BMW eInvoicing
EDI Implementation Guideline

VDA 4938 T2 v.1.3

Contents

Change History

Version	Summary of Changes	Date
1.0	MIG created / GoLive	09/01/2019
1.1	Incoming/Outgoing MIG - page 11/12 Additional BMW Company Codes – page 15 Samples – page 15 New BMW Business Unit Codes – page 16	04/11/2019
1.2	Additional BMW Company Codes - page 15 Address update BMW Business Unit Codes - page 16 BMW plant codes old/new outgoinig invoices – page 19	30/11/2020
1.3	New BMW Company Code – page 15	17/09/2021

1.INTRODUCTION

Document was created for BMW partners, who want to connect to eInvoicing platform. The main objective of the document is to describe the principles of compatibility of documents created based on VDA 4938 T2 standard with eInvoicing platform. The document highlights the parameters which are necessary in order to properly generate and route VDA 4938 T2 messages according to eInvoicing platform compatibility requirements. Chapters 7 & 8 contain Message Implementation Guides (MIG).

Main principles of VDA 4938 T2 EDI Implementation Guideline:

- Parties identification

- Document versioning

- Version and association assigned code

- Test indicator

- MIG of incoming invoice and MIG outgoing invoice containing data fields which are set of data possible for use in exchange of VDA 4938 T2 invoices between BMW and partners.

Below is a glossary of terms:

Dictionary	
Routing	Routing is a process of identifying so called routing parameters in order to determine clearly and definitely relation between document sender and document receiver. Sender, receiver, conformance level and test indicator are input routing parameters. Based on them target format and communication channel are determined, which are output parameters. Each of those parameters can be determined dynamically, based on data contained inside message.
Document incoming	The document sent from partners to BMW
Document outgoing	The document sent from BMW to partners
BMW company code	Code assigned to BMW company by BMW (AN..2) BMW Company code examples: A1 – for BMW AG MU – for BMW UK Manufacturing Ltd. There are more codes for other BMW Companies
Partner number	Partner number assigned by BMW (supplier number) Partner number example: "10000310"
VDA	(Verband der Automobilindustrie) is association of the automotive industry, dealing with standardization, development and research in the automotive industry.

Dictionary	
UN/EDIFACT	(the United Nations rules for Electronic Data Interchange for Administration, Commerce and Transport) comprises a set of internationally agreed standards, directories, and guidelines for the electronic interchange of structured data, between independent computerized information systems.
VDA 4938 T2	Message format published by VDA organization. The recommendation utilizes structured flat file UN/EDIFACT D07A invoice message and it is a subset of Global INVOIC. Message implementation guide contains segments, data element and qualifiers recommended by VDA. It means UN/EDIFACT standard is narrowed and suited to support many business processes (invoice processes) like: Commercial invoice, Debit note, Credit note, Self-billed invoice, etc. used in the automotive industry.
MIG	**M**essage **I**mplementation **G**uideline

2.INTERCHANGE STRUCTURE

An EDIFACT interchange file contains an interchange (UNB-UNZ) with only one message (UNH-UNT). The interchange frame can be preceded by a service string advice to define the used separator characters (recommended). One interchange file can only contain messages of the same type (e.g. INVOIC). BMW generates only one outgoing invoice message per interchange. It means in documents from BMW to partners there can only be **one** UNH per **one** UNB. Incoming invoices can contain only **one** UNH per one UNB too and assuming there are no attachments with the invoice package. For more information about attachments and containers usage please follow document „BMW_eInvoicing_EDI_Implementation_Guideline_CONTAINERS_v1.1.EN.pdf ". To send attachments with a VDA 4938 you have to use VDA4983.

Status	Segment	Description
Optional	UNA	Service String Advice
Mandatory	UNB	Interchange header
Mandatory	UNH	1x Message header
.	…	
Mandatory	UNT	Message segments 1x Message trailer
Mandatory	UNZ	Interchange trailer

3. ROUTING & OTHER PARAMETERS

There are certain routing parameters in the message content.

- ■ message type
- ■ invoice process
- ■ business area
- ■ sender of the message
- ■ receiver of the message
- ■ test indicator

Based on those parameters target format and communication channel are determined, which are output parameters. Parameters are determined dynamically based on data contained inside the message.

<u>Message type</u>

Based on message type it must be possible to determine business type of the message:

Format	Source field	Example values
VDA4938T2	/UNH/S009/0065	INVOIC

<u>Invoice process</u>

This parameter is designated to further distinguish type of the invoice, for example self-billing invoice. Based on this configuration (channel / format) can be differentiated. Source field for this parameter is:

Format	Source field	Example values
VDA4938T2	/BGM/C002/1000	CAN cancellation SBI self billing invoice GUA guarantee FCS fix cost settlement REV revaluation CDN credit or debit Notes VHS vehicle settlement BPO bank posting BTS business trip settlement FCN freight credit notes MMS maintenence material settlement LTS literature settlement

CNS cantine settlement
GUF guarantee freight
INF Information letter
INC Incoming

Values from that field must use the same set of invoice processes as defined by BMW. In other words, partners must know the rules to classify invoice to proper invoice process on BMW side.

Business Area

This parameter is designated to further distinguish department associated with the incoming invoice, for example to indicate specific branch. The BMW plant code is not needed, because BMW uses only one code for all plants. Source field for this parameter is:

Format	Source field	Example value
VDA4938T2	UNH.NAD C082.3039 where 3035 = "ST"	LX

Values must use the same set of business areas as defined by BMW. In other words, partners must know the logic to choose business area on BMW side related to specific invoice. Business Area can be an identification of BMW Branch or Dealer. For incoming invoices, the code does not refer to the ShipTo address. For detailed explanation, please read the incoming VDA 4938 guideline.

Business Unit

This parameter is designated to identify the exact receiver of the incoming invoice, if the invoice is for a dealer or branch. Source field for this parameter is:

Format	Source field	Example value
VDA4938T2	UNH.NAD C082.3035 = "ST" – RFF C506.1154 where 1153 = "UC"	LXA

Sender of the message

This parameter is used to determine the party which sends the message. As a general rule, partners must be identified by their respective partner numbers (in BMW systems). BMW affiliates must be identified by BMW company codes.

Only in case of outgoing invoices partner has the possibility to set alternative customer number only for identification of the sender (instead of default BMW company code) via web application.

Source fields for this parameter for invoice message are:

Format	Source field
VDA4938T2	/UNB/S002/0004

As a general rule, each message may contain only one sender.

<u>Receiver of the message</u>

This parameter is used to determine the party which receives the message. As a general rule, partners must be identified by their respective partner numbers (in BMW systems). BMW affiliates must be identified by BMW company codes. Source fields for this parameter for invoice message are:

Format	Source field
VDA4938T2	/UNB/S003/0010

<u>Test indicator</u>

Some message types or formats may contain test indicator, distinguishing messages sent in test mode. Source fields for this parameter are:

Format	Source field	Example value
VDA4938T2	/UNB/0035	1

Presence of this parameter may affect processing mode, in particular messages sent from partners in test mode are used exclusively for tests on eInvoicing platform and are not forwarded to BMW. For more information please refer to chapter 5.

3.1   MESSAGE VERSION

VDA 4938 T2 recommendation utilizes EDIFACT INVOIC message version D07A. Version is defined in UNH/S009/0052+0054. Message version is fixed type parameter and it not used for routing procedure.

Example:

■   UNH+1+INVOIC:D:07A:UN:GAVA23'

3.2   ASSOCIATION ASSIGNED CODE

In usual EDIFACT INVOIC D07A association assigned code is optional. However VDA 4938 T2 requires this code. eInvoicing verifies the requirement by inspection of data element UNH/S009/0057. Association assigned code is fixed type parameter and it not used for routing procedure.

Example:

■   UNH+1+INVOIC:D:07A:UN:GAVA23'

4.PARTY IDENTIFICATION

Parties are identified by the same identifiers in routing segments as well as in invoice content segments. Identifiers BMW Company Code and Partner Number have to be used in UNB envelope segment and also in NAD segments.

Example of self-billing invoice party identification:

- UNB+UNOC:3+BMWGROUPA1:ZZZ+BMWTP10019510:ZZZ+161130:1250+1000000232++
  ++++1'

eInvoicing requires the Partner to use qualifier "ZZZ" for routing party identifiers. Messages created by eInvoicing in format VDA 4938 T2 contain qualifiers "ZZZ" in UNB segment.

- UNB+UNOC:3+BMWGROUPA1:ZZZ+BMWTP10019510:ZZZ+161130:1250+1000000232++
  ++++1'

Example of correct envelope in outgoing document:

- UNB+UNOC:3+BMWGROUPA1:ZZZ+BMWTP10019510:ZZZ+161130:1250+1000000232++
  ++++1'
- Invoice addressed from BMW company code A1 to partner number 10019510.

Example of correct envelope in incoming document:

- UNB+UNOC:3+BMWTP11627010:ZZZ+BMWGROUPA1:ZZZ+160826:0934+1000000337++
  ++++1'
- Invoice addressed from partner number 11627010 to BMW company code A1.

5. TEST INDICATOR

Some message types or formats may contain test indicator, distinguishing messages sent in test mode. This parameter may affect processing mode, in particular messages sent from partners in test mode are used exclusively for tests on eInvoicing platform and are not forwarded to BMW.

Documents in production mode are only allowed to send without test indicator via production relation.

Test flag is required when Partner uses test transmission channel profile. Documents with test indicator are only allowed to send via test relation.

Example:

■ UNB+UNOC:3+BMWGROUPA1:ZZZ+BMWTP10019510:ZZZ+161130:1250+1000000232++

++++1'

6. ENCODING

Only possible encodings (ISO) used for VDA 4938 T2 messages are:

- UNOA UN
- UNOB UN
- UNOC UN
- UNOD UN
- UNOY UN

Encoding	Allows
UNOA	As defined in **ISO 646** (with the exception of letters, lower case a to z). • A to Z • 0 to 9 • . , – ( ) / = (space)
UNOB	As defined in **ISO 646** • All of UNOA • a to z • ' + : ? ! " % & * ; < >
UNOC	As defined in **ISO 8859-1** : Information processing – Part 1: Latin alphabet No. 1.
UNOD	As defined in **ISO 8859-2** : Information processing – Part 2: Latin alphabet No. 2.
UNOY	**ISO 10646-1** octet without code extension technique.

7. MIG INCOMING

The implementation guideline for incoming VDA4938 invoices is in the guideline zip package.

File name:
BMW_eInvoicing_EDI_Message_Implementation_Guideline_**incoming**_VDA4938T2_v.2.9_EN.pdf

(Incoming - partner sends VDA4938 invoice to BMW

8. MIG OUTGOING

The implementation guideline for outgoing VDA4938 invoices is in the guideline zip package.

File name:
BMW_eInvoicing_EDI_Message_Implementation_Guideline_**outgoing**_VDA4938T2_v.2.9_EN.pdf

(Outgoing - BMW sends VDA4938 invoice to partner)

9. COMPLEMENTARY SOURCES

- https://www.vda.de/de/services/Publikationen/global-invoic-anwendungshandbuch.html
- Container (send attachments with VDA4938):

    see BMW_eInvoicing_EDI_Implementation_Guideline_CONTAINERS_v1.1.EN.pdf

10. EXAMPLES

10.1 EXAMPLE VDA 4938 T2 INCOMING INVOICE

Examples of eInvoicing compatible incoming VDA 4938 files are in the folder samples of the guideline zip package.

10.2 EXAMPLE VDA 4938 T2 OUTGOING INVOICE

Examples of eInvoicing compatible outgoing VDA 4938 files are in the folder samples of the guideline zip package.

11. CODE LISTS

11.1 BMW COMPANY CODE LIST

BMW Company Code	Company Name	street	city	postal code	country	VATID (EU) TAXID (NON EU)
A1	BMW AG	Petuelring 130	München	80809	DE	DE129273398
B7	BMW Fahrzeugtechnik GmbH	Stedtfel-der Str. 2	Krauthausen	99819	DE	DE811163085
C5	BMW Motoren GmbH	Hinterbergerstraße 2	STEYR	4400	AT	ATU41644903
FE	Rolls-Royce Motor Cars GmbH	Petuelring 130	München	80809	DE	GB800366563
LG	Rolls-Royce Motor Cars Limited	The Drive Westhampnett Chichester	West Sussex	PO18 0SH	GB	GB239354938
LY	BMW SLP S.A. de C.V.	Boulevard BMW 655	San Luis Potosi	C.P.795 26	MX	BSL140625TX1

MU	BMW (UK) Manufacturing Ltd.	Eastern Bypass Road	Oxford	OX4 6NL	GB	GB239354938
RK	BMW Mobility Development Center s.r.o.	Bucharova 2817/13	Praha	15800	CZ	CZ08082189
S5	BMW Österreich Holding GmbH	Hinterbergerstraße 2	STEYR	4400	AT	ATU24214703
UH	BMW Manufact Hungary Kft	Széchenyi utca 31	Debrecen	4025	HU	HU26531436
U0	BMW Hams Hall Motoren GmbH	Canton Lane Coleshill	Birmingham	B46 1GB	GB	GB239354938

11.2 BMW BUSINESS AREA CODE LIST

BMW AREA CODE	BUSINESS AREA NAME
A1	BMW headquarter, all plants
BX	Niederlassung/branch Berlin
DG	Servicezentrum/branch Dingolfing
DX	Niederlassung/branch Düsseldorf
FX	Niederlassung/branch Frankfurt
HH	Niederlassung/branch Hamburg
HX	Niederlassung/branch Hannover
LX	Niederlassung/branch Leipzig
MX	Niederlassung/branch München
NG	Niederlassung/branch -overall (PCO)
NX	Niederlassung/branch Nürnberg
RX	Servicezentrum/branch Regensburg
SX	Niederlassung/branch Stuttgart
XA	Alpenhotel Ammerwald

11.3 BMW BUSINESS UNIT CODE LIST

Please note that the BMW Business Unit code can only be used in combination with the corresponding BMW Business Area code. In the following table you will find the BMW Business Area code from chapter 11.2 in the first column and the applicable BMW Business Unit Code in column 2.

A combination DG -> BXA is not possible and wrong.

A valid combination is BX -> BXA.

If the BMW Business Area code is A1, the Unit code is not needed.

BMW AREA CODE	BMW UNIT CODE	BMW BUSINESS UNIT NAME
BC	BCA	BMW Classic Moosacher Str. 66
BX	BXA	Niederlassung Berlin Kaiserdamm 90 / Hauptbetrieb
	BXB	Niederlassung Berlin Gehringstrasse 20
	BXD	Niederlassung Berlin Kaiserdamm 90 / Mini
	BXE	Niederlassung Berlin Blumberger Damm 2
	BXF	Niederlassung Berlin Kaiserdamm 90 / Motorrad Zentrum
DG	DGA	Servicezentrum Dingolfing Landshuter Str. 12
	DGB	Niederlassung Landshut Ohmstr. 2
	DGC	Niederlassung Dingolfing Karl-Dompert-Str. 7
	DGE	Niederlassung Dingolfing Landshuter Str. 12 / Motorrad Zentrum
	DGF	Niederlassung Moosthenning Gewerbefeld 4
DX	DXA	Niederlassung Düsseldorf Grafenberger Allee 277/258
	DXB	Niederlassung Düsseldorf Theodorstraße 279
	DXC	Niederlassung Düsseldorf BMW Motorradzentrum
	DXD	Niederlassung Bonn Vorgebirgsstrasse 95 / Hauptbetrieb
	DXE	Niederlassung Bonn Vorgebirgsstrasse 95 / Motorrad Zentrum
	DXF	Niederlassung Dortmund Nortkirchstrasse 111 / Hauptbetrieb
	DXG	Niederlassung Dortmund Nortkirchstrasse 111 / Motorrad Zentrum
	DXH	Niederlassung Essen Berthold-Beitz-Boulevard 508 / Hauptbetrieb
	DXK	Niederlassung Essen Berthold-Beitz-Boulevard 508 / Motorrad Zentrum
FX	FXA	Niederlassung Frankfurt Hanauer Landstraße 182/255
	FXB	Niederlassung Offenbach Spessartring 9
	FXC	Niederlassung Frankfurt Hanauer Landstr. 182
	FXD	Niederlassung Dreieich Gustav-Otto-Strasse 1 / Motorrad Zentrum
	FXE	Niederlassung Dreieich Gustav-Otto-Strasse 1 / Gebrauchtwagenzentrum
	FXF	Niederlassung Darmstadt Marburger Str. 22
	FXM	Niederlassung Kassel Scharnhorststrasse 14
	FXN	Niederlassung Kassel Scharnhorststrasse 14 / Motorrad Zentrum
	FXS	Niederlassung Frankfurt Hanauer Landstrasse 182
HH	HHA	Niederlassung Hamburg Offakamp 10 / Hauptbetrieb

	HHB	Niederlassung Hamburg Süderstrasse 133
	HHC	Niederlassung Hamburg Friedrich-Ebert-Damm 120
	HHD	Niederlassung Barsbüttel Rahlstedter Strasse 4-10
	HHE	Niederlassung Hamburg Osdorfer Landstrasse
	HHG	Niederlassung Hamburg Offakamp 10 / Motorrad Zentrum
	HHH	Niederlassung Hamburg Bergedorfer Strasse 68
HX	HXA	Niederlassung Hannover Lister Kirchweg 87
	HXB	Niederlassung Hannover Meelbaumstrasse 3
	HXC	Niederlassung Hannover Lissabonner Allee 3 / EXPO Park
	HXD	Niederlassung Hannover Lissabonner Allee 3 / Motorrad Zentrum
	HXE	Niederlassung Göttingen Herbert-Quandt-Strasse 8
	HXF	Niederlassung Bremen Borgwardstrasse 4 / Hauptbetrieb
	HXG	Niederlassung Bremen Borgwardstrasse 4 – 6 / Motorrad Zentrum
LX	LXA	Niederlassung Leipzig Zwickauer Strasse 55 / Hauptbetrieb
	LXB	Niederlassung Leipzig Zwickauer Strasse 55 / Motorrad Zentrum
	LXC	Niederlassung Leipzig BMW Allee 1
	LXD	Niederlassung Chemnitz Röhrsdorfer Allee 3 / Hauptbetrieb
	LXE	Niederlassung Chemnitz Röhrsdorfer Allee 3 / Motorrad Zentrum
	LXF	Niederlassung Dresden Dohnaer Strasse 99 / Hauptbetrieb u. Gebrauchtwagen
	LXG	Niederlassung Dresden Dohnaer Strasse 99 – 101 / Motorrad Zentrum
MX	MXA	Niederlassung München Frankfurter Ring 35
	MXB	Niederlassung Garching-Hochbrück Daimlerstrasse 21
	MXD	Niederlassung München Riesenfeldstrasse 7
	MXE	Niederlassung München Drygalski-Allee 35
	MXF	Niederlassung München Werner-Heisenberg-Allee 10
	MXG	Niederlassung München Frankfurter Ring 35
	MXH	Niederlassung München Nordallee 62
	MXI	Niederlassung München Frankfurter Ring 29
	MXK	Niederlassung Garching-Hochbrück Zeppelinstrasse 5
	MXV	Niederlassung München Ingolstädter Straße 172
NX	NXA	Niederlassung Nürnberg Witschelstrasse 60-62
	NXB	Niederlassung Nürnberg Kilianstrasse 181
	NXC	Niederlassung Nürnberg Witschelstrasse 60
	NXE	Niederlassung Nürnberg Regensburger Strasse 420
	NXS	Niederlassung Nürnberg Witschelstrasse 59
RX	RXA	Servicezentrum Regensburg Herbert-Quandt-Allee

	SXA	Niederlassung Stuttgart Untere Waldplätze 3
	SXB	Niederlassung Stuttgart Pragstrasse 140
	SXC	Niederlassung Stuttgart Pascalstr. 1
	SXD	Niederlassung Mannheim Neckarauer Strasse 164
SX	SXE	Niederlassung Mannheim Inselstrasse 2
	SXG	Niederlassung Saarbrücken Am Halberg 6-7
	SXH	Niederlassung Saarlouis Schanzenstrasse 20
	SXK	Niederlassung Saarbrücken Am Halberg 6-7
	SXL	Niederlassung Kirkel Konrad-Zuse-Str. 1
XA	XA	Alpenhotel Ammerwald

11.4 BMW PLANT CODE LIST

In outgoing invoices (Self Billing Invoices) BMW sends different plant codes in NAD+ST C082.3039

than in forecasts or shipments. This table will help to identify the correct BMW plant code.

Plant Code VDA4938	Plant code VDA4905
A1	001
A101	001
A110	010
A111	010
A115	015
A116	016
A117	017
A120	020
A121	020
A123	020
A130	030
A131	030
A140	040
A141	041
A147	040
A148	040
A149	049
A150	070
A156	156
A160	060
A162	060

A163	163
A164	164
A165	WKD
A166	060
A167	167
A168	060
A170	007
A180	080
A190	020
A1C5	WKD
A1F2	020
A1F3	030
A1F4	040
A1U0	1U0
B700	008
BXA	001
BXB	001
BXD	001
BXE	001
BXF	001
BXG	001
C100	092
C5	C5
CX10	CX1
CXA	001
CXB	001
DC17	170
DGA	001
DXA	001
DXB	001
DXC	001
DXD	001
DXE	001
DXF	001
DXG	001
DXH	001
DXI	001
DXK	001
FIA	001
FXA	001
FXB	001
FXD	001
FXE	001

FXF	001
FXH	001
FXI	001
FXK	001
FXL	001
FXM	001
FXN	001
FXS	001
HHA	001
HHB	001
HHC	001
HHD	001
HHE	001
HHG	001
HHH	001
HXA	001
HXB	001
HXC	001
HXD	001
HXE	001
HXF	001
HXG	001
I800	001
LXA	001
LXB	001
LXC	001
LXD	001
LXE	001
LXF	001
LXG	001
MU	080
MU80	080
MXA	001
MXB	001
MXC	001
MXD	001
MXE	001
MXF	001
MXG	001
MXH	001
MXI	001
MXK	001
MXL	001

MXV	001
NXA	001
NXB	001
NXC	001
NXD	001
NXE	001
OMI	170
OMP	170
RXA	001
SBA	001
SBB	001
SBC	001
SBE	001
SXA	001
SXB	001
SXC	001
SXD	001
SXE	001
SXG	001
SXH	001
SXK	001
SXL	001