trip(s) summary) or the evaluation intervals (period breakdown).

- The Y-axis indicates the evaluation of economic driving (100 points: excellent, 0 points: unsatisfactory).
- The blue line indicates the average evaluation of economic driving.

In general, the following applies: The diagram provides information on the gear shifting performed by your drivers. A positive evaluation indicates that your drivers shift gears in good time and, thus, save fuel and go easy on the engine. You can find a detailed evaluation of economic driving in the diagram [Diagram Economic Driving](#), which you can reach via the detail pages.

4.4.4.7 Diagram Speeding



Analysis of Predefined Period(s) and Analysis for Trip(s) Summaries

The *Speeding* diagram provides an overview of the speeding evaluation for individual vehicles/drivers. This permits the comparison of evaluations and the identification of irregularities.

Period Breakdown

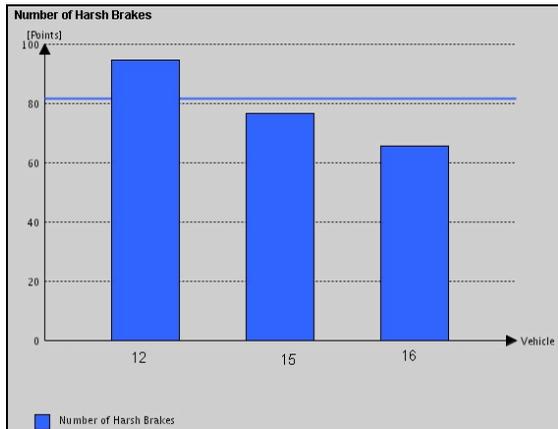
The *Speeding* diagram provides an overview of the speeding evaluation for the selected time intervals. This allows you to compare the evaluations during predefined time periods.

How to Read the Diagram

- The X-axis shows the vehicles/drivers (for predefined period(s) and trip(s) summary) or the evaluation intervals (period breakdown).
- The Y-axis indicates the speeding evaluation (100 points: excellent, 0 points: unsatisfactory).
- The blue line indicates the average speeding evaluation.

In general, the following applies: The fewer the speeding, the better the evaluation and the lower the fuel consumption.

4.4.4.8 Diagram Number of Harsh Brakes



Analysis of Predefined Period(s) and Analysis for Trip(s) Summaries

The *Number of Harsh Brakes* diagram provides an overview of the evaluation of harsh brakes for individual vehicles/drivers. This permits the comparison of evaluations and the identification of irregularities.

Period Breakdown

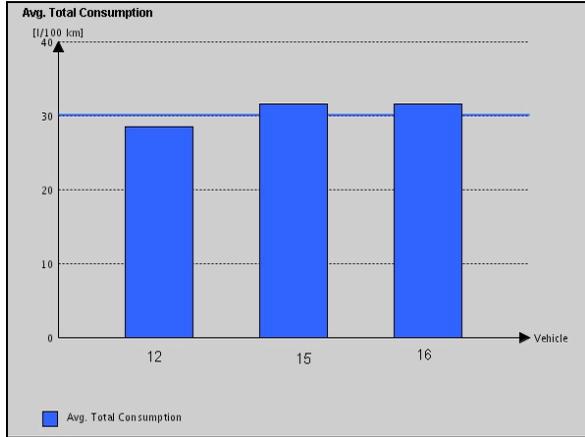
The *Number of Harsh Brakes* diagram provides an overview of the speeding evaluation for the selected time intervals. This allows you to compare the evaluations during predefined time periods.

How to Read the Diagram

- The X-axis shows the vehicles/drivers (for predefined period(s) and trip(s) summary) or the evaluation intervals (period breakdown).
- The Y-axis indicates the evaluation of harsh brakes (100 points: excellent, 0 points: unsatisfactory).
- The blue line indicates the average evaluation of harsh brakes.

In general, the following applies: The fewer the harsh brakes, the better the evaluation and the lower the fuel consumption and wear and tear.

4.4.4.9 Diagram Average Total Consumption



The diagram graphically displays the average total fuel consumption of the vehicle. The overall consumption includes the drive consumption and the idle consumption.

Analysis of Predefined Period(s) and Analysis for Trip(s) Summaries

The *Average Total Consumption* diagram provides an overview of the average total consumption for individual vehicles/ drivers. This permits the comparison of evaluations and the identification of irregularities.

Period Breakdown

The *Average Total Consumption* diagram provides an overview of the evaluation of fuel consumption for the selected time intervals. This allows you to compare the evaluations during predefined time periods.

How to Read the Diagram

- The X-axis shows the vehicles/drivers (for predefined period(s) and trip(s) summary) or the evaluation intervals (period breakdown).
- The Y-axis displays the average total fuel consumption.
- The blue line indicates the average of all data sets.

4.4.5 Detail Views

Provides detailed information on the selected data set. Moreover, you can go from here over  to the *Economic Driving Style* and *Number of Harsh Brakes* diagrams.



Note: For period breakdown, the detail view is only available after you have created an overview table for an individual vehicle with the help of the filters.

Upper Table

Vehicle	Period	Driver	Trailer
16	Year 2006	Dean	
Driving Style [Points]	Avg. Speed [km/h]	Avg. Total Consumption [l/100km]	Avg. Drive Consumption [l/100km]
84	80	28,5	28,3

In addition to the data of the overview table, this table contains general on the selected data set. Amongst others:

- *Average Total Consumption [l/100 km]*

The total consumption includes the drive consumption and the idle consumption.

- *Average Drive Consumption [l/100 km]*

The *Average Drive Consumption* corresponds to the average quantity of fuel used up for a total distance of 100 km.

- You can use the *Driver* or *Trailer* drop-down lists to check whether a vehicle was driven by different drivers during the evaluation period or whether different trailers were hitched on.

Driver	Trailer
Dean	

Middle Table

Driving Style		
Number of Overrevs [Points] 45	Speeding Time [Points] 91	Idling Time (Engine On) [Points] 88
Overrev Time [Points] 90	Economic Driving [Points] 96	
Number of Harsh Brakes [Points] 94		

Explanation of the evaluation of the driving style. The overall evaluation of the driving style comprises the following items:

- Number of Overrevs
- Overrev Time
- Number of Harsh Brakes
- Speeding
- Economic Driving
- Idling Time (Engine On)

In general, the following applies: The evaluation of the driver improves the more fuel he saves by means of an economic driving style, the less the engine is strained by overrevs, and the more carefully the brakes are used.

Lower Table

	03:52 Overtake time [min]		
	00:58 Speeding time [min]		
	38:54 [min] Idle time (Engine off)	0 number of PTO uses	
0'0 PTO consumption [l]	00:00 time of PTO uses [min]	3:235 number of stops	
43'08'4 consumption [l]	02:34 [min] Idle time (Engine on)	24 number of heavy brakes	
18'3 idle consumption [l]	04:22'4 moving time [min]	82 setting [s] percentage of time in green	Heavy Brakes
43'32'8 total consumption [l]	18:350 drive distance [km]	57843 number of overtakes	Economic Driving
Idle Consumption Values		Idle Values	
		Diagrams	

Further evaluations of the selected data set.

Additional Consumption Values	Meaning
<i>Total Consumption [l]</i>	Consists of drive consumption and idle consumption.
<i>Idle Consumption [l]</i>	Corresponds to the total fuel consumption of the vehicle while standing.
<i>Drive Consumption [l]</i>	Corresponds to the total fuel consumption of the vehicle while driving.
<i>PTO Consumption [l]</i>	Corresponds to the fuel consumption of the power take off while the vehicle is standing.

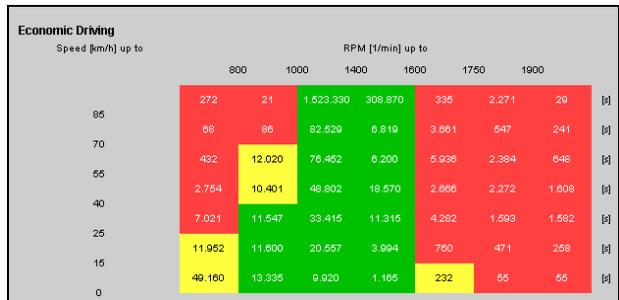
Further Performance Features	Meaning
<i>Drive Distance [km]</i>	Corresponds to the total distance covered by the vehicle so far.
<i>Moving Time [hour:min], IdlingTime (Engine On) [hour:min], Idling Time (Engine Off) [hour:min]</i>	The values indicate details regarding driving and standing times during the trip. The value <i>Idling Time (Engine On)</i> serves to determine the ratio <i>Idling Time (Engine On) / Operating Time [%]</i> . The evaluation of this ratio is also taken into account in the overall evaluation of the driving style. The lower the value <i>Idling Time (Engine On)</i> , the more positive the evaluation of the driving style.
<i>Time of PTO Uses [hour:min]</i>	Indicates the time while the power take off was switched on.
<i>Speeding Time [hour:min]</i>	The time during which the vehicle is driven with a speed higher than 85 km/h. This evaluation is also taken into account in the overall evaluation of the driving style. The shorter the speeding times, the better the evaluation of the driving style.
<i>Overrev Time [hour:min]</i>	Evaluation of the time during which the vehicle was driven with overrevs (exceeding the optimum RPM range) in pull operation (i.e. using the accelerator pedal). This evaluation is also taken into account in the overall evaluation of the driving style. The fewer the overrevs, the better the evaluation of the driving style.

Further Performance Features	Meaning
<i>Number of Overrevs</i>	<p>Number of overrevs (exceeding the optimum RPM range) in pull operation (i.e. using the accelerator pedal).</p> <p>This evaluation is also taken into account in the overall evaluation of the driving style. The fewer the overrevs, the better the evaluation of the driving style.</p>
<i>Time Share Green Section [%]</i>	<p>Corresponds to the percentage of the green section within the style map <i>Economic Driving</i> (see Section Diagram Economic Driving, Page 4-91). A high value indicates that the vehicle was usually driven in the optimal RPM range, which means that the driver shifted to the next gear in good time.</p> <p>The higher the value, the more economic the driving style and the better the overall evaluation of the driving style.</p>
<i>Number of Harsh Brakes</i>	<p>Specifies the number of harsh brakes performed by the vehicle. This evaluation is also taken into account in the overall evaluation of the driving style. The more harsh brakes, the worse the driving style.</p>
<i>Number of Stops</i>	<p>Specifies the number of times the vehicle stopped during the trip or during the selected time period (speed = 0).</p>
<i>Number of PTO Uses</i>	<p>Specifies how often the power take off was switched on.</p>

4.4.6 Graphical Evaluation of the Detail Views

4.4.6.1 Diagram Economic Driving

This page gives you an overview how long the vehicle has been driven at which speed and with which RPM. This means, it gives you an impression of the gear changing behaviour of the driver.



How to Read the Diagram

- The x-axis displays the RPM range, divided into 7 sections. The engine speed is stated in RPM.
- The y-axis displays the speed.
- The coloured section displays how many seconds the truck moved at a specific engine torque and within a specific RPM range.

The above example illustrates that during the selected time range, the truck was driven for 6,200 seconds at a speed between 55 and 70 km/h and an RPM range between 1400 and 1600 / minute.

- The colours in the chart correspond to the style map of the vehicle. They have the following meaning:
 - Green: optimum range of the engine map

- Yellow: less favourable range of the engine map
- Red: unfavourable range of the engine map

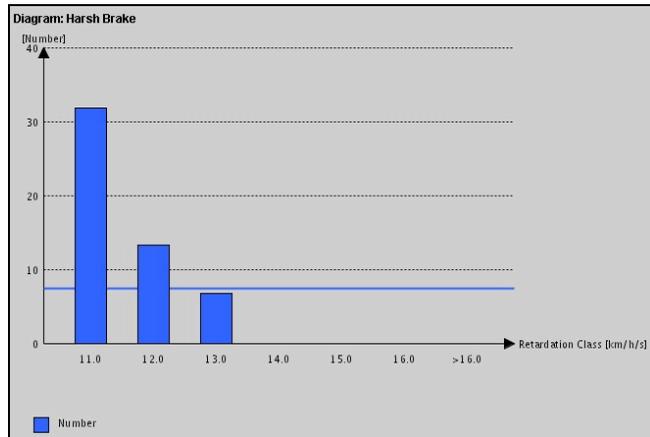
In the bottom section, the values are summarised in a table.

Sum:	2.188.420	94,55%
Sum:	83.764	3,82%
Sum:	42.369	1,83%

With an optimum driving style, the values in the green section are as high as possible and the values in the red section are as low as possible. A favourable evaluation can be achieved by changing into the next gear in good time.

4.4.6.2 Diagram Harsh Brakes

This page provides an overview how often the vehicle has made harsh brakes and how intensive the harsh brakes were. This means, it gives you an impression of the braking behaviour of the driver.



How to Read the Diagram

- The X-axis displays the various retardation classes. A deceleration class specifies by how many km/h per sec-

and the vehicle is decelerated during the braking process. A low value assigned for the retardation class, thus, indicates a relatively smooth harsh brake, a high value an intensive harsh brake.

- The y-axis displays the number of braking procedures.

This means the diagram shows how many braking procedures the vehicle has performed with which intensity.

In the bottom section, the values are summarised in a table.

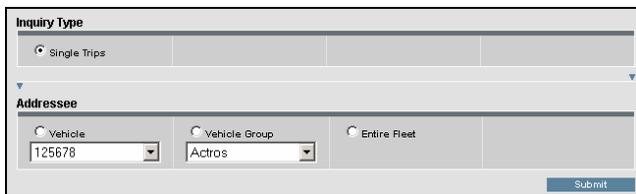
Deceleration in (km/h/s) until	11.0	12.0	13.0	14.0	15.0	16.0	>16.0	Sum
Number	32	13	7	0	0	0	0	62
Percent	61%	26%	13%	0%	0%	0%	0%	100%

An optimum braking procedure is marked by as few harsh brakes as possible. This means that the driver employs an anticipatory driving style and decelerates the vehicle in good time ahead of red traffic lights or obstacles. If harsh brakes are necessary, they should be made in deceleration classes which are as low as possible.

4.5 Performance Analysis, Vehicle Query

Here, you can query vehicle trip data which has not yet been sent to FleetBoard automatically.

1. Specify the *Addressee* to whom you want to send the data. You can select either an individual *Vehicle*, or a complete *Vehicle Group*, or the entire fleet.



The screenshot shows a web form with two main sections. The first section, titled 'Inquiry Type', contains a radio button labeled 'Single Trips'. The second section, titled 'Addressee', contains three radio buttons: 'Vehicle', 'Vehicle Group', and 'Entire Fleet'. Below the 'Vehicle' radio button is a dropdown menu with the value '125678'. Below the 'Vehicle Group' radio button is a dropdown menu with the value 'Actros'. A 'Submit' button is located at the bottom right of the form.

2. Click *Send*.
3. You will receive a message asking you whether you really want to start a query.



The screenshot shows a 'Confirmation' dialog box with a blue header. The text inside reads: 'A message is sent to 1 MB vehicle (s). Do you really want to send 1 SMS?'. At the bottom, there are two buttons: 'Yes' and 'No'.

4. Click *Yes* to submit the query.

Chapter 5

Maintenance

General Information on the Service	5-2
Prognosis List	5-3
Status Check	5-9
Vehicle Query	5-13
Statutory Test Dates.....	5-15

5.1 General Information on the Service

The maintenance system of the vehicle (e.g. Telligent maintenance system) determines the service intervals with reference to wear and tear. FleetBoard takes over the data and indicates the service prognoses for the individual maintenance positions. In addition, the vehicle can be examined *virtually* by means of a status check. Information on many functions and conditions, which until now have been checked via visual inspection, becomes available at a click mouse click.

5.2 Prognosis List

The *Prognosis List* service determines the service intervals for your fleet with reference to the tear and wear. You can view the Prognosis List in an overview table for all your vehicles, and additionally display a detail view for each vehicle containing all service-related information.



Note: Compared to MB vehicles, the Maintenance Prognosis service provides only very little information for all-makes vehicles.

5.2.1 Prognosis List, Overview Table

The page *Prognosis List, Overview Table* provides a convenient overview of the maintenance work to be carried out for your fleet.

Vehicle	Telematic Group	Vehicle Group	Date Time	Mileage [km]	Next Maintenance Activity	Date of Next Maintenance Activity	Distance to Next Maintenance Activity
FJ06 YSG	MB	RSM Area 3	18.10.2006 06:33	17.005	Time Maintenance	05.04.2007	14.000
GND6 NSA	MB	RSM Area 3	14.11.2006 19:27	41.140	Time Maintenance	12.04.2007	28.000
WX06 VSP	MB	RSM Area 3	25.09.2006 08:12	12.673	Time Maintenance	19.04.2007	23.000
FX06 HZL	MB	RSM Area 3	12.12.2006 16:15	41.386	1. General	05.11.2007	57.000
AY06 GJJ	MB	RSM Area 3	13.12.2006 13:39	39.424	1. General	02.01.2008	60.000
IX06 OCC	MB	RSM Area 3	14.11.2006 16:15	28.481	Engine	04.04.2008	64.000
<input type="button" value="Reset"/> <input type="button" value="View"/>							
Average Values (Related to Corresponding Filtered Records)							
#							41.000

Lines displayed in red colour indicate that a maintenance date for this vehicle has already been exceeded.

- In the *Vehicle* column, the vehicles are listed with the names you specified.
- *Telematic Group* specifies the telematics group the vehicle is assigned to.
- The *Vehicle Group* column indicates the group to which the vehicle is assigned.
- The *Date Time* column contains the date and the time the prognosis was made.
- *Mileage* specifies the mileage of the vehicle at the read-out time of the query.
- The *Next Maintenance Activity* column contains the earliest service job for the selected vehicle to be prognosticated by the maintenance system.

The following service activities are displayed:

- General maintenance
- Engine (only for MB vehicles)
- Time Maintenance (only for MB vehicles)
- Air Drier (only for MB vehicles)
- Retarder (only for MB vehicles)
- Transmission (only for MB vehicles)
- Rear Axles (only for MB vehicles)
- Main Service
- Emissions Test
- Safety Inspection
- Tachograph Inspection
- ADR (Inspection to European Agreement Concerning the International Carriage of Dangerous Goods by Road)



Note: For all vehicles, the due dates for main service, emissions tests, safety inspections, tachograph inspections, and ADR are specified only if you have entered this data under *Statutory Test Dates*. For all further maintenance activities for all-makes vehicles, merely the mileage up to the next maintenance interval is specified, but not the type of maintenance work. In the *Maintenance Work* column, thus, only the term *General Maintenance* is entered in all cases.

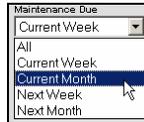
- The *Date of Next Maintenance Activity* column contains the prognosticated date when the next maintenance job is due. The following entries are possible:
 - The column does not contain any data: The Telligent maintenance system cannot yet determine a maintenance date, which means that the next maintenance date is still far ahead.
 - The *Date of Next Maintenance Activity* contains the entry *Immediate Service*: The maintenance work is immediately due.
 - The *Date of Next Maintenance Activity* contains a date. It indicates the next prognosticated maintenance date. If an exclamation mark is used instead of the date, this means that the service position in question is already overdue. In this case, the date will be displayed in red.
- The *Distance to Next Maintenance Activity* column contains the prognosticated number of kilometres the vehicle will run until this service job is due.

Average Values are calculated in the bottom lines of the table.

5.2.1.1 How to Use Filters in the Prognosis List

To view only selected data sets (e.g. those of a specific vehicle), filter the data.

For example, if you want to view only those vehicles for which a service job is prognosticated in the current month, select *Current Month* under *Maintenance Due*.



If you wish to know which vehicles have less than 2000 km to go until the next service job is due, enter the corresponding value under *Next Maintenance*.



View

Click *View*. The desired data sets will be displayed in the table.

5.2.2 Prognosis List, Detail View

The page *Prognosis List, Detail View* for an individual vehicle contains all service jobs for which the Telligent maintenance system is able to compute maintenance prognoses. The positions may change, depending on the equipment of the vehicle.

- In the top section of the page, the information of the overview table is shown again.

Vehicle YN06 KBE	Vehicle Group Actros	Date Time 24.11.2006 08:27	
Telematic Group MB	Next Maintenance Activity Time Maintenance	Date of Next Maintenance 07.12.2006	Renewal Distance 900

	Service Unit	Date of Next Maintenance	Renewal Distance
Mileage [km] 23.994	Time Maintenance	07.12.2006	900
Operating Time [h] 431	Engine	07.12.2007	25.000
Oil Quality 228.4..5	1. General	07.12.2007	25.000
Fuel Quality ...0.1 %	Engine Coolant	06.12.2008	50.000
Oil Viscosity 5W30	Air Filter	06.12.2008	50.000
Transmission Oil Quality 235.11	Transmission	06.12.2010	100.000
	Rear Axles	06.12.2010	100.000
	Air Dryer	-
	Brake - First Front Axle	-
	Brake - First Rear Axle	-

Back

- In the bottom section of the page, you can find a table with detailed information on the service prognosis and the service interval for the various *maintenance jobs*. The entries are sorted according to the due date. The maintenance work which has to be done next is listed at the top of the table. The values *Date of Next Maintenance* and *Renewal Distance* refer to the calculated service prognosis. The following entries are possible:
 - The columns *Date of Next Maintenance* and *Renewal Distance* do not contain any data: The Telligent maintenance system cannot yet determine a maintenance date, which means that the next maintenance date is still far ahead.
 - The *Date of Next Maintenance Activity* contains the entry *Immediate Service*, the column *Renewal Distance* does not contain any value: The maintenance work is immediately due.
 - The *Date of Next Maintenance Activity* contains a date. It indicates the next prognosticated maintenance date. If an exclamation mark is used instead of the date, this means that the service position in question is

already overdue. In this case, the date will be displayed in red.

- The *Renewal Distance* column contains the prognosticated number of kilometres the vehicle will run until this maintenance work is due.
- The *Mileage* column refers to the current mileage of the vehicle.
- The *Operating Time* indicates the total operating time of the selected vehicle.
- The positions *Oil Quality*, *Fuel Quality*, *Oil Viscosity*, and *Transmission Oil Quality* provide information on the service parameters set in the workshop. These parameters are used by the Telligent maintenance system as the basis to compute the service prognoses.



Note: For all-makes vehicles, merely the mileage up to the next maintenance work is specified, but not the type of maintenance work. In the *Maintenance Work* column, thus, only the term *General Maintenance* is entered in all cases.

5.3 Status Check

The Status Check provides important information on the current status of your fleet. Are the brake linings of your vehicle used up? Are the oil and coolant levels still OK? Is the wash water reservoir level still sufficient?



Note: The Status Check service is not available for all-makes vehicles.

5.3.1 Status Check, Overview Table

The *Status Check, Overview Table* page gives you an overview of all vehicles of the selected vehicle group.

Vehicle	Vehicle Group	Date Time	Faulty Bulb Count	Current Maximum Brake Wear [%]	Cooling Water Level Warning Count	Oil Short Fall [l]	Air Filter Condition
AY06 6JJ	RSM Area 3	13.12.2006 13:11	0	21	Ok	3,0< Max	-
FX06 HZL	RSM Area 3	12.12.2006 15:51	0	19	Pre-warning	0,0< Max	-
EN06 N3A	RSM Area 3	14.11.2006 15:45	0	26	Ok	0,8< Max	-
IX06 OCO	RSM Area 3	17.10.2006 15:45	0	17	Ok	0,1> Max	-
FJ06 Y5G	RSM Area 3	17.10.2006 16:45	0	8	Ok	0,6< Max	-
IX55DDU	RSM Area 3	29.08.2006 18:58			Ok	2,6< Max	Ok
WX06 VSP	RSM Area 3	23.08.2006 11:46	0	8	Ok	0,0< Max	-
IX55DDV	RSM Area 3	11.05.2006 12:14			Ok	1,8< Max	Ok

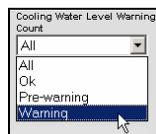
- In the *Vehicle* column, the vehicles are listed with the names specified by you.
- The *Vehicle Group* column indicates the group to which the vehicle is assigned.

- The *Date Time* column indicates the date and time the query was made.
- The *Faulty Bulb Count* column indicates the number of faulty bulbs.
- The *Current Maximum Brake Wear* column indicates the value (in per cent) computed as the maximum brake wear by means of a check of all axles.
- Three values may occur in the *Cooling Water Level Warning Count*.
 - *OK*: There is enough cooling water.
 - *Pre-warning*: The coolant level is close to the critical limit and ought to be refilled.
 - *Warning*: The coolant level has reached or exceeded the critical limit and has to be refilled immediately in order to avoid damage to the vehicle.
- The *Oil Shortfall* column specifies the amount of oil in the engine with reference to the maximum oil level. > *MAX* means that there is too much oil in the engine; < *MAX* indicates that there is not enough oil in the engine.
- The *Air Filter Condition* column indicates the condition of the air filter. The status can either be *OK* or *Not OK*.

5.3.1.1 How to Use Filters in the Status List

To view only selected data sets, use the filters.

For example, if you want to know which vehicles report a warning because their cooling water level is too low, select the corresponding entry:



View

Then, click the *View* button. The desired data sets will be displayed in the table.

Moreover, you can use the input fields to filter for:

- The number of faulty bulbs
- Current maximum brake wear
- Air filter

5.3.2 Status Check, Detail View

The page *Status Check, Detail View* for a selected vehicle provides an overview of the condition of the vehicle at the read-out time of the query.

In the top section of the page, the information of the overview table is shown again.

Vehicle FX06 HZL	Vehicle Group RSM Area 3	Date Time 12.12.2006 15:51	
Faulty Bulb Count 0	Current Maximum Brake Wear [%] 19	Cooling Water Level Warning Count Pre-warning	Oil Short Fall [l] 0,0 < Max
Air Filter Condition -			
▼			
Operating Time [h] 750	Brake Wear - First Front Left [%] 18	Brake Wear - First Front Right [%] 19	Current Fuel Consumption 15,164
Additional Information	Brake Wear - Second Front Left [%]	Brake Wear - Second Front Right [%]	Power Steering Oil Level
Washing Water Reserve 1	Brake Wear - First Rear Left [%] 4	Brake Wear - First Rear Right [%] 3	Total Mileage [km] 41.370
Oil Pressure [Bar] 0,00	Brake Wear - Second Rear Left [%] 19	Brake Wear - Second Rear Right [%] 19	
Back			

In the bottom section of the page, the following details are given:

- The eight positions which contain the term *Brake Wear* indicate the wear on brakes of the axles in per cent. If no value is indicated for *Brake Wear* as the degree of wear,

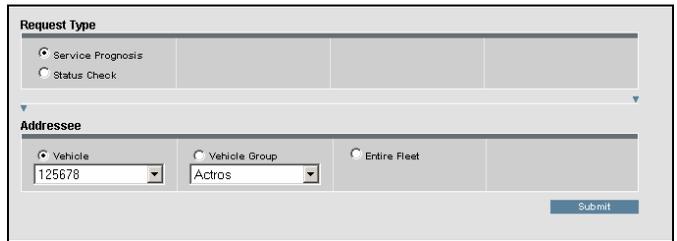
this means that no wear can be measured or that these brakes (axles) are not installed in the vehicle.

- The position *Operating Time* indicates the total operating time of the vehicle in hours.
- The value under *Total Mileage* indicates the current mileage of the vehicle.
- The value *Current Fuel Consumption* corresponds to the cumulative fuel consumption of the commercial vehicle during its complete lifetime (in the case of older vehicles starting with the installation/activation of the function).
- The *Oil Pressure* is indicated in *Bar* and assumes values of 0 to 10.
- The values of the positions *Power Steering Oil Level* and *Washing Water Reserve* can assume the values *OK* or *Not OK*.

5.4 Vehicle Query

The *Vehicle Query Form* allows you to start a query for a vehicle or vehicle group at any time by sending an appropriate message.

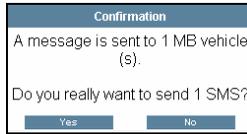
1. On the following page, select *Request Type*. Queries regarding the *Service Prognosis* and the *Status Check* are available. The results of the queries correspond to those described on the previous pages.
2. Subsequently, specify the *Addressee* to whom you want to send the data. You can select either an individual *Vehicle*, or a complete *Vehicle Group*, or the entire fleet.



Note: You can only carry out vehicle queries for vehicles belonging to the *MB* telematics group. Therefore, only vehicles belonging to this telematics group are displayed under *Addressee > Vehicle*. Accordingly, only vehicle groups containing vehicles of the *MB* telematics group are displayed under *Addressee > Vehicle Group*.

Submit

3. Click *Submit*.
4. You will receive a message asking you whether you really want to start a query.



5. Click *Yes* to submit the query.

5.5 Statutory Test Dates

vehicle	Main Service			Emissions Testing			Safety Inspection			Tachograph Testing			ADR		
	01	02	07	01	02	07	01	02	07	01	02	08	01	02	08
126678	<input type="text"/>														
38813	<input type="text"/>														
AD09 BLU	<input type="text"/>														
AY05ERU	<input type="text"/>														
AY06 GUJ	<input type="text"/>														

Enter the next statutory test dates for each vehicle of your fleet here. Click *Save* to import the data.

Only after entering the statutory test dates will these be evaluated in the Maintenance Prognosis.

Statutory test dates are:

- Main Service
- Emissions Test
- Safety Inspection
- Tachograph Inspection
- ADR

Chapter 6

Telediagnosics

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6.1 General Information on Telediagnosics

The Telediagnosics service is highly specialised in terms of its contents and is primarily intended for service staff and workshops. A service technician will be able to interpret the technical data available in MB-Service. This information can be very useful in the event of errors and problems.



Note: The Telediagnosics service is not available for all-makes vehicles.

6.2 Current Faults

The *Current Faults* tab provides information whether all control units, such as the Telligent maintenance system, the braking system, or the drive control of your vehicles work properly. If disturbances of the control units occur, you will be informed on the type and degree of the disturbance.

6.2.1 Current Faults, Overview Table

On this page, an overview of all vehicles of your fleet is provided.

Vehicle	Vehicle Group	Date Time	Current Faults Count	Control Unit	Mileage [miles]	Operating Time [h]	Quality Rating
23	RestriotedHK	11/14/2007 11:26	5	MR (168)	19,180	644	1
Sum and Average Values (Related to Corresponding Filtered Records)							
Sum			5		19,180	644	1

- In the *Vehicle* column, the vehicles are listed with the names you specified.
- The *Vehicle Group* column indicates the group to which the vehicle is assigned.
- The *Date Time* column indicates the date and time the query was made.

- If the Telligent maintenance system detects an error of a control unit of a vehicle at the readout time of the query, this error will be displayed as follows:
 - *Control Unit* contains the abbreviation of the control unit with the most severe error. A table with the abbreviations of all control units is provided under [Control Unit List, Detail View, Page 6–11](#).
 - *Current Faults Count* contains the number of current malfunctions.
 - *Quality Rating* specifies how severe the malfunction is.

Quality rating	Meaning
0	Minor error which should be removed later.
1	Error of medium severity which should be removed as soon as possible in a workshop.
2	Severe error, driving features may be restricted.

6.2.2 How to Use Filters in Current Faults

To view only selected data sets, use the filters. Apart from the standard filters *Vehicle*, *Mileage*, *Operating Time*, and *Time Period*, the following filters are available:

- *Control Units*: Allows you to search for malfunctions in specific control units.
- *Current Faults Count*: Allows you to search e.g. for vehicles with many malfunctions.
- *Quality Rating*: Allows you to search e.g. for severe malfunctions with the value 2. To do so, make the following entry:

Quality Rating	0	-	2
----------------	---	---	---

View

Click *View*.

The desired data sets will be displayed.

6.2.3 Current Faults, Detail View

Here, you will find detailed information regarding malfunctions in the vehicle.

Vehicle 56	Vehicle Group RestrictedHK	Date Time 11/14/2007 11:26	
Current Faults Count 5	Control Unit MR (168)	Mileage [miles] 19,180	Operating Time [h] 644
Quality Rating 1	Ignition On	Engine Off	

Control Unit	Entry	Quality Rating	Time Count	Path	Kind	Environment Data
TSF (32)	0	0	63/255 255/255	2D	15	-
MR (168)	0	1	-	07	70	255
MR (168)	2	-	-	08	21	255
ZDS (60)	0	0	14/11 12:06	E4	14	-
ZDS (60)	0	0	23/08 18:22	E3	9	-

Back

- If the Telligent maintenance system detects an error during the readout of the query, the control unit reporting the error is listed together with its specific abbreviation in the *Control Unit* column. A list with the abbreviations of all control units is provided under [Section Control Unit List, Detail View, Page 6 – 11](#).
- The *Quality Rating* column can assume three values:

Value	Meaning
0	Minor error which should be removed later.
1	Error of medium severity which should be removed as soon as possible in a workshop.

Value	Meaning
2	Severe error, driving features may be restricted.

- *Path* provides information on a specific line from a control unit to a peripheral device. In Actros, the lines are numbered, which allows a service technician to identify the interfered line.
- The position *Kind* provides information on the kind of error occurred, such as short circuit, line interference in the path described above, etc. A service technician is able to identify the error type with the help of the number entered here.
- *Time Count*: Indicates for each control unit how many hours have passed since the error message was sent, and/or at which time the error message was sent.

If a control unit reports an error, the hour counter is immediately activated and starts to count upwards. If the control unit does not report an error within the next 125 hours, the error message is deleted (latent error).

- *Environment Data* contains measured data where the error occurred. A service technician will be able to interpret the data.

6.3 Stored Faults

The Stored Faults list provides an insight into all errors reported by your vehicle. The data in the Stored Faults list can only be deleted in a workshop.

You can have all queries stored in the memory of the Telligent maintenance system displayed for a vehicle group. In addition, it is possible to query all error queries started by an individual vehicle or all errors present in a vehicle at the readout time of a query.

6.3.1 Stored Faults, Overview Table

Provides an overview of all vehicles of your fleet.

The screenshot shows a web-based interface for vehicle management. At the top, there are filters for 'Vehicle or Vehicle Group' (set to 'All'), 'Time Period' (set to 'Recent Messages'), 'Vehicle Search', 'Mileage' (range 15000-35000), and 'Operating Time'. Below these is a list of control units: ABA (179), ABS (14), AG (38), AGN (10), and AGN (138). A 'Reset' and 'View' button are present. The main area contains a table with the following data:

Vehicle	Vehicle Group	Date Time	Mileage (miles)	Operating Time (h)
10		02/04/2008 11:47	25,463	0
13		01/30/2008 17:14	20,907	27
56	RestrictedHK	10/17/2007 08:43	18,599	625
Average Values (Related to Corresponding Filtered Records)			21,690	217

- In the *Vehicle* column, the vehicles are listed with the names specified by you.
- The *Vehicle Group* column indicates the group to which the vehicle is assigned.
- The *Date Time* column indicates the date and time the query was made.
- *Mileage* contains the mileage of the vehicle at the readout time of the query.
- The *Operating Time* column contains the operating time of the engine in hours at the readout time of the query.

6.3.2 How to Filter the Stored Faults List

- To view only selected data sets (e.g. those of a specific vehicle), filter the data with the help of the drop-down lists and fields. The filters *Vehicle*, *Mileage*, *Operating Time*, *Control Unit*, and *Time Period* are available.

View

- Click *View*.

The desired data sets will be displayed.

6.3.3 Stored Faults, Detail View

The detail view of the Stored Faults list provides an overview of all errors (current or already removed) which are stored in the list at the readout time of the query. When removing the error in the workshop, the error memory will be reset.

Vehicle	Vehicle Group	Date Time					
48	All Vehicles	22.03.2004 10:28					
Mileage [k.m]	Operating Time [h]						
109.704	1575						
Control Unit	Error Count	Current Error	Quality Rating	Time Count	Path	Kind	Environment Data
TSF	255	0	-	255/255 255-255	0	0	n.a.
TSF	255	0	-	255/255 255-255	88	8	n.a.
TSF	255	0	-	255/255 255-255	0	35	n.a.
MSF	255	0	-	255/255 255-255	0	0	n.a.
ZHE	35	1	-	02/12 100-06	56	21	19 31
TSB/KSA/ZVA	211	1	0	70/03 07-12	55	20	n.a.
TSB/KSA/ZVA	244	1	0	66/03 10-26	60	0	n.a.
INS	131	1	0	53/03 05-38	19	42	n.a.
HZR	0	0	0	86/03 09-28	19	5	n.a.
HZR	0	1	0	85/03 05-50	19	3	n.a.
TSF	140	1	0	90/10 07-25	60	0	n.a.
ZDS	0	0	0	88/03 10-20	228	20	n.a.
ZDS	24	1	0	76/03 15-19	226	8	n.a.
HM/NR	37	1	0	76/03 10-15	3	74	n.a.
HM/NR	133	1	1	60/03 06-08	2	3	n.a.
HM/NR	133	1	1	255/255 255-255	4	61	n.a.
MSF	0	0	1	255/255 255-255	35	20	n.a.
WS	139	1	1	255/255 255-255	193	96	n.a.
WS	139	1	1	255/255 255-255	202	96	n.a.
WS	139	1	1	255/255 255-255	198	96	n.a.
ZHE	35	1	1	03/06 08-04	53	21	02 31
ZHE	35	1	2	03/00 08-04	54	21	02 31

- The *Control Unit* column lists each control unit which has reported at least one error. Specific abbreviations are

used. You can find a list of the abbreviations used for the control units under [Section Control Unit List, Page 6–11](#).



Note: If a control unit has already reported several errors, these are numbered in the *Error Count* column. Up to 15 errors can be stored, depending on the control unit.

- In the *Error Count* column, the values 0 and 1 may occur. If 1 is displayed, the error occurred at the readout time of the query. If 0 is displayed, the error no longer existed at the readout time of the query.
- Three values may occur in the *Quality Rating* column, which are explained in the following table:

Value	Meaning
0	Minor error which should be removed later.
1	Error of medium severity which should be removed as soon as possible in a workshop.
2	Severe error, driving features may be restricted.

- *Path* provides information on a specific line from a control unit to a peripheral device. In Actros, the lines are numbered, which allows a service technician to identify the interfered line.
- The position *Time Count* is a counter by hours. If a control unit reports an error, the hour counter is immediately activated and starts to count upwards. If the control unit does not report an error within the next 125 hours, the error message is deleted (latent error).

- The position *Kind* provides information on the kind of error occurred, such as short circuit, line interference in the path described above, etc. A service technician is able to identify the error type with the help of the number entered here.
- *Environment Data* contains measured data where the error occurred. A service technician will be able to interpret the data.

6.4 Control Unit List

The *Control Unit List* provides the complete information on the control units installed in your vehicle. You can, thus, see e.g. the version or part number and the year of manufacture at one glance.

6.4.1 Control Unit List, Overview Table

The overview table for the *Control Unit List* gives you an overview of all vehicles of your fleet.

Vehicle	Vehicle Group	Date Time	Mileage [miles]	Operating Time [h]	TP Version	Protocol Version	Control Unit Hardware	Control Unit Software
3		07/10/2008 11:01	23,798	27	13	Kontakt		11/2007
5		02/08/2008 16:28	16,306	0	13	Kontakt		
Average Values (Related to Corresponding Filtered Records)								
#			19,792	224				

- In the *Vehicle* column, the vehicles are listed with the names specified by you.
- The *Vehicle Group* column indicates the group to which the vehicle is assigned.
- The *Date Time* column indicates the date and time the query was made.
- *Mileage* contains the mileage of the vehicle at the readout time of the query.
- The *Operating Time* column contains the operating time of the engine in hours at the readout time of the query.
- *TP Version*: software version of the installed telematics platform.
- *Protocol Version*: version of the FleetBoard transmission protocol.
- *Control Unit Hardware*: hardware version of the control unit interface KOM.
- *Control Unit Software*: software version of the control unit interface KOM.

6.4.2 How to Use Filters in the Control Unit List

1. To view only selected data sets, use the filters. The filters *Vehicle*, *Mileage*, *Operating Time*, *Time Period*, *Control Unit*, and *Protocol Version* are available.
2. Click *View*.



The desired data sets will be displayed.

6.4.3 Control Unit List, Detail View

The detail view of the *Control Unit List* gives you an overview of all control units installed in the vehicle.

Vehicle YN06 KBJ	Vehicle Group RSM Area 3	Date Time 27.09.2006 15:26	
Mileage [km] 14.563	Operating Time [h] 322	TP Version 12344	Protocol Version Kontakt

Control Unit	Part Number	Production Date	Test Program Version	Hardware Version	Software Version	
FR	0014464102	7/2006		41	2	32
TSB/KSA/ZVA	0004463219	2006-2-16	8389376	46/2004	7/2005	
INS	0024467521	2006-2-13	66046	21/2004	46/2005	
KDM	0004462558	2006-2-20	131328	0/2006	46/2005	
HZR	0004464728	2006-2-2	131311	5/2003	36/2004	
TSF	0004462632	2006-2-16	8389376	46/2004	7/2005	
ZDS	0004462558	2006-2-20	131072	0/2006	46/2005	
FM	0004462161	2006-2-14	66304	7/2006	44/2003	
EPS/GE/ES	0014465909	7/2006		14	4	16
HM/NR	0014461817	2006-2-9	66560	5/2006	11/2004	
MSF	9434460123	2006-2-15	65792	14/2002	28/2004	
WS	0004462558	2006-2-20	131072	0/2006	46/2005	
ZHE	0014461129	2006-2-13	262912	26/2004	22/2005	
TCO	0014462033		1	-	-	-
BS	0004464136	7/2006		6	-	-
MR	0124473140	6/2006		25	245	1
PSM	0004461346	6/2006		7	17	32
GM	0004462558	2006-2-20	196608	0/2006	46/2005	
TP	0004460460	2006-2-26	65792	16/2006	51/2005	
TEL	-			-	-	-

- The *Control Unit* column lists all control units installed in the vehicle together with their specific abbreviations. The abbreviations for the control units have the following meanings:

Abbreviation	Meaning
ABS	Anti-lock brake system
AG	Automatic gear selection
ANE	Trailer recognition
ART	Intelligent autonomous cruise control
ASR	Acceleration skid control
AUF	Semitrailer recognition
BS	Braking system
EAB	Electronic trailer brake

EDW	Anti-theft alarm system
FFB	Radio remote control
FLA	Flame-start system
FR	Drive control
GS	Gear shift control
HPS	Hydraulic-pneumatic gearshift
HZR	Heating control, air conditioning
INS	Instrumentation
KOM	Communication interface
KS	Clutch control
KSA	Convenience locking system
MR	Engine control
NR	Level control
PSM	Programmable special module
RS	Retarder control
SPA	Track assistant
TCO	Tachograph
WS	Maintenance system
WSK	Torque converter clutch
ZV	Central locking

- The *Part Number* corresponds to the MB part number of the control unit.

- *Production Date* indicates the date the control unit was manufactured. This defines the release status unambiguously.
- The position *Test Program Version* provides information on the appropriate test program for a test and corresponds to the service release status.
- *Hardware/Software Version* provides information on the release status.

The service technicians in the workshops will be able to interpret the data.

6.5 Technical Data

6.5.1 General Information on Technical Data

You can query ready-made, complete data packages. You are offered the choice between *General* technical data and technical data on *Axles and Transmission*, on the *Braking System*, and on the *Engine and Cooling Circuit*. You can find a more detailed explanation of these pre-defined data packages in [Section Predefined Query – Detail View, Page 6–20](#).

In addition, you can define your own data packages and start an individual query. For information on how to do this, please refer to [Section Individual Query, Page 6–17](#).

The technical data are divided into the following parameter groups:

Parameter groups	Meaning
Alg	General value
LL	Data regarding the life cycle
MW	Measurement values
PA	Parameter
PR	Prognosis data

FleetBoard uses abbreviations for the technical data. These have the following meaning:

Abbreviation	Meaning
Akt	Current
AWa	General maintenance
B1HA	Brake 1st rear axle
B1VA	Brake 1st front axle
B2HA	Brake 2nd rear axle
B2VA	Brake 2nd front axle
Fzg	Vehicle
Get	Transmission
KraV	Fuel consumption
Kue	Cooling system
Kup	Clutch
Luf	Air filter
Mot	Engine
Par	Parameter
Ret	Retarder
RTC	Real time clock
Ütemp	Excess temperature
VA	Front axle
Ver	PTO (power take-off gear)

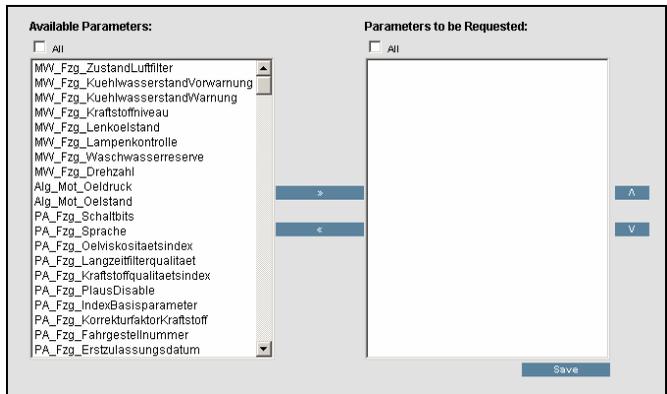
6.5.2 Individual Query

Under *Technical Data > Individual Query*, you can group and define the technical data your vehicles are to transmit. You can then start an individual query to request the data you have defined.

6.5.2.1 How to Define an Individual Query

Under *Technical Data > Individual Query > Define*, you can define the technical data you want your vehicle to transmit. All FleetBoard users with their own login can configure their own data packages.

From the left list (*Available Parameters*), you can select the technical data you want to query. The right list (*Parameters to be Requested*) indicates the technical data which has already been selected.



Supposing you want to check the engine oil pressure and oil level of one of your vehicles.

1. From the left list under *Parameters to be Requested*, select the entry *Alg_Mot_Oeldruck*.
2. Click the double arrow pointing to the right  to place the selected entry in the list to the right.

You will find further information under:

- [Telediagnosics, Vehicle Query, Page 6–23](#)

6.5.2.2 Viewing the Results of an Individual Query

Under *Individual Query > Show*, the result of the current individual queries will be displayed. The overview table and the detail views are similar to those of pre-defined queries.

You will find further information under:

- [Predefined Query – Overview Tables, Page 6–19](#)
- [Predefined Query – Detail View, Page 6–20](#)

6.5.3 Predefined Query

FleetBoard offers you predefined data packages which you can request from any vehicle. You can also make every vehicle send these predefined data packages automatically in regular intervals. Please refer to the documentation on the Customer Administration.

6.5.3.1 Predefined Query – Overview Tables

These tables are set up in the same way for each data package.

Vehicle	Vehicle Group	Date Time	Mileage (miles)	Operating Time (h)
18	RestrictedHK	11/27/2007 10:02	10,901	427
20	RestrictedHK	10/17/2007 07:30	18,699	625
Average Values (Related to Corresponding Filtered Records)			14,800	526

- In the *Vehicle* column, the vehicle names of the selected group are listed.
- The *Vehicle Group* column indicates the vehicle group to which each vehicle belongs.
- The *Date Time* column contains the date and the time the query was made.
- The *Mileage* column contains the mileage of the vehicle at the readout time of the query.
- The *Operating Time* column contains the operating time of the engine in hours at the readout time of the query.

How to Filter the Technical Data

1. To view only selected data sets (e.g. those of a specific vehicle), filter the data with the help of the drop-down lists and input fields. The standard filters *Vehicle*, *Mileage*, *Operating Time*, and *Date Time* are available. Via *Vehicle Search*, you can directly search for data of a specific vehicle. To do this, enter the vehicle name.

A rectangular button with a dark blue background and the word "View" in white text.

2. Click *View*.

6.5.3.2 Predefined Query – Detail View

Here you can find the results of the queries for a selected vehicle.



Note: If “-” is displayed instead of a result for a query, this value is not available. Unless defined otherwise, queries checking the status of a vehicle system (e.g. washing water reserve or bulb check) yield the result *0* if no error has been detected and *1* if an error has been detected.

General Vehicle Data

Data which provides an overview of the general state of your vehicle, e.g. the temperature data.

The meaning of the abbreviations in the parameters is given in the tables in [Section General Information on Technical Data, Page 6–15](#).

You can determine for the complete fleet which data is displayed here. For this purpose, please contact the FleetBoard Support.

Engine, Cooling

Selected data sets are offered which provide information on the condition of the engine and the cooling circuit of your vehicles.

The meaning of the abbreviations in the parameters is given in the tables in [Section General Information on Technical Data, Page 6–15](#).

You can determine for the complete fleet which data is displayed here. For this purpose, please contact the FleetBoard Support.

SCR NOX

Selected data sets are offered which provide information on the emissions cleaning conducted for your vehicles.

The meaning of the abbreviations in the parameters is given in the tables in [Section General Information on Technical Data, Page 6–15](#).

You can determine for the complete fleet which data is displayed here. For this purpose, please contact the FleetBoard Support.

Gear Box, Retarder, Clutch

Selected data sets are offered which provide information on the state of the gear box, retarder, and clutch.

The meaning of the abbreviations in the parameters is given in the tables in [Section General Information on Technical Data, Page 6–15](#).

You can determine for the complete fleet which data is displayed here. For this purpose, please contact the FleetBoard Support.

Drive Axles HL

Data which refers to the function of the driven rear axle.

The meaning of the abbreviations in the parameters is given in the tables in [Section General Information on Technical Data, Page 6-15](#).

You can determine for the complete fleet which data is displayed here. For this purpose, please contact the FleetBoard Support.

PTO, Axles AL, HD

Data referring to the functions of the driven front axle (AL), the driven torque axle rear axle (HD), and the PTO.

The meaning of the abbreviations in the parameters is given in the tables in [Section General Information on Technical Data, Page 6-15](#).

You can determine for the complete fleet which data is displayed here. For this purpose, please contact the FleetBoard Support.

Brake

Selected data sets are offered which provide information on the condition of the braking systems of your vehicles.

The meaning of the abbreviations in the parameters is given in the tables in [Section General Information on Technical Data, Page 6-15](#).

You can determine for the complete fleet which data is displayed here. For this purpose, please contact the FleetBoard Support.

Control Unit List

Selected data sets are offered which provide information on the control units of your vehicles.

The meaning of the abbreviations in the parameters is given in the tables in [Section General Information on Technical Data, Page 6–15](#).

You can determine for the complete fleet which data is displayed here. For this purpose, please contact the FleetBoard Support.

6.6 Telediagnosics, Vehicle Query

To start a vehicle query, proceed as follows:

1. Under *Inquiry Type*, select which type of vehicle query you wish to start.

Inquiry Type			
Telediagnosics	Technical Data		
<input type="radio"/> Current Faults	<input type="radio"/> Individual Inquiry	<input type="radio"/> Techn. data (Dyn. DP 3)	<input type="radio"/> Techn. data (Dyn. DP 7)
<input type="radio"/> Error Memory	<input type="radio"/> Techn. data (Dyn. DP 1)	<input type="radio"/> Techn. data (Dyn. DP 4)	<input type="radio"/> Techn. data (Dyn. DP 8)
<input type="radio"/> Control Units	<input type="radio"/> Techn. data (Dyn. DP 2)	<input type="radio"/> Techn. data (Dyn. DP 6)	<input type="radio"/> Techn. data (Dyn. DP 9)
▼			
Addressee			
<input checked="" type="radio"/> Vehicle	<input type="radio"/> Entire Fleet		
<input type="text" value="01"/>			<input type="button" value="Submit"/>

2. Select a vehicle, a vehicle group, or the entire fleet as addressee.



Note: You can only carry out vehicle queries for telediagnosics purposes for vehicles belonging to the *MB* telematics group. Therefore, only vehicles belonging to this telematics group are displayed under *Addressee > Vehicle*. Accordingly, only vehicle groups containing vehicles of the *MB* telematics group are displayed under *Addressee > Vehicle Group*.

Submit

3. Click the *Submit* button.

You will receive a message asking you whether you really want to start a query.



4. Click *Yes* to submit the query.

The requested data will now be queried from the vehicle.

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If you require help or further information, please contact the FleetBoard hotline.
You can find the current contact on the FleetBoard user website under Support.

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