



*Supplier Edition*

#### Change history

Version	Changed on	Comment	Changed by
1.0	03/06/2018	Initial creation	CoC
2.0	04/06/2018	JIS Toolbox extension	CoC
2.1	05/09/2018	Update to registration process	CoC
2.2	08/10/2018	Review business	CoC/Business
3.0	11/27/2018	AmSupply R13 -cf. release notes	CoC
4.0	04/16/2019	AmSupply R14 -cf. release notes	CoC
4.2	07/05/2019	Adjustments Daimler Supplier Portal	CoC

## Table of Contents

Introduction to the JIS Toolbox .....	1
JIS Toolbox access (Daimler Supplier Portal).....	2
Step 1: Registration on the Daimler Supplier Portal .....	2
Step 2: Registration for the JIS Toolbox.....	2
JIS Toolbox .....	6
Navigating in the JIS Toolbox apps.....	6
Mobile version .....	8
Introduction to JIS Toolbox emergency system.....	9
Search by ProdNo.....	12
Search by shift number .....	14
Search by time and criteria.....	16
Impulse Overview .....	18
Introduction to JIS Monitoring .....	19
Buffer monitoring.....	21
Lead time monitoring .....	28
Frequently asked questions .....	29
Contact.....	31

## Introduction to the JIS Toolbox

The JIS Toolbox is a web application that can be accessed internally from within the Daimler intranet as well as via the Daimler Supplier Portal. The JIS Toolbox currently includes two modules: the JIS emergency system and the JIS monitoring.

### Target group

The JIS Toolbox is used by Daimler JIS MRP controllers and by MRP controllers at sequencing service providers (EDLs) as well as suppliers delivering in sequence (JIS suppliers).

### Use case

Two main use cases are currently supported by the JIS Toolbox.

**JIS emergency system** allows you to download JIS broadcast and preview information. In the event of a fault in communication during JIS broadcast transmission, the business partner can continue its operations and production can be maintained.

**JIS monitoring** allows you to view the current JIS commodity supply pipeline. Information is provided on the current vehicle at the installation location as well as the vehicle at the start of assembly. Depending on the monitoring function, the system can also provide details on the current buffer stocks.

## JIS Toolbox access (Daimler Supplier Portal)

External business partners can access JIS Toolbox via the Daimler Supplier Portal. Therefore, every external user must register separately with his supplier number. This process is described in detail as follows.

If a user already has access to the supplier portal, it is sufficient to register for the "JIS Toolbox" application. In this case, you can start with [step 2](#) of these instructions.

## Step 1: Registration on the Daimler Supplier Portal

This step is necessary for users who use the portal for the first time.

Open the following address in your browser: <https://supplier.daimler.com>

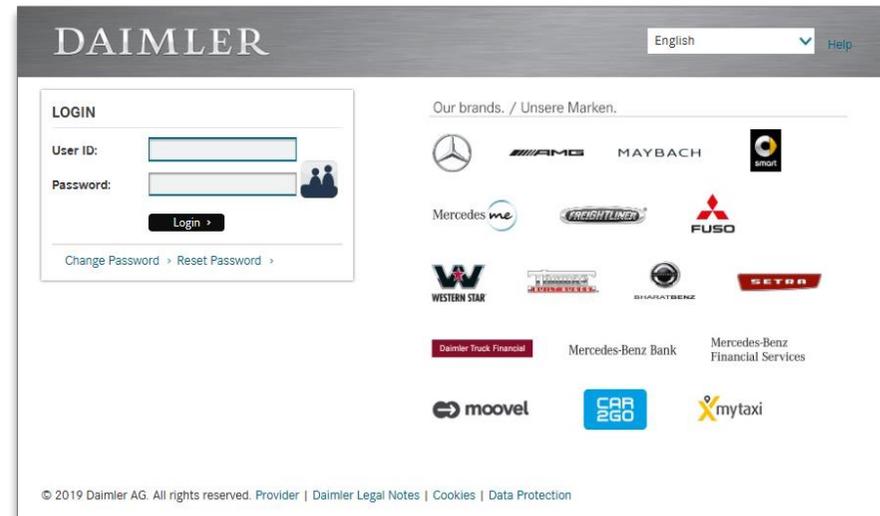
Please follow the registration process and use the help documents on the site.

## Step 2: Registration for the JIS Toolbox

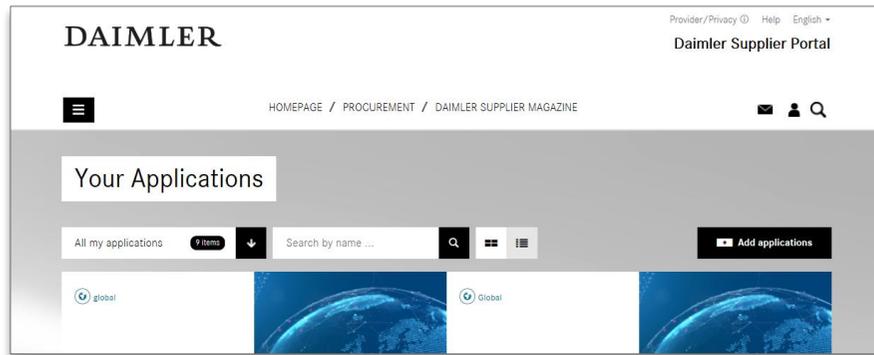
To register for the JIS Toolbox, you will need a user account on the Daimler Supplier Portal. Please refer to the [previous chapter](#).

Open the following address in your browser: <http://supplier.daimler.com>

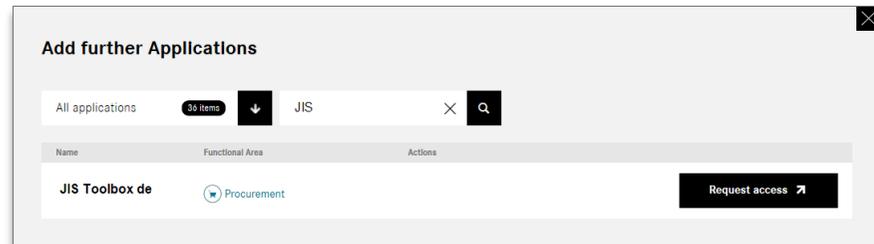
Log on by providing the user name and password you chose during the registration process.



Click on “Add Application” on top of your application list.

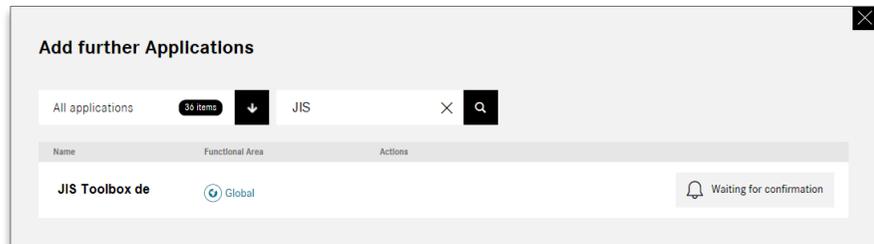


Search for the “JIS Toolbox” and select “Request access”.



You will now see, that your request is waiting for approval from your portal manager.

To identify your portal manager, please check your profile.

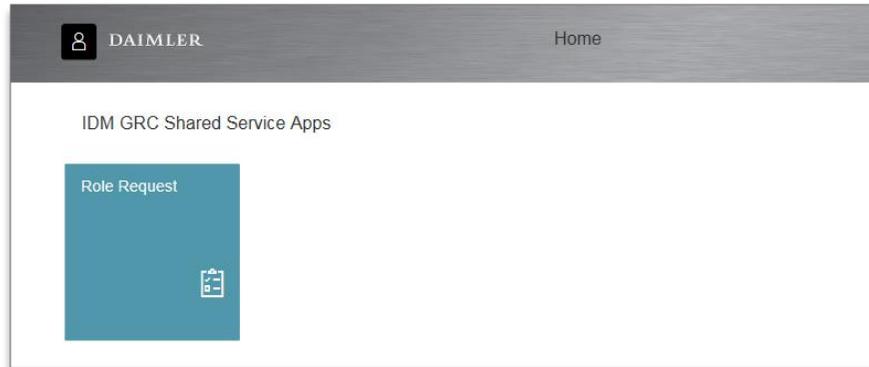


Following the confirmation by the portal administrator, you will see the JIS Toolbox in your application list as a tile and you can start it by clicking on it.

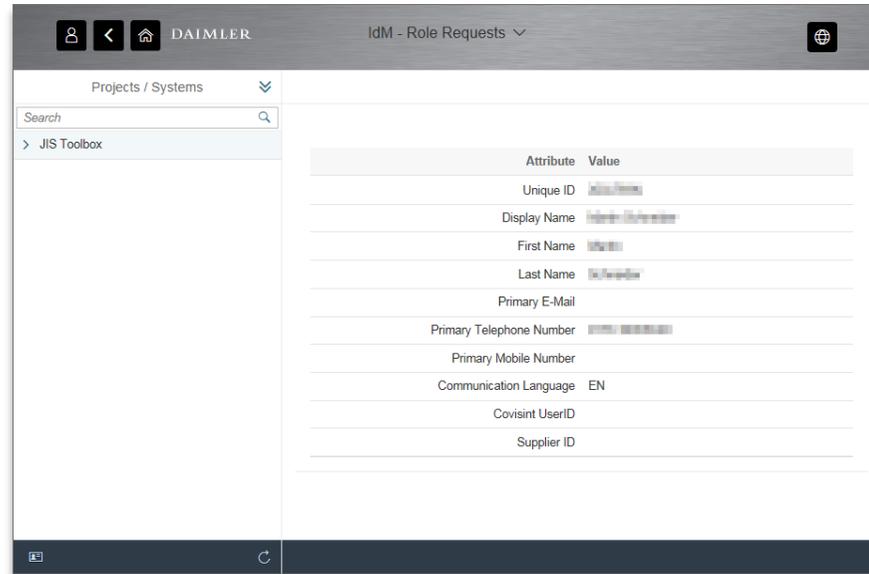


Please note that it can take up to 12 hours after the confirmation by the security administrator for your access to be fully enabled.

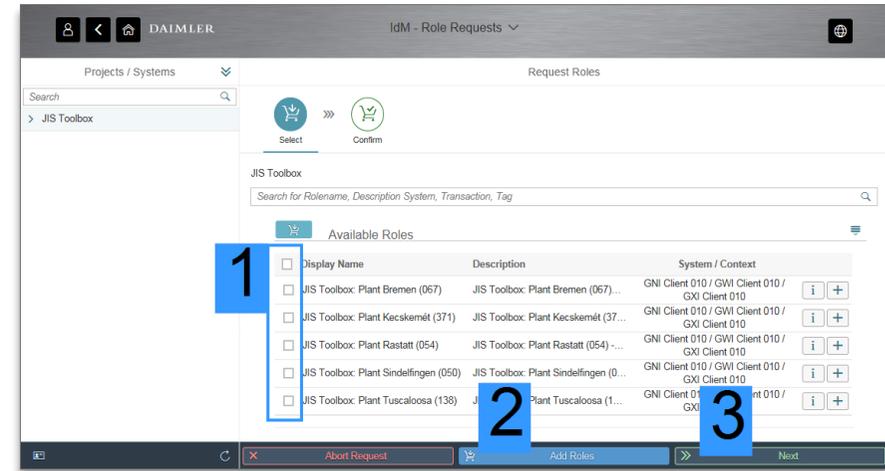
As soon as your access has been enabled, you can open the JIS Toolbox and start the role request process in the displayed role request application. The JIS Toolbox is available for different plants. Depending on which plant(s) you supply, you will need to apply for the respective role(s) accordingly.



Enter the role request application and select "JIS Toolbox" on the left.



A list with all available plant roles is displayed (see below). Select the roles relevant to you (1). You can apply for several roles at once. It is also possible to apply for additional roles at a later point. Add the roles chosen to your selection (2) and continue with the next step (3).

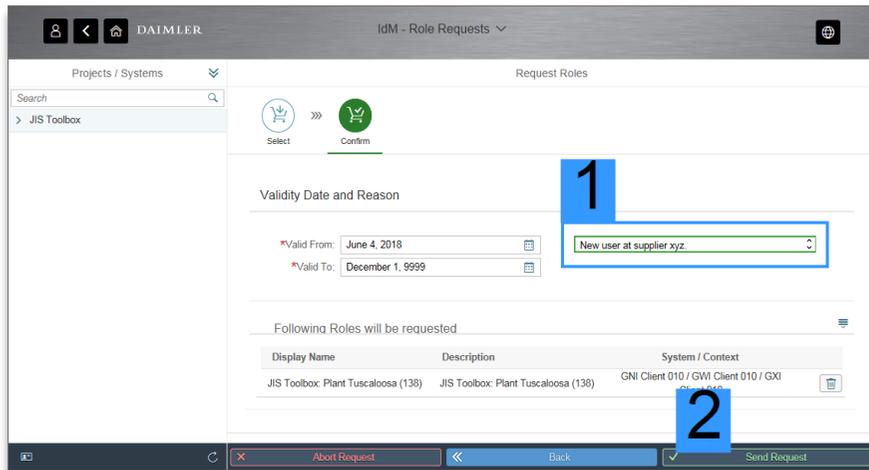


In the next step, enter a reason why you require access (1). Please always enter the supplier you are working for. The validity period is prefilled and does not need to be changed.

You can now submit the request (2).

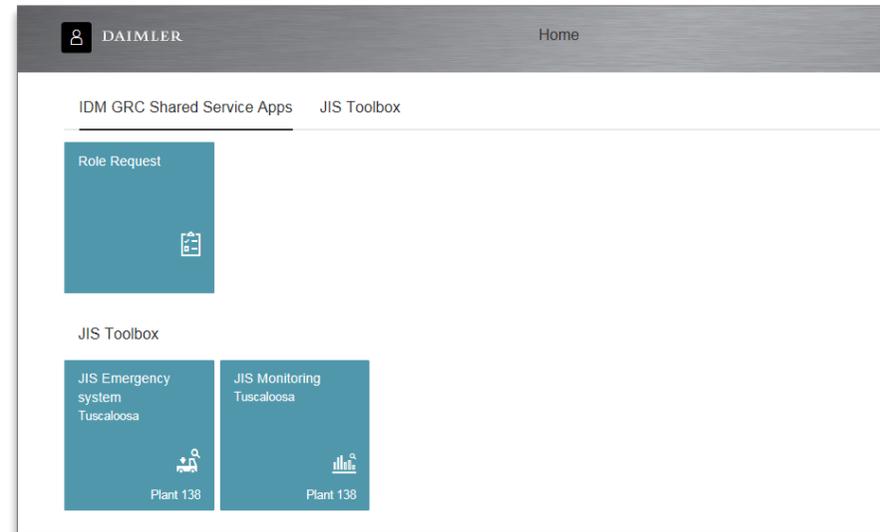
Please note that role requests are processed by a Daimler employee. You will not receive a notification when the request was approved.

Should you have any questions regarding a pending role request, please get in touch with your JIS contact.



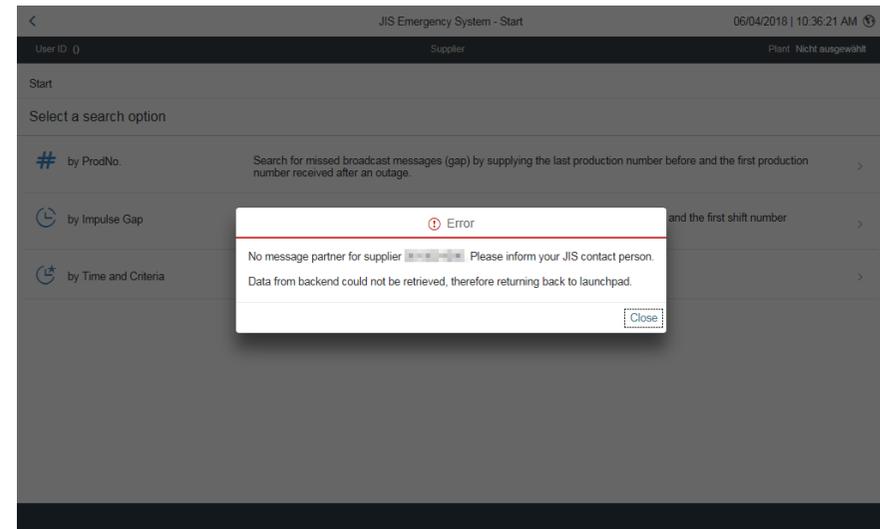
After your access request was confirmed, you will see the JIS Toolbox entry with its two modules when you start the application in the Daimler Supplier Portal (see below).

The role request application will remain visible so it is possible to subsequently apply for additional plants at a later point of time.



Please note that JIS Toolbox must also be set up by your JIS contact at Daimler for your supplier number.

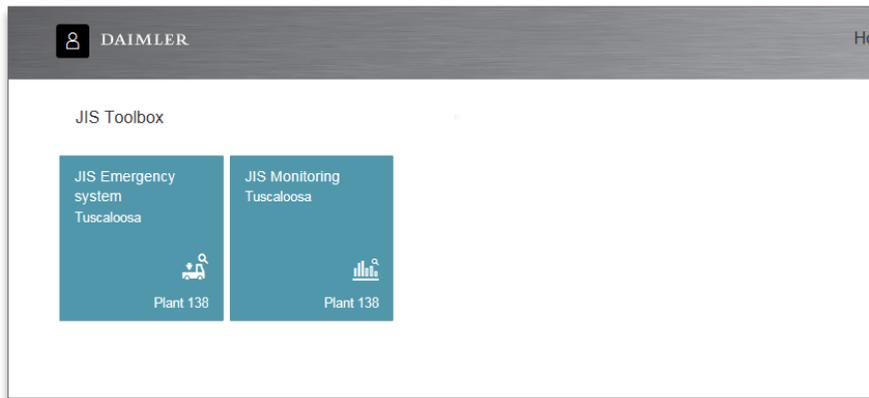
If you encounter the following error message, please get in touch with your JIS contact at the respective plant.



## JIS Toolbox

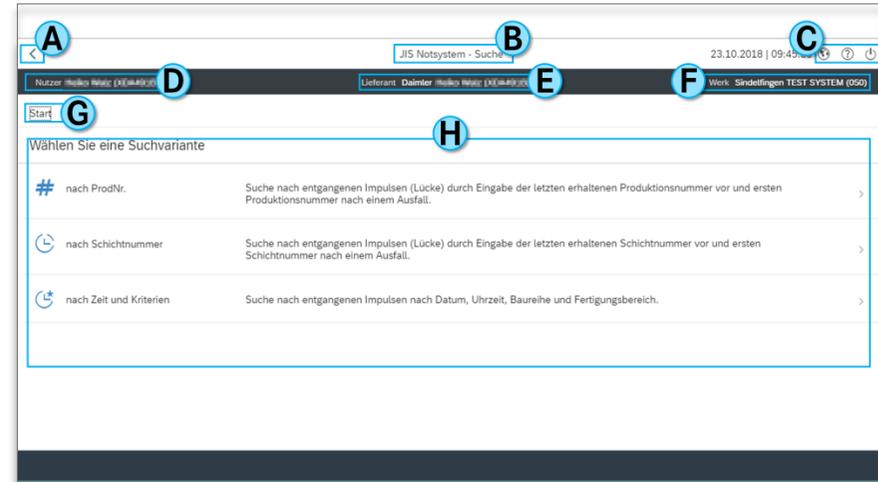
The JIS Toolbox has an emergency system and a monitoring module. Each module is implemented as an independent app. Both apps (tiles) are displayed after you start the JIS Toolbox application.

Note that JIS Toolbox apps are plant-specific, i.e. if you are authorized for several plants, you will see two tiles for each plant.



## Navigating in the JIS Toolbox apps

The design of the two apps is standardized. As such, you will find the following navigation elements in both apps.



### a) Go to previous page

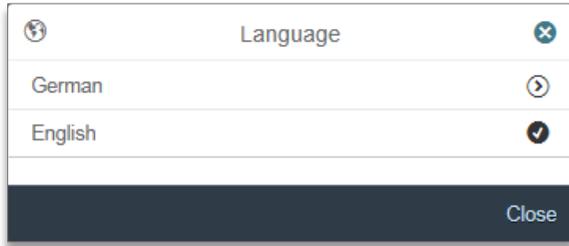
The arrow in the upper left corner takes you back to the previous page. Clicking on this icon will eventually also navigate you back to the launchpad.

### b) Title of current page

The user can use the page title to determine at any time where he currently is in the system.

### c) Switch language & Help & Logout

JIS Toolbox is currently available in German and English. A default language is selected automatically, depending on the language of the browser. Click on the icon in the upper right corner to switch the language at any time.



The help window contains the latest version of the JIS Toolbox handbook as well as contact information.



External users accessing the JIS Toolbox from the supplier portal, additionally find a logout button. Upon logging out, the user is redirected back to the supplier portal. Please note that using the log off function in the supplier portal does not terminate your session in the JIS Toolbox.

#### d) Logged on user

This is where your full name and user name is displayed. If you experience any problems, please always forward this information to support.

#### e) Selected supplier

The currently selected supplier is displayed with its supplier number and name. For all requests, only data that is linked to this supplier number is taken into consideration.

#### f) Selected plant

This element displays for which plant you have started a JIS Toolbox application. As JIS Toolbox is multi-plant capable, every plant has its own tile on the launchpad for each application. In case you have access to several plants, it is important that you ensure that the correct plant has been selected.

#### g) Navigation path

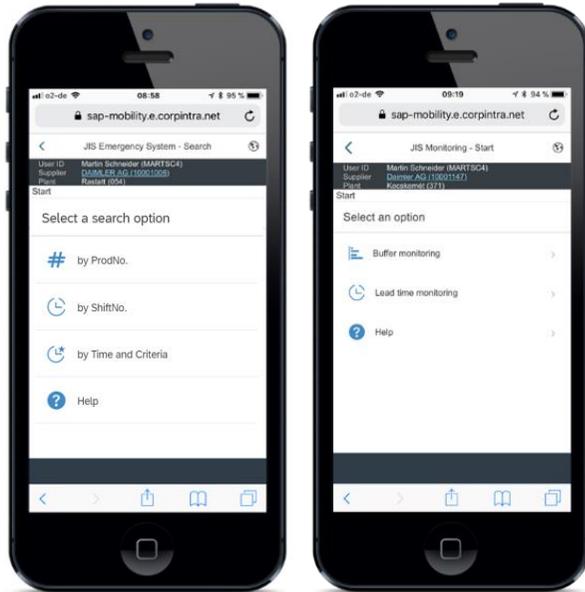
The navigation path shows where you are currently located in the system and what steps you took to get there. Use the navigation path to go to any previous step.

#### h) Content window

This field contains the actual content of the current page.

## Mobile version

JIS Toolbox can also be used on a smartphone. Correct operation can only be ensured on iPhones in combination with the Safari browser.



## Introduction to JIS Toolbox emergency system

The JIS emergency system module allows JIS suppliers and service providers to access the JIS broadcast data. Only those vehicles that already had start of assembly (IB-IST or VIB-IST) are considered. In case of problems with (standard) EDI transmission, the emergency system function allows you to display and download vehicle sequence and BOM data over the Internet and the Daimler Supplier Portal.

### Target group

The emergency system function was developed to avoid production downtimes caused by EDI transmission problems.

**All JIS suppliers and service providers are therefore asked to test the system at regular intervals to ensure seamless operation in the event of a problem.**

Should you receive JIS preview messages, you will most likely need access to the emergency operation function of JIS Toolbox.

### Use case

The emergency system function of the JIS Toolbox provides the vehicle sequence and JIS-relevant BOMs in the event of a transmission problem using the default transmission path (EDI). The following are example problems/malfunctions for which the emergency system can be used.

#### T-system malfunction (EDIS)

If the EDIS system malfunctions, you will not receive any vehicle broadcasts or only delayed vehicle broadcasts. The emergency system function then allows you to display and download the missed vehicle broadcasts. These can be used until the data from default transmission service has been recovered.

#### Gap in pulse transmission

You suspect that there is a gap in the transmission of vehicle impulses. The emergency system function allows you to search for any missed vehicle impulses (checkpoints) and download them.

#### Missing or incorrect BOM information for a production number

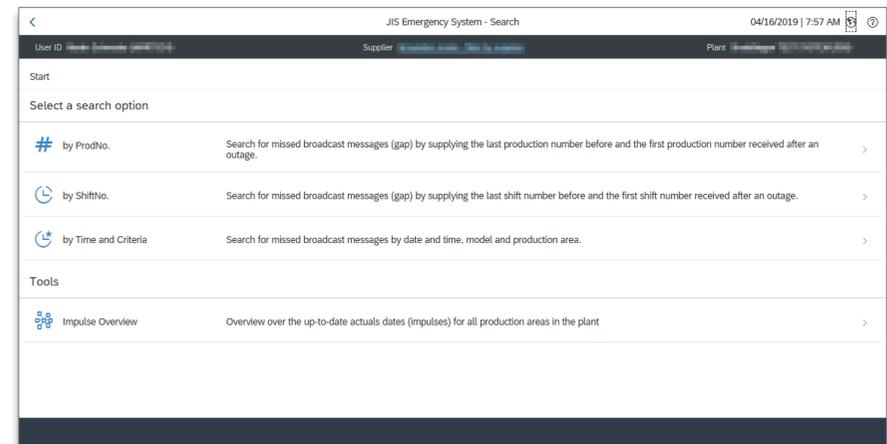
A missing or incorrect bill of material (BOM) is identified for a vehicle which

already had start of assembly (IB-IST/VIB-IST). For this vehicle the most recent BOM can be displayed and downloaded.

### Initial steps in JIS emergency system

To start JIS emergency system for a plant, click on the respective "JIS Emergency System" tile in the JIS Toolbox. The JIS Emergency system opens. Three search options are offered in the JIS Monitoring app:

- Search by ProdNo.
- Search by shift number
- Search by time and criteria



The search options, the way they work and their differences are described in detail as follows.

Additionally there is an impulse overview, which shows the most current actual dates for all production areas in the plant.

### Available download options

The JIS emergency system offers various download options for the broadcast data. All downloads are made available in ZIP format to safeguard the integrity of the data and prevent transmission errors from occurring.

The emergency system is based on the JIS preview. Broadcasts can only be provided for vehicles for which a JIS preview exists.

The VDA4916 files offered are based on version 03 of the Daimler VDA4916 standard. JIS toolbox, in comparison to the "JIS-N - JIS Notsystem" (JIS emergency system) predecessor application, therefore contains changes e.g. in record type 664 the unloading point is displayed.

However plant Tuscaloosa does not use VDA4916 file formats, they use the file format defined in the JIS supplier communication handbook.

The availability of the different downloads therefore depends on what format is used in the relevant plant.

Please check the table on the next page for an overview of the available download options as well as important information on the files.

	Tuscaloosa	Other plants
Broadcast	JIS Broadcast – as specified in the JIS Supplier Communication Handbook	<p>VDA 4916 – MBC-specific format 03 (type: release order pulse / JIS broadcast)</p> <p>A broadcast file is created for each vehicle. In plants which use different broadcast types, the broadcast is generated based on the selection.</p> <p>Important information:</p> <ul style="list-style-type: none"> <li>- transmission counter is not aligned with the regular JIS broadcast transmission</li> <li>- if necessary the broadcasts can be configured to include transmit codes (ALLECODE or RELECODE only) in record type 663</li> </ul>
Broadcast with BoM	JIS Preview – as specified in the JIS Supplier Communication Handbook	<p>VDA 4916 – MBC-specific format 03 (type: release order pulse / JIS broadcast)</p> <p>A broadcast file with BoM (record type 664) is created for each vehicle and virtual filename (message group). In plants which use different broadcast types, the broadcast is generated based on the selection.</p> <p>Important information:</p> <ul style="list-style-type: none"> <li>- the files are JIS broadcasts with a BoM (record type 664), not JIS previews</li> <li>- the transmission counter is not aligned or synched with the nightly JIS preview or the regular JIS broadcast transmission</li> <li>- the customer and supplier number in record type 661 are based on the JIS preview for the respective virtual filename (message group) and are not necessarily the same as in the JIS broadcast</li> <li>- record type 663 is based on the JIS broadcast – this means only ALLECODE and RELECODE records as configured for the JIS broadcast</li> <li>- in record type 664 the fields “ZGS” and “Module number” are filled</li> </ul>
Excel	<p>Excel file</p> <p>Excel table that contains all the information displayed on screen.</p> <p>Important information:</p> <ul style="list-style-type: none"> <li>- the error message which might be displayed, when opening the file, can be ignored</li> </ul>	
Excel with BoM	<p>Excel file</p> <p>Excel table that contains all the information displayed on screen and the respective BOM for each production number.</p> <p>Important information:</p> <ul style="list-style-type: none"> <li>- the error message which might be displayed, when opening the file, can be ignored</li> </ul>	

## Search by ProdNo.

This search type is used to search for production numbers. If two production numbers are entered, the gap between the two production numbers is selected. The entered production numbers themselves do not appear in the results list. If the "to" field is left blank, the gap up to the most recent vehicle is selected. This option should be selected while a malfunction is still ongoing and broadcasts are not received via EDI. If the plant uses different broadcast types (e.g. VIB and IB), you can choose which broadcast type is relevant.

After the search type is selected, you can enter the production numbers as search criteria in the form. If a plant uses several broadcast types, these are displayed as an additional selection option. Choose "Search" to go to the next step.

The screenshot shows the search interface with the following details:

- Page title: JIS Emergency System - Search
- Date/Time: 06/06/2018 | 8:36:11 AM
- Search type: Start / Search
- Impulse type: IB (dropdown menu)
- Prod. No.: 9686517 to 9686520
- Search button: Search

All relevant commodities are displayed along with the respective virtual file name (message groups). Please note that several commodities might be available for selection, depending on the EDI setup of the JIS supplier/sequencing service provider. All commodities are selected by default. Filtering and sorting can be activated by clicking on column header. If information is only needed for a specific message group or vehicles that pertain to a specific JIS commodity, you can limit the selection accordingly here.

Choose "Next" to go to the next step.

The screenshot shows the filter interface with the following details:

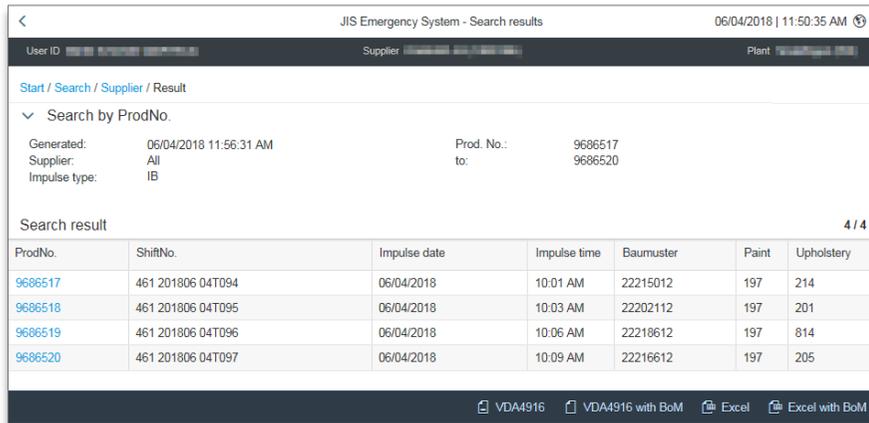
- Page title: JIS Emergency System - Filter by Covisint supplier
- Date/Time: 10/24/2018 | 12:16:52 PM
- Search type: Start / Search / Supplier
- Table columns: Supplier, Commodity (message group), Virtual filename
- Dropdown menu options: Sort Ascending, Sort Descending, Filter
- Next button: Next

The result list shows all vehicles that fulfill the parameters specified. The search parameters specified are listed above the result list for information purposes.

Each column can be filtered and sorted by clicking on the heading.

Various download options are provided at the bottom of the screen. All downloads are made available in ZIP format to safeguard the integrity of the data and prevent transmission errors from occurring.

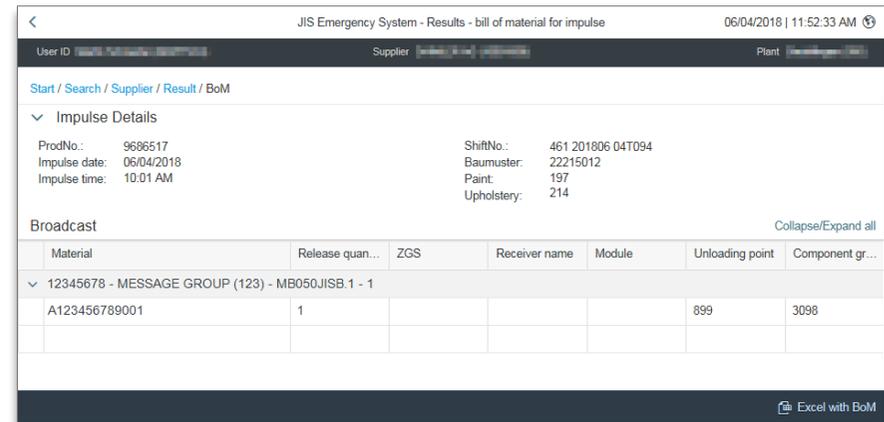
For details on the download options please see above.



Click on one of the production numbers to display this vehicle in detail. The detail view shows information at BOM level. Only the message groups previously selected are taken into account.

The BOMs are arranged by message group and additional details such as the call quantity and receiving area are displayed.

At the bottom right, there is a download function that can be used to generate an Excel table that contains all information displayed.



## Search by shift number

This search type is used to search for shift numbers.

When a "from shift no." and a "to shift no." are entered, the gap between the two shift numbers is selected. By default the "to shift no." is filled with "999" to select all vehicles in this shift. This value can be changed to select only an interval in which broadcasts were missed.

After the search option is started, you can search for the shift number in the form. For this purpose, the production area, shift indicator, date of shift start and the consecutive shift numbers are specified.

Choose "search" to go to the next step.

The screenshot shows the 'JIS Emergency System - Search' interface. At the top, it displays the date and time: '10/24/2018 | 12:20:35 PM'. Below the header, there are navigation tabs for 'User ID', 'Supplier', and 'Plant'. The main form area is titled 'Start / Search' and contains the following fields:

- Production area\*: A dropdown menu.
- Shift indicator\*: A dropdown menu with 'T Day' selected.
- Date shift start\*: A date picker showing '10/24/2018'.
- Last ShiftNo. before the gap. (xxx)\*: An empty text input field.
- First ShiftNo. after the gap. (yyy)\*: A text input field containing '999'.

At the bottom left, there is a '0' icon, and at the bottom right, there is a 'Search' button.

All relevant commodities are displayed along with the respective virtual file name (message groups). Please note that several commodities might be available for selection, depending on the EDI setup of the JIS supplier/sequencing service provider. All commodities are selected by default. Filtering and sorting can be activated by clicking on column header. If information is only needed for a specific message group or vehicles that pertain to a specific JIS commodity, you can limit the selection accordingly here.

Choose "Next" to go to the next step.

The screenshot shows the 'JIS Emergency System - Filter by Covisint supplier' interface. At the top, it displays the date and time: '10/24/2018 | 12:16:52 PM'. Below the header, there are navigation tabs for 'User ID', 'Supplier', and 'Plant'. The main area is titled 'Start / Search / Supplier' and contains a table with the following columns:

Supplier	Commodity (message group)	Virtual filename
<input checked="" type="checkbox"/>	Sort Ascending	
<input checked="" type="checkbox"/>	Sort Descending	
<input checked="" type="checkbox"/>	Filter	

At the bottom right, there is a 'Next' button.

The result list shows all vehicles that fulfill the parameters specified. The search parameters specified are listed above the result list for information purposes.

Each column can be filtered and sorted by clicking on the heading.

Various download options are provided at the bottom of the screen. All downloads are made available in ZIP format to safeguard the integrity of the data and prevent transmission errors from occurring.

For details on the download options please see above.

JIS Emergency System - Search results 06/04/2018 | 11:50:35 AM

User ID [redacted] Supplier [redacted] Plant [redacted]

Start / Search / Supplier / Result

Search by Impulse Gap

Generated: 06/04/2018 1:17:10 PM  
Supplier: All

Production area: 461  
Date: 06/04/2018  
Shift indicator: T  
Shift No.: 094 - 099

Search result 4 / 4

ProdNo.	ShiftNo.	Impulse date	Impulse time	Baumuster	Paint	Upholstery
9686517	461 201806 04T094	06/04/2018	10:01 AM	22215012	197	214
9686518	461 201806 04T095	06/04/2018	10:03 AM	22202112	197	201
9686519	461 201806 04T096	06/04/2018	10:06 AM	22218612	197	814
9686520	461 201806 04T097	06/04/2018	10:09 AM	22216612	197	205

VDA4916 VDA4916 with BoM Excel Excel with BoM

Click on one of the production numbers to display this vehicle in detail. The detail view shows information at BOM level. Only the message groups previously selected are taken into account.

The BOMs are arranged by message group and additional details such as the call quantity and receiving area are displayed.

At the bottom right, there is a download function that can be used to generate an Excel table that contains all information displayed.

JIS Emergency System - Results - bill of material for impulse 06/04/2018 | 11:52:33 AM

User ID [redacted] Supplier [redacted] Plant [redacted]

Start / Search / Supplier / Result / BoM

Impulse Details

ProdNo.: 9686517  
Impulse date: 06/04/2018  
Impulse time: 10:01 AM

ShiftNo.: 461 201806 04T094  
Baumuster: 22215012  
Paint: 197  
Upholstery: 214

Broadcast Collapse/Expand all

Material	Release quan...	ZGS	Receiver name	Module	Unloading point	Component gr...
12345678 - MESSAGE GROUP (123) - MB050.JISB.1 - 1						
A123456789001	1				899	3098

Excel with BoM

## Search by time and criteria

This search type is used to search for time and other criteria. If the plant uses different broadcast types (e.g. VIB and IB), you can choose which broadcast type is relevant.

When the search option is started, you can define the search here by setting different parameters. Select from the entries provided in the drop-down menu for the model series and production area.

Choose "Search" to go to the next step.

JIS Emergency System - Search

06/04/2018 | 11:42:17 AM

User ID [redacted] Supplier [redacted] Plant [redacted]

Start / Search

Impulse type: IB

From impulse: 06/04/2018 10:00 AM

To impulse: 06/04/2018 10:20 AM

Series: S Class - 222

Prod. Area: Hall 46 - 461

Search

All relevant commodities are displayed along with the respective virtual file name (message groups). Please note that several commodities might be available for selection, depending on the EDI setup of the JIS supplier/sequencing service provider. All commodities are selected by default. Filtering and sorting can be activated by clicking on column header. If information is needed only for a specific message group or vehicles that pertain to a specific JIS commodity, you can limit the selection accordingly here.

Choose "Next" to go to the next step.

JIS Emergency System - Filter by Covisint supplier

10/24/2018 | 12:16:52 PM

User ID [redacted] Supplier [redacted] Plant [redacted]

Start / Search / Supplier

Supplier	Commodity (message group)	Virtual filename
<input checked="" type="checkbox"/>	Sort Ascending	[redacted]
<input checked="" type="checkbox"/>	Sort Descending	[redacted]
<input checked="" type="checkbox"/>	Filter [input type="text"]	[redacted]

Next

The result list shows all vehicles that fulfill the parameters specified. The used search parameters are displayed above the result list for information purposes.

Each column can be filtered and sorted by clicking on the heading.

Various download options are provided at the bottom of the screen. All downloads are made available in ZIP format to safeguard the integrity of the data and prevent transmission errors from occurring.

For details on the download options please see above.

JIS Emergency System - Search results 06/04/2018 | 11:50:35 AM

User ID [redacted] Supplier [redacted] Plant [redacted]

Start / Search / Supplier / Result

Search by Time and Criteria

Generated: 06/04/2018 11:49:47 AM Date: 06/04/2018 - 06/04/2018  
 Supplier: All Time: 10:00 AM - 10:10 AM  
 Impulse type: IB Series: 222 Prod. Area: 461

Search result 4 / 4

ProdNo.	ShiftNo.	Impulse date	Impulse time	Baumuster	Paint	Upholstery
9686517	461 201806 04T094	06/04/2018	10:01 AM	22215012	197	214
9686518	461 201806 04T095	06/04/2018	10:03 AM	22202112	197	201
9686519	461 201806 04T096	06/04/2018	10:06 AM	22218612	197	814
9686520	461 201806 04T097	06/04/2018	10:09 AM	22216612	197	205

VDA4916 VDA4916 with BoM Excel Excel with BoM

Click on one of the production numbers to display this vehicle in detail. The detail view shows information at BOM level. Only the message groups previously selected are taken into account.

The BOMs are arranged by message group and additional details such as the call quantity and receiving area are displayed.

At the bottom right, there is a download function that can be used to generate an Excel table that contains all information displayed.

JIS Emergency System - Results - bill of material for impulse 06/04/2018 | 11:52:33 AM

User ID [redacted] Supplier [redacted] Plant [redacted]

Start / Search / Supplier / Result / BoM

Impulse Details

ProdNo.: 9686517 ShiftNo.: 461 201806 04T094  
 Impulse date: 06/04/2018 Baumuster: 22215012  
 Impulse time: 10:01 AM Paint: 197 Upholstery: 214

Broadcast Collapse/Expand all

Material	Release quan...	ZGS	Receiver name	Module	Unloading point	Component gr...
12345678 - MESSAGE GROUP (123) - MB050JISB.1 - 1						
A123456789001	1				899	3098

Excel with BoM

## Impulse Overview

Overview over the up-to-date actuals dates (impulses) for all production areas in the plant. The overview considers all vehicles, no matter if a supplier supplies materials for it or not.

This overview can be used to check, whether the production is ongoing.

< JIS Emergency System - Impulse Overview 04/16/2019 | 9:03 AM  

User ID  Supplier  Plant 

[Start](#) / [Impulse Overview](#)

∨ Impulse Overview

Overview over the up-to-date actuals dates (impulses) for all production areas in the plant. The overview considers all vehicles, no matter if a supplier supplies materials for it or not. This overview can be used to check, whether the production is ongoing.

Hall / Production area	ShiftNo. / ProdNo.	Date
4 / 540	540 201904 16T001 / 3956099	04/16/2019 6:12 AM
4 / 541	541 201904 16T140 / 3957655	04/16/2019 8:59 AM
4.1 / 543	543 201904 16T078 / 3955588	04/16/2019 9:00 AM

 Last update: 04/16/2019, 9:02 AM 

## Introduction to JIS Monitoring

The JIS Monitoring function helps JIS suppliers and external service providers as well as DAI employees to monitor JIS buffers and ensure on-time deliveries.

The buffer monitoring displays information on the current buffer status, the latest delivery and vehicle at the respective installation locations.

The lead time monitoring provides information on the current time from assembly start to the installation locations of interest.

### Target group

The monitoring functions can be used by external partners as well as internal DIA employees.

Note that the availability of both monitoring functions relates to how the JIS process is coordinated between the JIS supplier or external service provider and JIS responsible in the plant.

JIS suppliers and external service providers who currently do not use any monitoring functions but are interested in them should get in touch directly with their JIS contact person at the respective plant.

### Use case

Both monitoring functions can be used by the JIS suppliers and external service providers to control the delivery of materials from a delivery date and quantity perspective.

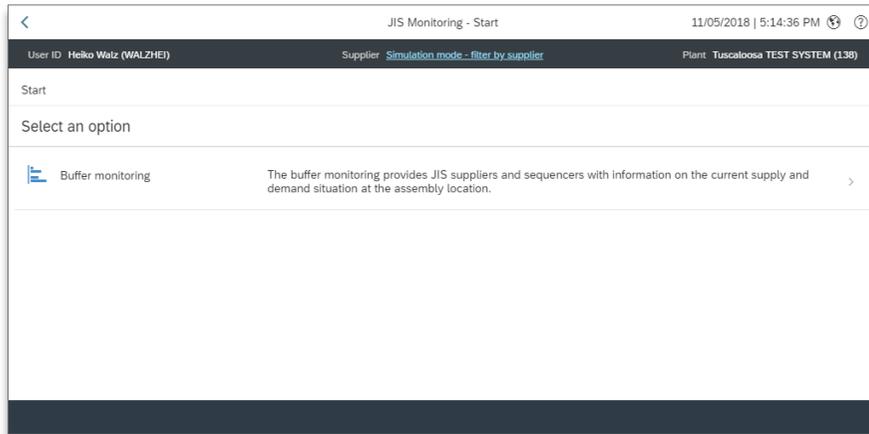
The buffer monitoring also allows DAI employees to be informed of the current demand and supply situation and identify potential delivery problems early on.

The lead time monitoring offers two main application scenarios. For suppliers and external service providers who already receive the lead time information via EDI, access to the same data guards against failure of the EDI connection. For all other suppliers, the JIS Toolbox offers additional information that has not been available before.

## First steps in JIS Monitoring

To start the JIS Monitoring for a plant, click on the respective "JIS Monitoring" tile in the JIS Toolbox. The JIS Monitoring app currently offers two functions:

- Buffer monitoring
- Lead time monitoring



Please note that the availability of both monitoring functions depends on to the respective plant. Some monitoring functions might look empty/void as the JIS monitoring needs to be set up per JIS commodity and supplier. Should you have any questions, please get in touch directly with your JIS contact at the respective plant.

In the upper right corner, the option to change the language as well as the access to the help screen can be found. The help screen offers the latest version of the handbook and contact information.

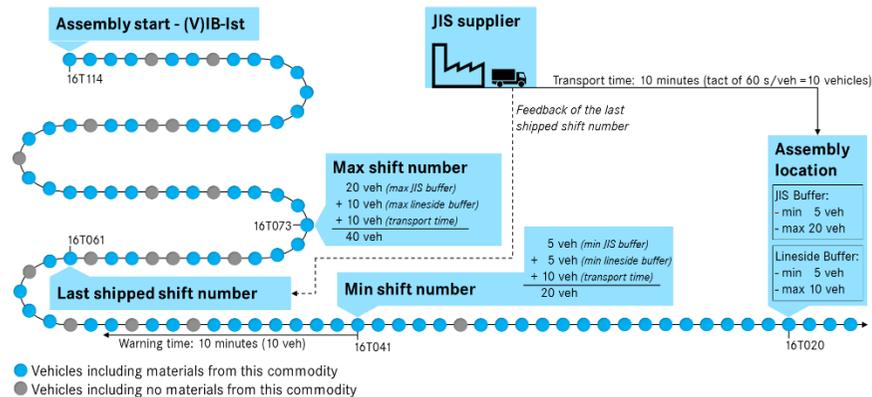
In case of question, please get in touch with your contact person at the plant.

## Buffer monitoring

The buffer monitoring provides JIS suppliers and external service providers with information on the current lead time, latest delivery and the vehicle at the assembly location/installation points. Delivery sequences must be defined and represent a JIS commodity.

### Functionality of buffer monitoring

The functionality and the calculations behind are depicted in the following illustration.



For every JIS commodity that is monitored, different parameters are defined that describe the delivery sequence:

- Buffer sizes are maintained: a minimum and maximum value are defined for the production buffer (prod. buffer/lineside buffer) and additional buffer areas (JIS buffer, i.e. unloading zone). These values specify how many vehicles per buffer must be available at minimum at all times and how much space is available at maximum.
- The average transport time from the JIS supplier or external service provider to the receiving area at the plant is also maintained. Based on the average cycle time (takt), the number of vehicles that pass the installation point (assembly location) during the transport to the plant is calculated. These vehicles are added on the buffers additionally.

- You can also define a warning time from which the JIS supplier or external service provider receives a warning that he will soon fall below the minimum buffer. The warning time maintained is divided by the average cycle time to determine the number of vehicles that are added to the minimum buffer.

Example calculation (cf. illustration on the left):

- A minimum of five vehicles should be buffered on the lineside and also minimum five in the remaining buffer areas.
- The average transport time of the JIS supplier to the plant is ten minutes. With a cycle time of 60 sec./veh., this corresponds to ten vehicles passing the installation point during a transport.
- As a result, a minimum of 20 vehicles must be delivered.
- Accordingly, a maximum of 40 vehicles should be shipped to the plant.
- The warning time of ten minutes corresponds to ten vehicles (as per the cycle time). If the last shipped shift no. is between 20 and 30 vehicles ahead of the installation location, the sequence is highlighted in yellow as a warning.

Data from the manufacturing execution system (PLUS) is used to determine that shift number 16T020 is currently at the installation location. Based on the information in which vehicles a certain JIS commodity is installed, the minimum and maximum value are now used to calculate a corresponding shift number. The JIS supplier can use these shift numbers to control his deliveries.

Additionally, the JIS supplier transmits the highest shift number that is currently being shipped. In this example, the shift number 16T061 was transmitted. This means that the supplier is between the min. and max. shift number and outside the warning time. His delivery status is therefore OK and is therefore highlighted in green.

## Overview of delivery status

Every delivery sequence is shown as a bar in buffer monitoring. Depending on the delivery situation, the bar is assigned a different status, which is highlighted in color.

The bars are sorted in ascending sequence in buffer monitoring, based on criticality (status) and alphabetical order.



As the illustration shows, there are a total of six delivery statuses, each of which is briefly introduced in the following.

### Underdelivery:



The delivered parts are not sufficient to meet requirements. The highest shipped shift number (in blue) is lower than the minimum required shift number (in red).

### Warning underdelivery:



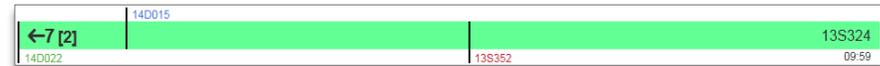
There is an imminent danger of underdelivery if new parts are not delivered soon.

### Overdelivery:



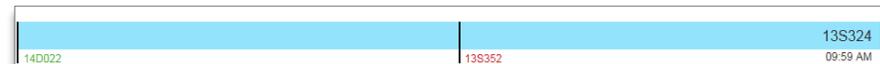
There is an overdelivery, i.e. the buffer area is not sufficiently sized for the parts being shipped. The highest shipped shift number (in blue) is higher than the maximum number allowed (in light green).

### Status OK:



The shipped quantity corresponds to the required quantity. The highest shift number shipped (in blue) lies between the minimum required (in red) and the maximum shift number allowed (in green).

### No feedback:



No shift number/production number or an invalid shift number/production number was sent as a feedback to the JIS toolbox. The status of the delivery situation can therefore not be assessed.

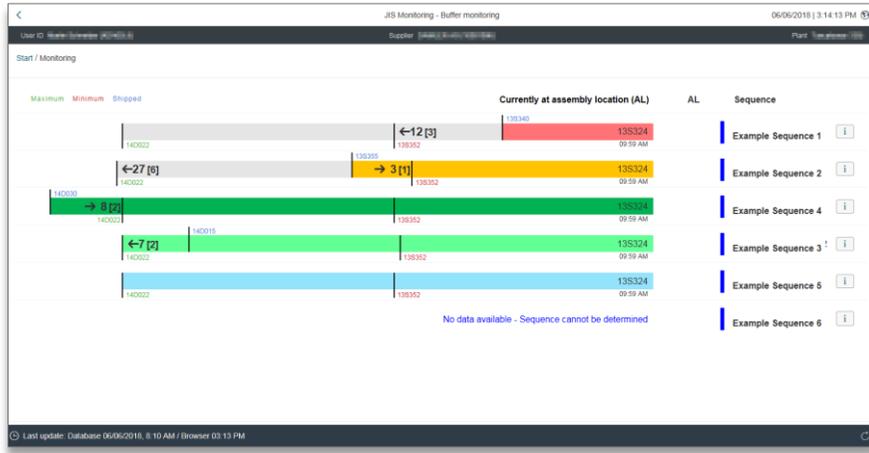
### No data:

No data available - Sequence cannot be determined

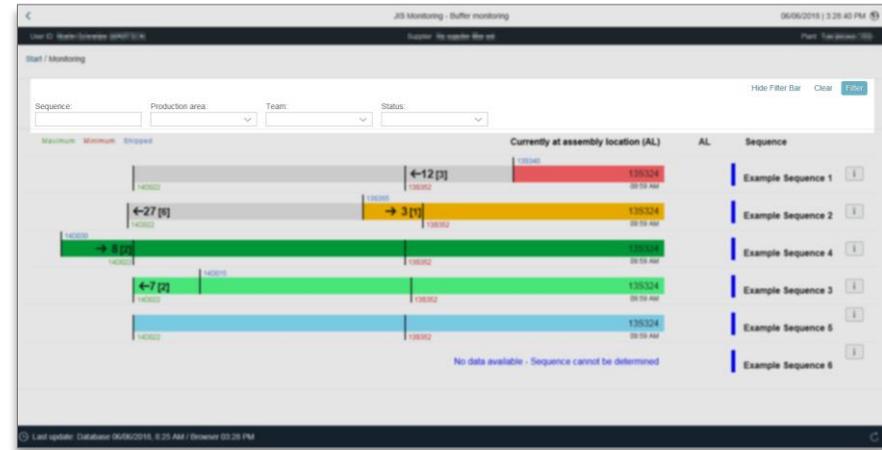
The sequence could not be calculated. This happens regularly in case of configuration or data errors. Please get in touch with your JIS plant contact.

## Structure of buffer monitoring screen

When starting buffer monitoring, an overview page is opened.



Additionally, users can use the filter bar to filter sequences by sequence name, production area, team and status. The filters set are stored in a browser cookie and will be automatically applied upon the start of the JIS buffer monitoring.



The Buffer Monitor supports two types of sorting:

- Criticality: sorted by status. Within the status “Underdelivery” and “Warning underdelivery” the sequences are sorted based on criticality (estimated time to impact). Within the other status the sequences are sorted by alphabet.
- Alphabetically: all sequences are sorted alphabetically via the sequence description.

This screen automatically reloads at regular intervals. Information on the last update is displayed in the lower left corner. This information indicates how up to date the displayed data is. There are two timestamps:

- The database timestamp indicates when the last sequence calculation took place. If this time stamp is older than 15 minutes, please restart the browser. If the problem persists, contact your respective JIS contact person.
- The browser timestamp indicates when the display was last reloaded and updated. The display automatically updates at a specified time interval. If the time until the next update is exceeded by several minutes, click the update button in the bottom right corner once.

Various information is displayed for each sequence depending on the delivery status.

The following describes the various different information.

#### a) Delivery sequence



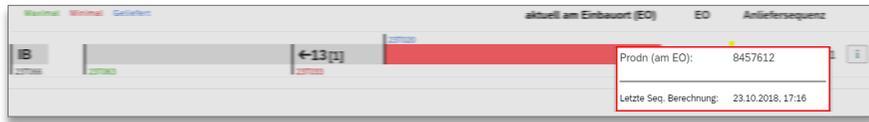
The name defined for the delivery sequence is displayed here.

#### b) Assembly/Installation location



The installation location for the delivery sequence is displayed here.

### c) Shift number at assembly/installation location



This shift number is currently at the installation location where the JIS commodity is installed. Below the shift number, the timestamp when this vehicle reached the assembly/installation location is displayed.

The following information is additionally displayed when hovering over the shift number:

- Corresponding production number of vehicle at installation location
- Timestamp when delivery sequence was last calculated

### d) Shift number at assembly start (IB/VIB)



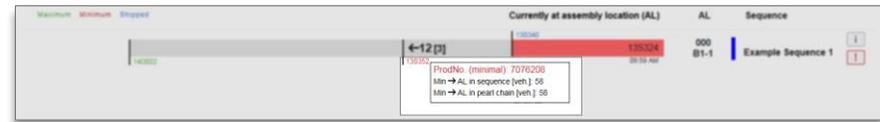
At the left end of a sequence bar the shift number at assembly start is displayed. In case commodity is controlled via VIB (currently only in plant 050), VIB is displayed instead of IB.

The following information is additionally displayed when hovering over the shift number:

- Corresponding production number of vehicle at assembly start
- Information (V)IB-IST (assembly start) situation:
  - Production number of vehicle at assembly start
  - Total number of vehicles between assembly start and vehicle at installation location
  - Number of vehicles between assembly start and installation location that are part of the delivery sequence
  - Anticipated throughput time of a vehicle up to installation location (based on average cycle time at installation location)
  - Average cycle time (tact) at installation location

- Timestamp when vehicle started assembly

### e) Minimum shift number



At least up to the minimum shift number, parts must be delivered to avoid missing parts. The calculation of the minimum shift number is based on the required minimum buffer stocks at the assembly line and in the JIS buffer. There is an additional buffer, which takes into account that during the transport from the supplier/sequencer to the plant additional buffer space will become available, as vehicles will be pass the installation location. This additional buffer is based on the average cycle time/consumption rate at the installation location and the defined transport time.

The following information is also displayed when placing the mouse over the minimum shift number:

- Production number of vehicle
- Number of vehicles between minimum shift number and vehicle at installation location in delivery sequence
- Total number of vehicles between minimum shift number and vehicle at installation location

### f) Maximum shift number



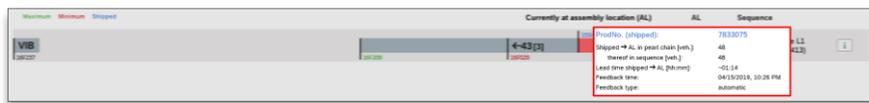
Parts can be delivered up to this maximum shift number without exceeding the available buffer space. The calculation of the maximum shift number is based on the required maximum buffer stocks at the assembly line and in the JIS buffer. There is an additional buffer, which takes into account that during the transport from the supplier/sequencer to the plant additional

buffer space will become available, as vehicles will be pass the installation location. This additional buffer is based on the average cycle time/consumption rate at the installation location and the defined transport time.

The following information is also displayed when placing the mouse over the shift number:

- Production number of vehicle
- Number of vehicles between maximum shift number and vehicle at installation location in delivery sequence
- Total number of vehicles between maximum shift number and vehicle at installation location

### g) Shift number shipped



This shift number was transmitted by the JIS supplier or sequencing service provider as the last one shipped.

The following information is also displayed when placing the mouse over the shift number:

- Production number of vehicle
- Number of vehicles between shift number delivered and vehicle at installation location in delivery sequence
- Total number of vehicles between shift number delivered and vehicle at installation location
- Estimated lead time between the shift number delivered and the assembly location (time to impact)
- Timestamp when shipment data from the supplier was received
- Feedback type – EDI message or manual feedback

### h) Master data



Click on the "i" button to display the master data for the delivery sequence.

The master data contains the following information:

- Unique sequence ID to identify the delivery sequence
- Message partner for which the delivery sequence is set up incl. name
- Component group master(s) (CGMs) assigned to the delivery sequence
- Defined average transport time and corresponding number of vehicles (based on average cycle time at installation location)
- Defined warning time before minimum is reached and corresponding number of vehicles (based on average cycle time at installation location)
- Number of vehicles per load carrier (LC)

### i) Warning messages



An "!" button appears in case of warnings or errors. Click on the button to display the message.

Here, the system warns when current data on the installation location cannot be accessed. This is an indication that there may be a data provisioning or processing issue and the sequence bar might not be up to date. Should this state persist for a prolonged period of time outside of break times, please inform your JIS contact person.

Frequent warning messages:

- No production feedback for assembly location since >X minutes
- No shipment notification for sequence X found
- Vehicle X is not located between assembly location and start of assembly
- Shift number X not included in sequence (Check CGM assignment)
- No cycle time determined for reference checkpoint X

#### j) Distance to min/max/shipped



Indicated by an arrow the number of vehicles between the shipped shift number and the minimum or maximum are displayed depending on the status of the delivery sequence. The figure in brackets specifies the corresponding load carriers for a better matching to truck loads. This figure considers only those vehicles that are part of the delivery sequence (based on the CGM assignment).

#### k) Shipped shift number supplier feedback

The calculation of the delivery status requires the JIS supplier or external service provider to transmit feedback on the last shipped shift number.

This feedback can be automatically provided via EDI. The specifications for this can be requested from your JIS contact person.

You can also provide manual feedback in the buffer monitoring. Manual feedback can be entered by double-clicking on the respective delivery sequence.

The user can either enter a shift number or production number. Upon submitting a new shift number, this number is validated and the sequence bar is being recalculated. All sequence bar will be reloaded subsequently.

The dialog box is titled 'Sequence ID: [redacted]' and has a close button in the top right corner. The main text reads 'Please enter a shift or production number.' Below this text are two input fields: 'ShiftNo.' and 'ProdNo.'. Underneath these fields are four input boxes containing the values 'T11', '201806', '05T', and an empty box. At the bottom of the dialog are two buttons: 'Send' and 'Cancel'.

## Dashboard mode

The Buffer Monitor is also available in a dashboard mode that has a more minimalistic view. All functions of the original view (automatic reload, filtering and sorting) work as usual. The Dashboard Mode is activated by clicking on the icon on the right upper side of the screen.

Sequences in the status “Underdelivery” and “Warning Underdelivery” additionally display two values in the overview:

- Total number of vehicles between shift number delivered and vehicle at installation location
- Estimated lead time between the shift number delivered and the assembly location (time to impact)

For more details to one sequence, the sequence can be opened by clicking on it.

Sequence	Production area	Team	Status	Sorting	Time to Impact	Vehicles
001 1-Palmenstr. 10.00 (001)			Underdelivery	Criticality	-09.04	24 veh.
002 1-Palmenstr. 10.00 (002)			Underdelivery	Criticality	-09.22	26 veh.
003 1-Palmenstr. 10.00 (003)			Underdelivery	Criticality	-09.58	40 veh.
004 1-Palmenstr. 10.00 (004)			Warning Underdelivery	Criticality	-07.00	47 veh.
005 1-Palmenstr. 10.00 (005)			Warning Underdelivery	Criticality	-08.21	56 veh.
006 1-Palmenstr. 10.00 (006)			Warning Underdelivery	Criticality	-08.57	60 veh.
007 1-Palmenstr. 10.00 (007)			Warning Underdelivery	Criticality	-10.17	69 veh.
008 1-Palmenstr. 10.00 (008)			OK	Criticality		
009 1-Palmenstr. 10.00 (009)			OK	Criticality		
010 1-Palmenstr. 10.00 (010)			OK	Criticality		
011 1-Palmenstr. 10.00 (011)			OK	Criticality		
012 1-Palmenstr. 10.00 (012)			OK	Criticality		
013 1-Palmenstr. 10.00 (013)			OK	Criticality		
014 1-Palmenstr. 10.00 (014)			OK	Criticality		
015 1-Palmenstr. 10.00 (015)			OK	Criticality		
016 1-Palmenstr. 10.00 (016)			OK	Criticality		
017 1-Palmenstr. 10.00 (017)			OK	Criticality		
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029 1-Palmenstr. 10.00 (029)			OK	Criticality		
030 1-Palmenstr. 10.00 (030)			OK	Criticality		

## Lead time monitoring

Lead time monitoring provides JIS suppliers and external service providers with information on the current lead time and installation situation at the installation locations you are delivering to. All data is displayed per component group master.

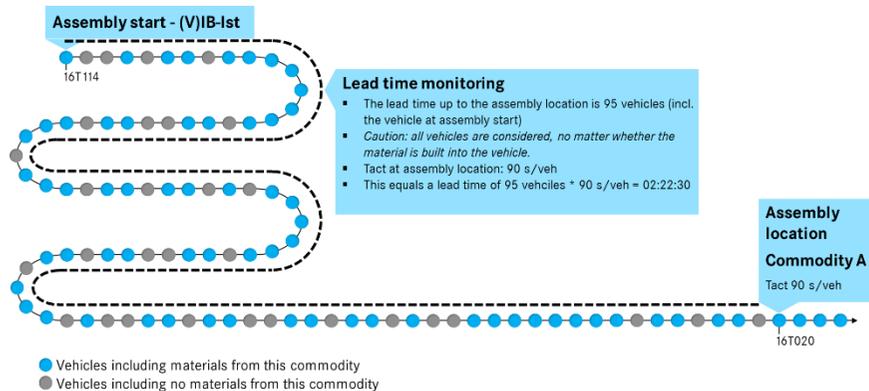
This data is currently recalculated every ten minutes and can be made available to the JIS supplier or external service provider automatically as an XML file sent via EDI.

You can also display or download the data in JIS Toolbox.

### Functionality of lead time monitoring

Lead time monitoring is based on component groups, which are assigned in the factory layout in AM Supply.

The overall functionality can be explained based on the following illustration.



For each component group, the vehicle at the assembly / installation location as well as the vehicle that currently has assembly start is determined.

Based on this information the lead time as well as the number of vehicles up to the installation location on the assembly line is determined. The vehicle that is currently at the start of assembly is also included in the count. All vehicles are taken into account for the lead time, regardless whether the

component group is installed in the vehicle.

The cycle time defined for the installation location in the factory layout can be used to determine the lead time. The lead time is the estimated time until the vehicle currently at the start of assembly is expected to arrive at the installation location.

In the example, the vehicle with shift number 16T020 is at the installation location. The vehicle with shift number 16T114 is currently at the start of assembly. This makes up to a lead time of 95 vehicles.

The maintained cycle time of 90 s/vehicle can be used to calculate the lead time of 02:22:30.

### Data in lead time monitoring

The following data is displayed in lead time monitoring:

- Message partner: Message partner that receives the message
- Assembly location (AL): Description of component group master, incl. assembly/installation location
- Supplier: Supplier number
- Supplier name: Name of supplier
- Production area: Production area in which the parts group is installed
- ProdNo. Start Imp.: Production no. of vehicle currently at start of assembly
- Shift no. Start Imp.: Shift no. of vehicle currently at start of assembly
- ProdNo. (AL): Production no. of vehicle currently at assembly/installation location
- Shift no. (AL): Shift no. of vehicle currently at assembly/installation location
- Timestamp (AL): Time stamp when the vehicle was at the assembly/installation location
- Ahead count: Number of vehicles in lead time to assembly/installation location
- Ahead hh:mm: Lead time to assembly/installation location
- Timestamp create: Timestamp of calculation

## Display of lead time monitoring

An overview page is opened when lead time monitoring is started. Here, all data is shown in tabular form.

Click on the button in the lower right corner to generate an XML file that corresponds to the structure of the file sent via EDI.

Message partner	Assembly Loc. (AL)	Supplier	Supplier name	Factory hall	ProdNo. Start Imp.	ShIPNo. Start Imp.	ProdNo. (AL)	ShIPNo. (AL)	Timestamp (AL)	Ahead Count	Ahead hh:mm	Timestamp Create
12345678	Prod Area / Trim / Station /CGM 1	12345678	Supplier A	Hall A	0005143	09120190060010	0054896	091201900600F00	16:40:00	0376	07:24:56	16:50:01
12345678	Prod Area / Trim / Station /CGM 2	12345678	Supplier A	Hall B	1267607	091201900600T40	0054490	091201900600C03	16:46:00	0460	09:04:20	16:50:01
						2		48	06:06:2018			06:06:2018

## Frequently asked questions

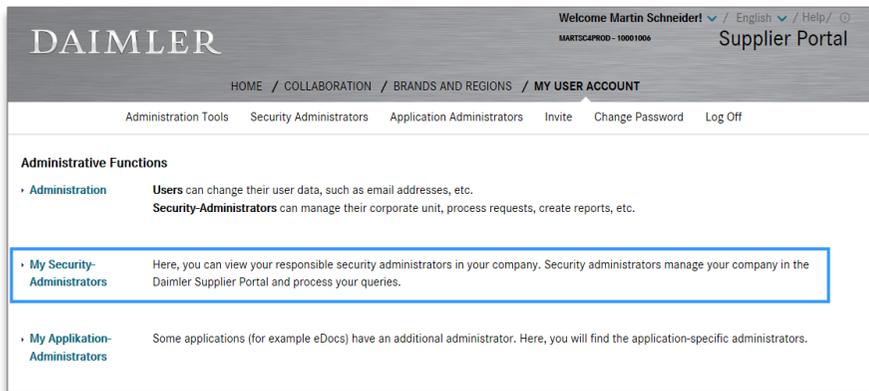
**The following error message is displayed when I open JIS Toolbox. What can I do?**



Your session has expired. Close all browser windows and log back on.  
If you just recently registered, please give the system 12 hours to correctly set up your user.

### Where can I find my portal manager as an external user?

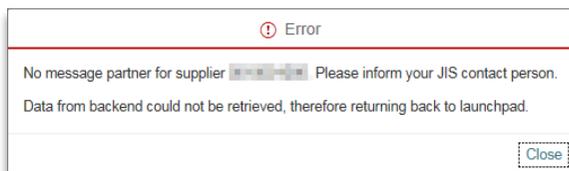
On the Daimler Supplier Portal, you can find your portal manager under menu item "My user account".



**As an external user, I recently applied for access to a specific plant but am still waiting for the access details. What can I do?**

Please note that as an external user, you do not receive any e-mail notification when your request was processed. You should therefore regularly check whether you can now access the plant in question. If you continue to experience problems, please get in touch with your JIS contact at the respective plant.

**When I try to start a JIS Toolbox function as an external user, the system says that a messaging partner has not been configured. What do I need to do?**

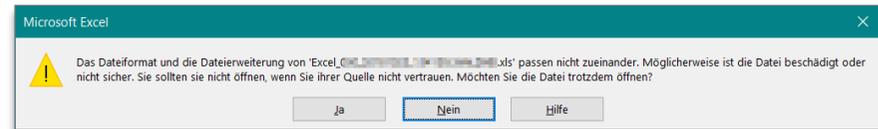


JIS Toolbox must be set up for you. In this case, please get in touch with your JIS plant contact.

**I looked for a vehicle in emergency system but could not find it. Why?**  
 JIS Emergency system only includes vehicles that already had assembly start. Vehicles that have not had assembly start yet cannot be displayed.

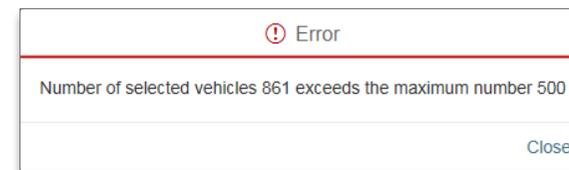
**I also supply KON materials to Daimler AG in addition to JIS materials. Why are those not taken into account in JIS Toolbox?**  
 JIS Toolbox only supports JIS materials.

**When opening a file that was downloaded from the JIS Toolbox, Microsoft Excel shows a warning message. Why?**  
 Technically, the file provided by the JIS Toolbox contains the format MHTML. Yet, the file is named with extension XLS to ensure that the file is opened with Microsoft Excel.



**When I conduct a search in JIS Emergency system, I get an error message stating that the maximum number of vehicles has been exceeded. What is the search limited to 500 vehicles?**

JIS Emergency system is designed for EDI downtime, which is why the search is limited to 500 vehicles. This prevents long loading times. Please restrict your search request accordingly.



**I am using multiple users in the supplier portal. Upon opening the JIS Toolbox I am authenticated as one of my other users. Why?**  
 The JIS Toolbox and the supplier portal use a separate session management.

Please click on the logout icon in the upper right corner of the JIS Toolbox to end the current session and to re-login with your other user.

## Contact

For all technical questions, please get in touch with your JIS plant contact directly.

If you have any additional questions, comments, praise or critique on JIS Toolbox, please send an e-mail to the following address:

[mbox\\_jis-itp@daimler.com](mailto:mbox_jis-itp@daimler.com)