


<b>VDA</b>	<b>Technical Measures to Ensure the Authenticity and Integrity of Invoicing Data with EDIFACT Interchange</b>	<b>4938 T4</b> Annexe 1			
<b>Version 2.2, July 2016</b>					
<b>Working Group Invoicing Processes</b>					
<table><tr><td><b>Publisher:</b></td><td>Verband der Automobilindustrie Behrenstrasse 35 Postfach 8 04 62 10004 Berlin Phone 030/897842-221 Internet: <a href="http://www.vda.de">www.vda.de</a></td><td><u>Copyright</u> Reprint and every other form of duplication are only permitted if the source is quoted.</td></tr></table>			<b>Publisher:</b>	Verband der Automobilindustrie Behrenstrasse 35 Postfach 8 04 62 10004 Berlin Phone 030/897842-221 Internet: <a href="http://www.vda.de">www.vda.de</a>	<u>Copyright</u> Reprint and every other form of duplication are only permitted if the source is quoted.
<b>Publisher:</b>	Verband der Automobilindustrie Behrenstrasse 35 Postfach 8 04 62 10004 Berlin Phone 030/897842-221 Internet: <a href="http://www.vda.de">www.vda.de</a>	<u>Copyright</u> Reprint and every other form of duplication are only permitted if the source is quoted.			
 <b>Verband der Automobilindustrie</b>					

## **Disclaimer**

The VDA Recommendations may be freely used by anyone. Users are responsible for correct application of the recommendations from case to case.

The Recommendations take into account the prevailing state-of-the-art at the time of publication. Use of the VDA Recommendations does not absolve anyone from responsibility for his/her own actions. In so far all users act at their own risk. Liability of the VDA and those involved in the VDA Recommendations is excluded.

Anyone noticing errors or the possibility of incorrect interpretation when applying the VDA recommendations is requested to notify VDA of this promptly so that any errors can be rectified.

## Introduction

Federal Law Gazette 2008 Part I No. 63, published in Bonn on 24 December 2008 reads:

...

Article 8        Amendment of the German Value Added Tax Act (Umsatzsteuergesetzes)  
*The Value Added Tax Act as promulgated on 21 February 2005 (Federal Law Gazette I p. 386), most recently amended by Article 4 of the Act of 19 December 2008 (Federal Law Gazette I, p. 2794) shall be amended as follows:*

1. 1. Article 14 shall be amended as follows:

...

b) paragraph 3 point 2 shall read as follows:

(3) The authenticity of origin and integrity of contents of an invoice transmitted electronically shall be guaranteed through

*"2. electronic data exchange (EDI) according to Article 2 of the Recommendation 94/820/EC of the Commission of 19 October 1994 concerning the legal aspects of electronic data exchange (Official Journal EC No. L 338 p. 98), if in the agreement on this data exchange the use of a procedure is provided, which guarantees the authenticity of the origin and the integrity of data.*

The technical details of the procedure recommended by VDA 4938 Part 2 as part of the application of EDIFACT message INVOIC is described below.

# Technical measures to ensure the authenticity and integrity of invoicing and credit note data in electronic data interchange (EDI)

## 1. Message standards

The following EDI standards for the electronic exchange of invoices is currently supported:

- UN/EDIFACT INVOIC D.07A according to VDA Recommendation 4938 Part 2 –

Other UN/EDIFACT standards, subsets or versions are not supported. The usable segments, data element groups and data elements, as well as their formats and content, are aligned to the aforementioned VDA recommendation for EDI application.

## 2. Data transfer process

EDI files are sent over a secure data transfer protocol, such as OFTP1 or OFTP2. Secure network connections must be used (ISDN, VPN) for OFTP1, while SSL/TLS encryption is required for OFTP2 via the Internet.

## 3. Features to ensure authenticity

In particular to ensure data-origin authentication, the parties undertake to apply exclusively the protocol specified in the parameter data sheet.

In addition, checks must be made upon receipt to the following segments and data elements of the identifiers provided by the UN/EDIFACT Standard to guarantee data-origin authentication:

### A) Transfer of invoices and other accounting documents of the seller:

To identify the sender, the following features must be used cumulatively:

- In segment UNB, data element 0004: The unique identification number assigned by the managing organization to the service provider or third party authorized by it.
- In segment RFF, data element 1154 of segment group 3 with reference to the seller (i.e., if the value of "SE" is specified for segment NAD in data element 3035): The VAT ID assigned to the service provider by the tax authority, if the value "VA" is specified in the data element 1153 of same RFF segment, or fiscal number assigned to the service provider by the tax authority, if the value "FC" is specified in the data element 1153 of same RFF segment.

- In segment NAD, data element 3039 of segment group 2 with reference to the seller (i.e., if the value "SE" is specified for segment NAD in data element 3035): the supplier number assigned by the buyer

Identification features of the sender:

<b>Sender Identification</b> (Segment UNB, data element 0004)	<b>VAT ID or fiscal number</b> (Segment RFF, data element 1154)	<b>Supplier no. ass. by buyer</b> (Segment NAD, data element 3039)
<b>Sender Identification</b> (Segment UNB, data element 0004)	<b>VAT ID or fiscal number</b> (Segment RFF, data element 1154)	<b>Supplier no. ass. by buyer</b> (Segment NAD, data element 3039)
<i>ID of sender station (e.g. Odette ID)</i>	<i>XX XXXXXXXXXXXX</i>	<i>xxx/xxxxxx</i>

To identify the recipient, the following features must be used cumulatively:

- In segment UNB, data element 0010: The unique identification number assigned by the managing organization to the service recipient or third party authorized by it.
- In segment RFF, data element 1154 of segment group 3 with reference to the buyer (i.e., if the value of "BY" is specified for segment NAD in data element 3035): The value added tax identification number (VAT ID) assigned to the service recipient by the tax authority, if the value "VA" is specified in the data element 1153 of same RFF segment, or fiscal number assigned to the service recipient by the tax authority, if the value "FC" is specified in the data element 1153 of same RFF segment.

<b>Recipient Identification</b> (Segment UNB, data element 0010)	<b>VAT ID or fiscal number</b> (Segment RFF, data element 1154)
<b>Recipient Identification</b> (Segment UNB, data element 0010)	<b>VAT ID or fiscal number</b> (Segment RFF, data element 1154)
<i>ID of station of the recipient (e.g. Odette ID)</i>	<i>XX XXXXXXXXXXXX</i>

**B) For the transfer of self-billed invoices (credit memo procedure) and other accounting documents of the buyer:**

To identify the sender, the following features must be used cumulatively:

- In segment UNB, data element 0004: The unique identification number assigned by the managing organization to the service recipient or third party authorized by it.
- In segment RFF, data element 1154 of segment group 3 with reference to the buyer (i.e., if the value of "BY" is specified for segment NAD in data element 3035): The value added tax identification number (VAT ID) assigned to the service recipient by the tax authority, if the value "VA" is specified in the data element 1153 of same RFF segment, or fiscal number assigned to the service provider by the tax authority, if the value "FC" is specified in the data element 1153 of same RFF segment.
- In segment NAD, data element 3039 of segment group 2 with reference to the buyer (i.e., if the value "BY" is specified for segment NAD in data element 3035): the customer number assigned by the seller.

Identification features of the sender:

<b>Sender Identification</b> (Segment UNB, data element 0004)	<b>VAT ID or fiscal number</b> (Segment RFF, data element 1154)
<b>Sender Identification</b> (Segment UNB, data element 0004)	<b>VAT ID or fiscal number</b> (Segment RFF, data element 1154)
<i>ID of sender station (e.g. Odette ID)</i>	<i>XX XXXXXXXXXXXX</i>

To identify the sender, the following features must be used cumulatively:

- In segment UNB, data element 0010: The unique identification number assigned by the managing organization to the service provider or third party authorized by it.
- In segment RFF, data element 1154 of segment group 3 with reference to the seller (i.e., if the value of "SE" is specified for segment NAD in data element 3035): The VAT ID assigned to the service recipient by the tax authority, if the value "VA" is specified in the data element 1153 of same RFF segment, or fiscal number assigned to the service provider by the tax authority, provided that the value "FC" is specified in the data element 1153 of same RFF segment.

<b>Recipient Identification</b> (Segment UNB, data element 0010)	<b>VAT ID or fiscal number</b> (Segment RFF, data element 1154)	<b>Supplier no. ass. by buyer</b> (Segment NAD, data element 3039)
<b>Recipient Identification</b> (Segment UNB, data element 0010)	<b>VAT ID or fiscal number</b> (Segment RFF, data element 1154)	<b>Supplier no. ass. by buyer</b> (Segment NAD, data element 3039)
<i>ID of station of the recipient (e.g. Odette ID)</i>	<i>XX XXXXXXXXXXXX</i>	<i>XXXXXXXXXX</i>

## 4. Features to ensure integrity

The recipient or third party authorized by it must carry out the validity checks defined in the UN/EDIFACT Standard to ensure the integrity of the data:

- The information in segment UNT, data element 0074, must match the number of transmitted segments of the EDI message.
- The information in segment UNT, data element 0062, must match the message reference number referred to in segment UNH, data element 0062.
- The information in segment UNZ, data element 0036, must match the number of messages contained in the EDI transmission.
- The information in segment UNZ, data element 0020, must match the data exchange reference in segment UNH, data element 0020.

## 5. Test identification

Test data must be marked with the test indicator "1" in the UNB segment, data element 0035. If this indicator is missing, the transmitted data are interpreted as production data.

## 6. Value added tax – mandatory information

Before the invoice is sent or processed, mandatory VAT data in VAT-relevant invoices or credit memos must be mapped in the message as follows and their completeness checked by both partners:

Full name and full address of the service provider	Segment group Segment Qualifier	2 NAD SE - Seller
Full name and full address of the service recipient	Segment group Segment Qualifier	2 NAD BY - Buyer
Fiscal number or VAT ID number assigned by the tax authority to the service provider	Segment group Segment Qualifier	3 (under SG2/NAD+SE) RFF VA - VAT ID FC – Fiscal number
Date of issue of invoice – in case of correction, the date on which the invoice was corrected is valid	Segment group Segment Qualifier	n/a DTM 137 – Date of message
Consecutive invoice number	Segment group Segment Data element	n/a BGM 1004

Quantity of delivered goods or scope of other performance	Segment group Segment Qualifier	26 QTY 47 – Invoiced quantity
Commercial designation of the goods delivered or the nature and scope of other performance	Segment group Segment Data element	26 IMD 7008
Time of delivery or other performance	Segment group Segment Qualifier	n/a DTM 1 – Service completion date
Itemized fee for the delivery or other service after tax rates and exemptions	Per value added tax rate 1 x Segment group Segment Qualifier	 52 MOA 125 – Taxable amount
Applicable tax rate and amount of tax applied to the fee	Segment group Segment Qualifier Data element Segment Qualifier	52 TAX VAT 5278 – tax rate MOA 124 – Tax amount
Fee reductions agreed in advance	Segment group Segment Qualifier	50 MOA 109 – Discount amount
A note on the tax exemption is required in the case of tax exemption (e.g. "intra-Community delivery")	Segment group Segment Qualifier	n/a FTX TXD – Tax declaration
If required, reference to the tax liability of the beneficiary (reverse-charge scheme), for example for construction work and factory supplies of a foreign-based contractor (details see § 13 b of the German VAT Law).	Segment group Segment Qualifier	n/a FTX TXD – Tax declaration



## Communication Parameter Sheet

	Company A	Company B
<b>OFTP General</b>		
Version		
SSID(s) (Odette-ID)		
SFID(s)		
Odette Password		
File restart enabled	yes / no	yes / no
<b>OFTP2 Parameters</b>		
Server Address (url or IP address)		
TLS connection required	yes / no	yes/no
TLS client authentication required	yes / no	yes / no
OFTP2 authentication required	yes / no	yes / no
OFTP2 file encryption required	yes / no	yes / no
OFTP2 file signing required	yes / no	yes / no
OFTP2 EERP signing required	yes / no	yes / no

<b>AS 1/2/3</b>		
Standard	AS1 [ ] AS2 [ ] AS3 [ ]	AS1 [ ] AS2 [ ] AS3 [ ]
Protocol	https	https
Server Address (url or IP address)		
HTTPS client authentication required	yes / no	yes / no
Other requirements		
S/MIME	plain	plain
Compression	yes / no	yes / no
File encryption	yes / no	yes / no
Message Disposition Notification	synchronous / asynchronous	synchronous / asynchronous