Find out more about DEX



Suppliers receive the current specification electronically. Within a defined timeframe suppliers confirm the reception and the acceptance.

The requirements apply to all deliveries of products, materials, services and digital goods to Bosch (software, data and IT-Services, in further text collectively referred to as: "product"). For easier readability, this text uses the short terms "**Supplier**" and "**Bosch**".

There are different kind of exchanges:

- during e.g.: project phases, request for quotations, technical meetings
- official Document Exchange (DEX), requiring documented reception and acceptance.

Documents are exchanged:

• On demand (either by Supplier or by Bosch).

The DEX process is essential - If the documents are not correctly exchanged or not on time, there are risks of:

- Misalignment between Supplier and Bosch version
- Wrong deliveries
- Production stoppages
- Financial and Bosch image damage
- not fulfilling IATF 16949 requirements

The exchange is done within the whole supply chain. It is mandatory as well to inform the sub-suppliers about the change, to distribute the updated documents as necessary and to ask for confirmation



Contact and Responsibilities



For questions about technical document content, address your technical purchasing contact e.g.:

- BOM not clear
- Change number not known
- What has been changed
- Reason of exchange
- Introduction date of EC is not clear
- Revision / Version differences
- For all other issues, address your commercial purchasing contact.

After receiving DEX Package, if any additional documents are required, contact the sender of the package.

Please note: Business language is English.

Contact SupplyOn for any SupplyOn issues, e.g.:

- To update the contact person for Document Exchange (SupplyOn DMS)
- For access to SupplyOn
- For difficulties to download the documents
- DEX package is not displayed in SupplyOn
- Onboarding of affiliates

2





Document EXchange





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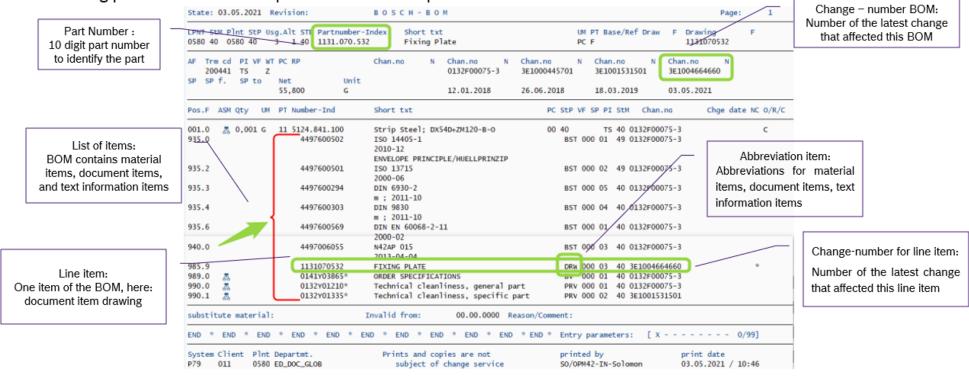
1 Explanation about documents exchanged

1.1. BOM

Bill of Material (BOM) is the formally structured list of components which are used to produce a final product. BOMs contain the object number of each component, the quantity, unit of measure and the corresponding document info records. BOM contains material items, document items, and text information items.

Document items in the BOM are e.g. usually drawings, Bosch Norm, instructions, order specification.

The table below shows the type of document items, their abbreviations and whether they are included in the Document EXchange (DEX) or not:



The following picture shows an example for a BOM and explains the content.

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2 DEX - PILUM DEX

The documents are sent by creating a DEX package via $\ensuremath{\mathsf{PILUM}}$

2.1 DEX – Electronic Exchange

The Document EXchange is done via SupplyOn. The supplier can provide the feedback electronically. The preferred way for exchanging documents is via SupplyOn.

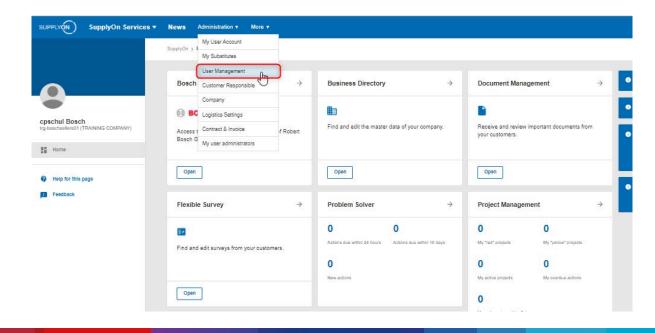
a) Contact Person for DEX via SupplyOn @ Supplier

To ensure to receive all documents via SupplyOn, it is essential that each supplier defines a contact person for DEX in SupplyOn.

The DEX contact person is responsible for

- reception of exchanged documents
- provision of feedback (declining/accepting).

The supplier has to enter the contact details in SupplyOn using the Management Cockpit. The following pictures show how to enter the contact details. Under Administration, select user management





Select under "service settings" the tab "Document Management" and enter the user data accordingly:

SUPPLYON SupplyOn	Services v News Administration v More v			trg-boschsellersD1 (TRAINING COMPAN	Y) - Basch apsah Log Or
My SupplyOn > User management: Se	ervice settings: Document Management			Help and support Print Me	ssage to support
My work area User accounts	Service settings Standard settings				
Customer responsible settings for corpo	snate group trg-boschsellers SCG:			Company: 999511108 trg-boschsellers01	TRAINING C
Sourcing Document Mana	gement Problem Solver Collaboration Folders Project Mana	gement Logistics & Finance (Auto) Teams			
comprehensive overview of all custome	ess can edit documents provided by customers in SupplyOn Service Document Mana r responsibles is available in the Business Directory tao "Contact Persons".				ew assignment
Customer responsible	set 🗑 Company	Responsible for customer	E Authorization	E Areas of responsibility	E
(RB-PRD-Training-Supplier 01), Iver	n Junghaenel (PT) Irg-boschsellers01 (TRAINING COMPANY)	All customers	👻 Write 💙	Alt	*
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trg-seller1-DEX, trg-seller1-DEX	trg-boschsellers01 (TRAINING COMPANY)	All customers	Viente 💙	All	*
4 Customer responsibles Select all D	eselect al	Rows per page 10		First Previous Page 1	of 1 Next Last
Remove					
		Save Cancel			
		and the second s			

Bosch (commercial buyer) needs to know the contact details of this person as well as updates and changes.

DEX	Manual
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b) DEX via SupplyOn

Once Bosch sends a document package to supplier, the supplier's contact person receives a notification from SupplyOn via email. The valid documents are available now via SupplyOn Document Management System inbox. The DEX package can be accessed using the link in the notification email.

The picture below shows an example of this email:

From: SupplyOn Document Management <<u>DocumentManagement@Mail.SupplyOn.com</u>> Sent: Mittwoch, 13. Januar 2021 11:24 To: Kloppig Sonja (GS/PSC21) <<u>Sonja.Kloppig@de.bosch.com</u>> Subject: New document available

Dear Ms. Kloppig, Your company trg-boschsellers01 (TRAINING COMPANY) (Adorf) has received a new document. Please respond. Type Package Name/no. DEXP129004 Version 001 DEXP129004 Title Release date Status Published Customer Robert Bosch GmbH Link to document This e-mail was also sent to the following recipients: Tobias Adams, s1 cpschul01, lven Junghaenel (PT) (R8-PRD-Training-Supplier 01),

Please note that the correct RBSNo has to be used in case there are multiple entities within a Supplier's company.

Once logged on into SupplyOn, below is the view of the DEX package and its documents:

SUPPLYON)	SupplyOn Services 🔻	News Administr	ation v More v				
My SupplyOn > Do	cument Management: Open/new docum	ente					
Open/new	Responded Subscribed Al	Sent documents	5				
Document details,	material number, process Search	Reset search	I	\bigtriangledown			
Advanced Search							
Туре	😥 Name/no.	Version I	I Title	Statue	🗐 Sent by	Release date	Date of receipt
Logistics	DEXP144132 - 313110004C 2190 - 0399Y25192 - BV	01	ORDER SPECIFICATIONS	Published	Robert Bosch GmbH	2/11/2022	2/11/2022 1:52 PM MET
ECM	DEXP144132 - DEX-Change Letter - ECN	001	Change Letter	Published	Robert Bosch GmbH	2/11/2022	2/11/2022 1:52 PM MET

The DEX package always contains a change letter with detailed information about the attached documents and the further proceeding (e.g. next supplies to BOSCH, PPA/PPAP...).

For better understanding, please read the change letter information first. Furthermore, please check the content of the received documents and provide your feedback electronically.

c) DEX via Email

For suppliers not registered for SupplyOn, the DEX packages are sent via email with a zipped attachment of documents. The attachment is protected with a password: the details are available in the mail you receive. The supplier can save the documents, after entering the correct password. For better understanding, kindly read the change letter first. Please check the contents of the received documents and provide your feedback via signed copy of the change letter to Bosch. Please ensure the contact details for the correct recipient for Document Exchange is known to your Commercial Purchasing contact at Bosch.

Winzip 8.0 or above is required to open the attachment.

If you do not receive the email, please ensure that it is not blocked by your firewalls.

DEX via SupplyOn is the preferred mode of Document Exchange. Please contact your Commercial Purchasing contact at Bosch for further details.



3 DEX – Acceptance

A formal acceptance of the documents is mandatory for all documents including the change letter and also for the DEX package.

Acceptance of the DEX package means overall acceptance of all documents within the DEX package. Electronic Acceptance via SupplyOn is legally binding.

Once

- the documents are accepted and
- the "Change Letter" is accepted and
- the DEX package is accepted.

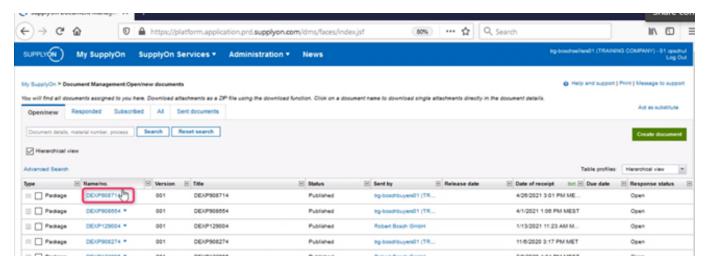
supplier must send a response electronically via single click.

Upon acceptance suppliers confirm

- Reception of the documents
- Usage of these for future production
- · Invalidation of previous versions of these documents
- Confirmation from sub-suppliers of the documents if relevant for them.

3.1 Acceptance of the documents

First select the DEX package which documents should be accepted:



Click on "linked documents":

	t Management:Open/new documents > DEXP908654 (001): Link					Help and support Print Messa	
ocess							
			Send feedback Cancel More	·			
Process details	Linked documents History and references						
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XP908854 (001)	DEXP908854		Status	Published			
sponse comment:			Response status:	Change			
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nked documents							Collapse
ype	Namelno.	E Version	Title	🖻 Status	Response comment	Response status	
ECM	DEXP908854 - DEX-Change-Letter	001	Change Letter	Published		Accepted	
Drawing	DEXP908854 - 3130591283_DRW	2	Zeichnung	Published		Accepted	
General General	DEXP908854 - 3130591283_STL	24	Motorgehäuse	Published		Accepted	
Drawing	DEXP908854 - 1488C08152_DRW	02	Nockenwelle	Published		Open 🔻	
+ General	DEXP908854 - 1486C08152_STL	1	NOCKENWELLE, SH, STROKES,	5,E, GRINDING Published		Open 🔻	
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Apply status to	Jocaments						
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Click on "linked documents":

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My SupplyOn > Docur	nent Management:Open/new documents > DEXP908654 (0	01): Linked documents				Help and support Print Messi	age to suj	pport
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Current process							Collapse	1
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Linked documents							Collapse	Ð
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 Drawing 	DEXP908854 - 3130591283_DRW	2	Zeichnung	Published		Accepted		
• General	DEXP908854 - 3130591283_STL	24	Motorgehäuse	Published		Accepted		
Drawing	DEXP908854 - 1466C08152_DRW	02	Nockenwelle	Published		Open 💌		
• General	DEXP908854 - 1468C08152_STL	1	NOCKENWELLE, SH, STROK	68,5,E, GRINDING Published		Open 💌		
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5 Entries Select all	Deselect all		Rows per page 10			First Previous Page 1	of 1 Next	! Last
			Send feedback Cancel Mor	• *				



The documents are available for view / download by the supplier.

ocument				
		Send feedback	Cancel More *	6
Document detail	5 History and references			
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Response from:	trg-baschsellers01 (TRAINING COMPANY)			
Status:	Open Change			
Document details	201			Jan 11, 2022 12:53:59 PM
Type:*	ECM DEXP909406 - DEX-Change-Letter - ECN		Delivery date:	Jan 11, 2022 12:03:09 PM
Document name/number:*	DEVERSION OF DEVENING CONTRACTORY			
Version:	001		Company:	trg-boschbuyers01 (TRAINING COMPAN)
Status:	Published		Contact:	Micha Test Name
Release Date:	1/11/2022			
Part Number:				
EC Number:				
Technical Impact:				
Technical Purchasing Contact:				
Lonacc	Change Letter			
Description:				
acaunpoon.				
Attachments:				
Auachments:	Change_Letter.pdf (en, 88 KB);			

The first step is to accept each document one by one:

	plyOn Services • News Administration • More	Ť				trg-boschsellers01 (TRAINING COM	PANY) - Bosch	apschu Log Ou
ly SupplyOn > Document I	Management: All documents > DEXP909406 (001): Linked documente					Help and support Print	Message to s	upport
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🔄 🗌 Standard	DEXP909406 - 1234567890 - 0780 - 46345 - BST	001	3452	Published	Decline comment	Declin Accept		
Apply status to do	ocuments					Decline		
2 Entries Select all De	eselect all		Rows per page 10			First Previous Page	1 of 1 Ne	st Lasi
N			Send feedback Cancel More					

DEX Manual

It is also possible to accept all documents with one click:

My SupplyOn > Document Management: Open/new documents > DEXP909415 (001): Linked documents

Process									
					Send	i feedback	Cancel	More 🔻	
Process details Lin	ked documents History and	references							
Current process									
DEXP909415 (001) DEXP	909415						Status		Published
Response comment:							Response s	tatus:	Accepted
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🕂 🗹 General	DEXP909415 - 234-04167 - 3741 - 45	58 - BS - Resend - 6		001		678			
2 Set status to "In procession Accepted Decline Mark as "Not relevant". Accepted with agreement	g"]				Send	Rows per p	age 10 💌 Cancel	More 💌	

A window opens, please select "send response":

sporee 'Accepted' for	2 documents	
Send Response	Cancel	
Ող		

3.2 Acceptance of the DEX package

After the documents have been accepted, the second step is to accept the package. Click on "Change":

PPLYON Suppl	yOn Services News Administration More					trg-boschsellers01 (TRAINING COMPANY) - Bosch opsch Log O
y SupplyOn > Document Ma	magement: All documents > DEXP909406 (001): Linked documente					O Help and support Print Message to support
• The status of 2 linked	documents was changed.					
Process						
			Send feedback Cancel Mo	ire *		
Process details L	inked documents History and references					
Current process					Status Published	Contegene (
DEXP909406 (001) DE	KP909408		Status	Published	Response status: Accepted	
Response comment:			Response status	Change	Decline d	2
Linked documents						Colleges
Туре	🗉 Name/no.	I Version	🖃 Title	🖃 Status	Response comment	🖂 Response status
ECM	DEXP909406 - DEX-Change-Letter - ECN	001	Change Letter	Published		Accepted
E Standard	DEXP909406 - 1234567890 - 0780 - 46345 - BST	001	3452	Published		Accepted
Apply status to doct	uments					
2 Entries Select all Desc	lect all		Rows per page 10 👻			First Previous Page 1 of 1 Next Las
			Send feedback Cancel Mo	re •		



Please choose "Accepted":

		Send Feedb	ack Cancel More	
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Process response		Process response		
lesponse from: Itatus:	Open	Response from: trg-boschsellers01 (TRAINING COMPANY) Status: Open Accepted Decline		
Process details	Change			
ype:*	Package		Delivery date:	Jan 11, 2022 12:54:03 PM
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ime/no.:*			Company:	trg-boschbuyers01 (TRAINING COMPANY) Micha Test Name
rsion:	001			Micha lest Name
rsion:	Published		Contact:	
ime/na.:" ission: atus: Je:			Contact:	



Please use button "send feedback":

PPLYON	SupplyOn Services •	News	Administration v	More v
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My SupplyOn > Document Management: All documents > DEXP909406 (001): Process details

rocess				-
		Send feedback Cance	More 💌	
Process details	Linked documents History and references	Send	l f <mark>e</mark> edback]
Process response				<u>_</u>
Response from: Status:	trg-baschsellers01 (TRAINING COMPANY) Accepted Change			
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Version:	001	Company	. B	rg-baschbuyers01 (TRAINING COMPANY)
Status:	Published	Contact:		Vicha Test Name
Title:	DEXP909406			
Description:	ENGINEERING CHANGE			
		Send feedback Cance	More *	

When the supplier accepts the DEX, it is mandatory to inform the sub-suppliers about the change and distribute the updated documents, as necessary.



4 DEX – Decline

It is possible to decline or accept the documents individually in each position.

If any document of the DEX package or the DEX package itself is declined, it is mandatory to add the reason for declining in the comment box. However, the DEX package can only be set to "Declined" when at least one document is individually declined.

For example, Document 1 can be accepted, and Document 2 can be declined in the same DEX package, and the overall status of the DEX package can only be "Declined'.

Please note the function "attachments" is not supported (are not sent via SupplyOn).

Please choose "Decline":

00088				
		Send fee	dback Cancel More	·
Process details	Linked documents History and referen	nces		
Process response		Process response	_	
lesponse from: Status:	trg-baschsellersü1 (TRAINING COMPANY) Open Change	Response from: trg-baschsellers01 (TRAINING COMPANY) Status: Open Accepted Decline		
rocess detalls	Change	Process details		
/pe:*	Package		Delivery date:	Dec 10, 2021 4:55:50 PM
sme/no.:*	DEXP909370 001			trg-baschbuyers01 (TRAINING COMPA
atus:	Published		Company: Contact:	Hannemann Manfred (AA/PSG)
le:	DEXP909370		Contact:	
escription:	ENGINEERING CHANGE			



Please use button "send feedback" and provide the "Decline Comment":

SUPPLYON	SupplyOn Services 🔻	News	Administration v	More v
My SupplyOn > D	ocument Management: All documents	> DEXP9093	70 (001): Process detail	10

Process				-
		Send feedb		•
Process details	Linked documents History and references		Send feedback	
Process response				
Response from: Status:	trg-boschsellers01 (TRAINING COMPANY) Declined Change			
Decine comment.*				
Process details			Sector Marcol	
Type;*	Package DEXP909370		Delivery date:	Dec 10, 2021 4:55:50 PM
Name/no.:*	001		Company:	trg-boschbuyers01 (TRAINING COMPANY)
Status:	Published		Contact:	Hannemann Manfred (AA/PSG)
Title:	DEXP909370			
Description:	ENGINEERING CHANGE			
<u></u>		Send feedb	ack Cancel More	

In case of declining documents, suppliers have to contact

Bosch technical purchasing contact in case of technical concerns & questions Bosch commercial purchasing contact in case of commercial concerns & questions.

After clarification, the DEX package can then be accepted.



5 Activities after Dex

In the change letter, the rules and activities after DEX are described, mainly for

- application of Bosch norm "N2580" (Prohibition and declaration of substances) as the basis for all shipments Correct shipping documents
- Initial sampling
 Marking of deliveries after the change
- •

5.1 Prohibition and declaration of substances

Bosch Norm "N2580" (Prohibition and declaration of substances) serves as the basis for all shipments to Bosch. A valid version of this norm is available here: https://www.bosch.com/company/supply-chain/information-for-business-partners/#further-information.

5.2 Correct shipping documents

For all products with a revision number in the bill of material, it is most important that this number is mentioned on all shipping documents. Without this information, it will not be possible for Bosch to accept the shipment, and we will be forced to send you a complaint notice regarding these parts.

5.3 Initial Sampling - PPA/PPAP procedure

Production Process and Part Release procedure (PPA/PPAP) must be performed in line with VDA Volume 2 (current edition) or AIAG PPAP manual (4th edition) requirements. Supplier is obliged to conduct a complete PPA/PPAP and document the results as evidence for the fulfillment of the requirements. This applies as well to an evaluation after a change.

Further information is available here: https://www.bosch.com/company/supply-chain/information-for-business-partners/

5.3.1 Initial Sampling after a change WITH technical impact on product and/or process

Bosch requests documents and samples as evidence for the PPA/PPAP and adds specific sampling requirements, if needed. Preferably, the documents are transferred electronically via eISIR.

5.3.2 Initial Sampling after a change WITHOUT technical impact on product and/or process

For changes WITHOUT technical impact on product and/or process, an update of the release on the current documentation status is needed.

However, it is possible for a customer to **waive** the submission of documents.

BOSCH uses this **waiver** possibility. A document will be issued by Bosch which serves as an update of the existing release on the documentation status after this type of change (WITHOUT technical impact on product and/or process).

Hint: In the past these release updates were managed with the so-called "cover sheet releases".

The supplier is informed about the update of the release on the current document status.

Supplier takes necessary steps to enable deliveries based on the new document status (e.g. internal release, update labeling).

5.4 Marking of deliveries after a change

The first three deliveries after the start of a series and after the aforementioned change measures must be marked according to Bosch specifications (Specifications in accordance with the logistics manual below or separate agreements).

In addition, the papers accompanying the first three deliveries after a change must be marked as follows:

• 1. delivery, 2. delivery, 3. delivery after change [number of the change, revision level].

Deliveries of samples for PPA/PPAP release (initial sample) must be clearly marked on the packaging and on the delivery paper.

The revision level must also be clearly visible on the delivery papers for all products with a revision level is listed on the bill of materials (BOM).

It is as well necessary to comply with all rules and notes arising from the current version of the Bosch supplier logistics manual. For further details see https://www.bosch.com/company/supply-chain/information-for-business-partners/

6 Reminder & Escalation

A reminder letter will be automatically triggered by SupplyOn if supplier has not replied two weeks after reception of DEX package.

Bosch will contact the supplier to clarify the reasons for not answering and accepting the DEX package. Any queries which can not be solved will be addressed to the commercial and / or technical contact for further problem solving.