Mercedes-Benz US International, Inc. Supplier Connection Guidelines

IMPORTANT: Check with MBUSI for any late-breaking changes to this specification. https://supplier-portal.daimler.com/docs/DOC-1473



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1. Audience

Mercedes-Benz US International, Inc. uses state-of-the-art processes and manufacturing techniques which require it to maintain a close relationship with all its suppliers. It is essential to have the most reliable communications possible to ensure the continuity of MBUSI operations is not interrupted. This document outlines the connection methods and connection requirements for MBUSI suppliers.

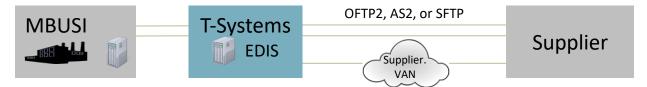
2. Overview of Connection

2.1.Description of Connections

MBUSI will primarily use standard-based Electronic Data Interchange (EDI) communications with its suppliers such as Accredited Standards Committee (ASC) X12. Suppliers can connect over a Value Added Network (VAN) or directly to MBUSI's EDI system called *EDIS* to transmit and receive messages. Suppliers choosing to connect to EDIS directly must connect over the internet using OFTP2, AS2, or SFTP.

See Section 2.3 for an important note regarding Critical Suppliers

2.2.Data flow between MBUSI and Suppliers



All critical message types must use OFTP2

2.3. Critical Message Types

MBUSI may determine that it exchanges time critical messages with one of its suppliers; it is a *requirement* that such critical messages use OFTP2 over the internet directly to EDIS. No other connection option can be used. It is solely the responsibility of MBUSI to determine whether a supplier has a critical message and is not the decision of the supplier.

Examples of MBUSI processes that contain time critical messages are listed below. This is not an exhaustive list and the items below are subject to revision at any time by MBUSI without notice.

- Just in Sequence (JIS) or sometimes referred to as Sequence Parts Suppliers (SPS)
- Supply to Line (S2L) or sometimes referred to as Just in Time (JIT)
- Suppliers with high frequency of deliveries per day
- Suppliers with very short delivery times

In view of the increasing globalization of the automotive industry MBUSI chose to adopt a standard method of communication for EDI data with time critical content utilizing state-of-the-art technologies within the automotive industry.

Transmission of this critical data will take place using OFTP2 over an internet connection. The data transmission will be directly to/from the Daimler EDIS system, which is a global EDI solution for Daimler AG and its subsidiaries. The system is supported by T-Systems International GmbH (TSI). This provides reliability, security, and efficiency in communications between MBUSI and our suppliers.

In order to guarantee this reliability, MBUSI requires all suppliers who have a critical message type to ensure the following:

- Support OFTP2 connections over internet
 - Have OFTP2 certificates from an approved CA (suppliers are responsible to monitor their certificate expiration dates)
 - Use an OFTP2 software that is approved by Odette to have interoperability with other OFTP vendors (if you have any questions about your software's compatibility you should address them directly to T-Systems)
 - o OFTP software has ability for parallel sessions
 - o 2 SFIDs recommended (this item is not a requirement)
- Fully redundant internet connection (with diverse path)
- Reliable and high availability (HA) EDI systems
- Perform regular failover testing
- Ability to send/receive production related EDI messages from/to supplier's production systems through the EDIS system, reliably during MBUSI operating hours without interruptions

For further general information about OFTP2 as a standard refer to Odette's website, www.odette.org, and search for OFTP2.

3. Benefits of Electronic Data Interchange (EDI)

EDI is now well established as a reliable state-of-the-art channel of communication for doing business in today's world.

Particularly in view of advances in logistics, MBUSI and its suppliers will be working more closely together than in the past. This will mean increased process synchronization, which would not be feasible without the use of electronic communication channels.

The main aims of EDI communication are as follows:

- fast and secure data interchange
- paper-free data interchange
- elimination of repeated data entry by the recipient (time and cost)
- reduction of errors caused by having to re-input the data

- standard interfaces for processing regularly recurring bulk data communications
- no printing on expensive multiple-copy forms

However, EDI is more than just another channel of communication. By enabling fast, standardized data interchange, it creates the basis for enhancements to other related processes, thereby generating potential savings.

Examples of these enhancement opportunities include:

- Reductions in administration expenses through:
 - standardization of work processes, and therefore simplification of processes both across multiple workplaces and within individual workplaces
 - immediate availability of data for further processing with user programs
- Faster flow of information, resulting in
 - immediate reaction to changed requirements
 - faster flow of goods
 - fewer one-off operations, such as special transport consignments
 - more accurate planning
 - greater flexibility
 - less capital tied up in inventories

These enhancements are available to all parties involved in the communication process. The prerequisite is the successful integration of EDI into internal systems and processes.

We expect all our partners, including component suppliers, area contract freight forwarders and external service providers, to make effective use of these state-of-the-art communication technologies and resources, becoming more competitive in the process.

We see this as a fundamental requirement for our mutual efforts to optimize the costs and processes of our business operations.

Our purchasing partner selection decisions will be based not only on optimum quality of the actual service, e.g. material or transport, but also implicitly on the provider's readiness to display flexibility and innovation, and therefore the ability to use state-of-the-art communication systems.

This attitude is also shared by other automotive producers and in other sectors, so showing some initiative in this area is very much in your own best interests as well.

Accordingly, these requirements – which we have been voicing for some years now – are not seen as an appropriate area for any investment contribution on our part.

4. Setup of EDI Connection

4.1. Setup Options Available

MBUSI allows two general methods of connection for EDI data.

- 1. Value Added Network (VAN) Any VAN which already has an interconnect with EDIS
- 2. Direct connection to our EDI system managed by T-Systems International, GmbH (TSI) The below connections methods are available
 - OFTP2
 - AS2
 - SFTP

Suppliers with a Critical Message Type must use the Direct Connect option above with OFTP2 and other additional requirements, which are outlined in <u>Section: Critical Message Types</u>.

4.2.VAN Setup Option

This option is not available to a supplier if MBUSI has determined you are critical, see <u>Section: Critical</u> <u>Message Types</u> for additional information on this.

General procedure

Please make sure you have completed the following steps before beginning any integration testing (content testing) with MBUSI. Careful testing helps all parties to set up a reliable and secure data interchange, in terms of both technical and content aspects.

Setup Procedures for Suppliers

When you are setting up electronic data interchange with MBUSI using a VAN or plan to change your existing EDI connections, please complete the following steps:

- 1. After part sourcing is complete, a member of an MBUSI ramp-up team or Material Resource Planner (MRP) will create an IT request for your setup.
- 2. Our SAP Support team will email the contact you provided to guide you through EDI setup and testing.
- 3. You are responsible to read this document and all relevant EDI specifications.
- 4. Our SAP Support team will initiate contact with T-Systems (our EDI provider)
- 5. T-Systems will contact you with EDI connection information
- 6. Reply to T-Systems within 2 weeks for connection setup (see <u>Section: Contacts</u> for contact details)
- 7. Confirm with T-Systems your VAN is supported (interconnect with EDIS already exists)
- 8. Supplier contacts their VAN to setup the necessary EDI connection with T-Systems
- 9. T-Systems will send notification to Supplier and MBUSI that connection setup is complete
- 10. Content testing with the relevant plant must then be made. SAP Support team will guide you through testing each relevant EDI message type.

4.3.Direct Connection - OFTP2 Option

General procedure

Please make sure you have completed the following steps before beginning any integration testing (content testing) with MBUSI. Careful testing helps all parties to set up a reliable and secure data interchange, in terms of both technical and content aspects.

Setup Procedures for New Suppliers

When you are setting up electronic data interchange with MBUSI using OFTP2 or plan to change your existing EDI connections, please complete the following steps:

- 1. After part sourcing is complete, a member of an MBUSI ramp-up team or Material Resource Planner (MRP) will create an IT request for your setup.
- 2. Our SAP Support team will email the contact you provided to guide you through EDI setup and testing.
- 3. You are responsible to read this document and all relevant EDI specifications.
- 4. Our SAP Support team will initiate contact with T-Systems (our EDI provider)
- 5. T-Systems will contact you with EDI connection information
- 6. Reply to T-Systems within 2 weeks for connection setup (see <u>Section: Contacts</u>)
- 7. Select and implement an OFTP2 system

 If you are a supplier with time critical messages also follow the requirements in Section: Critical

 Message Types
- 8. Enter all the communication parameters for data interchange with MBUSI in your system or ask your software supplier to do this for you
- Complete the form (provided by T-Systems) with your OFTP2 partner data and fax or email it to T-Systems (see <u>Section: Contacts</u>)
- 8. Complete a **procedure test** with T-Systems
- 9. T-Systems will send notification to Supplier and MBUSI that connection setup is complete
- 10. Content testing with the relevant plant must then be made. SAP Support team will guide you through testing each relevant EDI message type.

Procedure test with T-Systems

During the procedure test line connections will be tested. This must be done before any data interchanges with our plants. This test will ensure all parameters have been configured correctly.

4.4.Direct Connection - AS2 Option

General procedure

Please make sure you have completed the following steps before beginning any integration testing (content testing) with MBUSI. Careful testing helps all parties to set up a reliable and secure data interchange, in terms of both technical and content aspects.

Setup Procedures for New Suppliers

When you are setting up electronic data interchange with MBUSI using AS2 or plan to change your existing EDI connections, please complete the following steps:

- Contact your MBUSI representative for the relevant message types
- 2. MBUSI will initiate contact with T-Systems (TSI) to begin setup
- 3. Contact T-Systems within 2 weeks for connection setup (see Section: Contacts)
- 4. Supplier completes setup on their AS2 system
- 5. Complete the form (provided by T-Systems) with your **AS2 partner data** and fax or email it to T-Systems (see <u>Section: Contacts</u>)
- 6. Arrange a date and time for a **procedure test** with the EDIS system with our EDI Customer Supports
- 7. Complete a **procedure test** with T-Systems
- 8. T-Systems will send notification to Supplier and MBUSI that connection setup is complete
- 9. Content testing with the relevant plant must then be made. SAP Support team will guide you through testing each relevant EDI message type.

Procedure test with T-Systems

During the procedure test with TSI line connections will be tested. This must be done before any data interchanges with our plants. This test will ensure all parameters have been configured correctly.

4.5.Direct Connection - SFTP Option

General procedure

Please make sure you have completed the following steps before beginning any integration testing (content testing) with MBUSI. Careful testing helps all parties to set up a reliable and secure data interchange, in terms of both technical and content aspects.

Setup Procedures for New Suppliers

When you are setting up electronic data interchange with MBUSI using SFTP or plan to change your existing EDI connections, please complete the following steps:

- 1. Contact your MBUSI representative for the relevant message types
- 2. MBUSI will initiate contact with T-Systems to begin setup
- 3. Contact T-Systems (TSI) within 2 weeks for connection setup (see Section: Contacts)
- 4. Supplier completes setup on their SFTP client to connect to TSI's SFTP server
 It is supplier's responsibility to schedule jobs to check TSI's SFTP server to receive their messages
- 5. Complete the form (provided by T-Systems) with your **SFTP partner data** and fax or email it to T-Systems (see Section: Contacts)
- 6. Arrange a date and time for a **procedure test** with the EDIS system with our EDI Customer Supports
- 7. Complete the procedure test with the EDIS test system
- 8. T-Systems will send notification to Supplier and MBUSI that connection setup is complete
- 9. A data test with the relevant plant must then be made. Please inform your MBUSI contact partner that you are ready to begin data content testing for the relevant message types.

Procedure test with T-Systems

During the procedure test with TSI line connections will be tested. This must be done before any data interchanges with our plants. This test will ensure all parameters have been configured correctly.

5. EDI Communication Changes

If you wish to change your communication method only or change any individual parameters, contact T-Systems and inform MBUSI before beginning any changes. You are responsible to contact MBUSI any time you are changing your EDI system or ERP/Production system. An MBUSI representative will schedule appropriate tests with you. Careful setup and testing of any changes helps to keep a reliable and secure data interchange.

6. Communication Readiness

MBUSI is constantly producing data. This data has to be sent directly to our communication partners (suppliers). This means that it is important to keep your communication system ready to receive at all times. In any case, please inform MBUSI's EDI team well in advance of any planned outage.

Maintenance windows for EDIS generally occur a few times a year. They are usually scheduled on the 3rd Sunday of a month. However, MBUSI and T-Systems may schedule maintenances at other times.

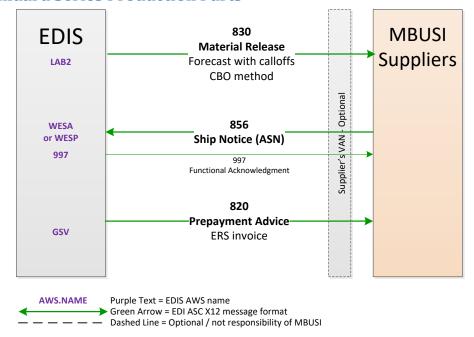
7. EDI Message Types

MBUSI chooses to use EDI standards wherever possible. The most common standard used by MBUSI is the ASC X12. The actual transaction sets within the ASC X12 standards used and specifications for implementing those transaction sets depend on the type of parts a supplier provides. Please refer to your MBUSI contact to determine which message types apply to you.

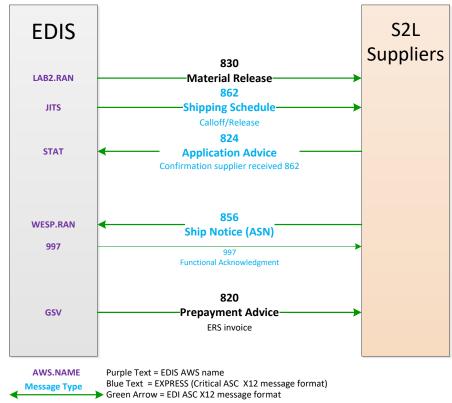
MBUSI may, at its discretion, make changes to the format or contents of its EDI messages at any time. The lists and diagrams below cover almost all of MBUSI's EDI exchange; however, some special processes or unique scenarios may have different EDI requirements. These would be communicated during the supplier EDI setup process.

Detailed specifications are on the MBUSI portal: https://supplier-portal.daimler.com/docs/DOC-1473

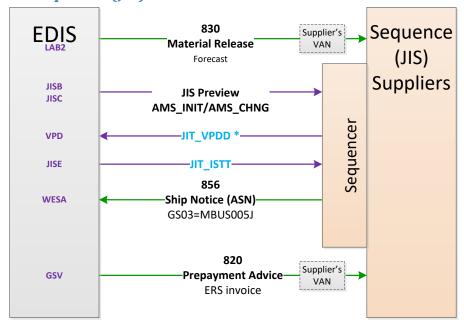
7.1. Standard Series Production Parts



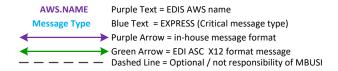
7.2. Supply-to-Line Production Parts



7.3. Just-in-Sequence (JIS) Production Parts



*VPD data is only suppliers that send parts with serial numbers



Custom format message type specifications are found in the <u>JIS Supplier Communication Handbook</u> on the portal. <u>https://supplier-portal.daimler.com/docs/DOC-1473</u>

MBUSI ASC X12 Parameters

MBUSI uses a single ID for sending messages, but uses two separate EDI IDs for receiving - one receiving ID for Production and a different receiving ID for Testing. Please configure this in your systems. MBUSI follows the ASC X12 standard and requires the ISA15 element to contain a "T" for any test message.

The GS ID of a message will depend on the specific MBUSI business process behind that message. This is outlined in separate documentation on the Daimler portal with the specifications for each message type.

8.1.MBUSI X12 Parameters for Production

	ISA Qual	ISA ID	ISA15	GS ID *			
Receiving Messages from MBUSI	ZZ	MBUS MBUS002	Р	MBUS002			
		(with 3 spaces)		MBUS002A			
				MBUS002L			
				MBUS002S			
				MBUS002T			
Sending Messages to MBUSI	ZZ	MBUS MBUS003	Р	MBUS003			
		(with 3 spaces)		MBUS003A			
				MBUS003J			
				MBUS003L			
				MBUS003S			
				MBUS003T			
997s sent back from MBUSI	For any 997 sent back from MBUSI to the supplier the ISA and GS sender/receiver are simply reversed. For example, if a						
	supplier sends an 856 message to MBUSI ZZ:MBUS MBUS003						
	with the GS ID MBUS003, the corresponding 997 would have						
	ZZ:MBUS MBUS003 for the ISA sender and MBUS003 for the GS						
	sender.						

^{*}GS ID defined by business process, see ASC X12 specification on portal for which code to use.

8.2.MBUSI X12 Parameters for Testing

	ISA Qual	ISA ID	ISA15	GS ID *		
Receiving Messages from MBUSI	ZZ	MBUS MBUS002 (with 3 spaces)	Т	MBUS002 MBUS002A		
		(MBUS002L		
				MBUS002S		
				MBUS002T		
Sending Messages to MBUSI	ZZ	MBUS MBUS005	T	MBUS005		
		(with 3 spaces)		MBUS005A		
				MBUS005J		
				MBUS005L		
				MBUS005S		
				MBUS005T		
997s sent back from MBUSI	For any 997 sent back from MBUSI to the supplier the ISA and					
	GS sender/receiver are simply reversed. For example, if a supplier sends an 856 message to MBUSI ZZ:MBUS MBUS005 with the GS ID MBUS005, the corresponding 997 would have					
	ZZ:MBUS MBUS005 for the ISA sender and MBUS005 for the GS					
	sender.					

^{*}GS ID defined by business process, see ASC X12 specification on portal for which code to use.

8.3. Supplier X12 Parameters

If you are using a VAN to connect to EDIS, you will provide T-Systems with your EDI ID and qualifier. If you are connecting directly to EDIS and you do not have an EDI ID and qualifier, then your EDI qualifier will be "ZZ" and your EDI ID will be your 10 digit MBUSI supplier number.

9. Frequently Asked Questions

Who is MBUSI's EDI provider?

MBUSI partners with T-Systems International GmbH for EDI translation and routing. T-Systems also provides VAN services for MBUSI to any supplier using a VAN for EDI messages.

What EDI message formats are allowed?

MBUSI uses ASC X12 messages formats. Some special MBUSI processes use a custom in-house format.

Does MBUSI send functional acknowledgements (ASC X12 997)?

MBUSI only sends 997s for 856 messages. Our suppliers do not have to send 997s back to MBUSI.

Can a supplier use VDA or EDIFACT messages like used in Europe for other Daimler plants?

No. Suppliers can only use the message format ASC X12 defined by MBUSI (or the custom in-house format for certain special processes or messages).

Are direct connections allowed?

Yes. You may directly connect to T-Systems using SFTP, AS2, or OFTP2. There are no extra data volume charges to suppliers with direct connections so there may be cost savings for you by using this method. Please contact T-Systems for additional information.

How do I start my EDI setup?

There are three basic steps in the setup process.

- 1. MBUSI Logistics will submit a request to MBUSI IT for a supplier's setup. This will happen only after a purchasing arrangement is complete.
- 2. You will receive contact directly from T-Systems for setup of your EDI connection.
- 3. MBUSI's support team will test each EDI message type with you based on what type of parts you are delivering.

10. Contacts

The contact point for changing, setting up, or testing communication connections to MBUSI and receiving error reports regarding communication with EDIS systems is **generally the T-Systems EDI Customer Support.**

If a message was communicated successfully, but you have issues with the content of that message you may contact MBUSI's EDI team.

In any contact (email or phone) with either T-Systems or MBUSI be sure to include "MBUSI plant 138", supplier number, and message type.

10.1. T-Systems Customer Support

When you are contacting the T-Systems EDI Customer Support

T-Systems International GmbH

EDI Customer Support

US Phone: +1 866 405 5305

German Phone: +49 391 5976 2016

E-Fax: +49 391 580 211 271

E-Mail: edi.hotline@t-systems.com Subject line for all emails must use the format:

"Daimler | w138 | 10 Digit Supp# | Message Type | Description"

The T-Systems EDI Customer Support is available 24 hours, 365 days a year. Urgent incidents will be handled appropriately. Service requests for setups and non-urgent incidents are handled during T-Systems business hours.

Normal business hours are Monday to Friday between 1am to 3pm US Central Time excluding MBUSI plant holidays. Outside of these hours only processing exceptions will be handled.

10.2. MBUSI EDI Team

Mercedes-Benz US International, Inc.

Email: mbusi edi@daimler.com

M-F 8:00am - 4:00pm, US Central Time, excluding plant holidays

MBUSI Control Room

Phone: +1 205 462 6600

Email: ITControl.Room@daimler.com

24/7 emergency support only

*For most emergencies, such as connection interruptions, contact T-Systems first.

ITO/PT - Plant138

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