SUBMISSION OF E-INVOICES (XRECHNUNG)

TECHNICAL GUIDANCE FOR YOUR IT DEPARTMENT

Ruhr-Universität Bochum · Last updated: September 2026 · Version 1.0

CONTENTS

Important information before you start:

The terms of use of the state portal apply to the web capture module, to Peppol and to direct submission alike. Please familiarise yourself with them beforehand.

To check in advance whether your invoice will be accepted, you can use a KoSIT validator.

“If an incoming message does not contain an XML file [this refers to ordinary PDFs, hybrid PDFs or other formats], further processing is stopped and the message including its attachment(s) is deleted. The invoice issuer receives **no** notification of this.” (Extract from the information for invoice issuers published by vergabe.nrw, under the heading “Wie nutzt man die Option des Direktversandes?”. Translated from German; the German original is authoritative.)

1. BASIC PRINCIPLE

Ruhr-Universität Bochum is a public institution of the German federal state of North Rhine-Westphalia. Electronic invoices are not delivered to us directly, but through the central **state e-invoicing platform** at vergabe.NRW. The platform receives the invoice, validates it and forwards it to the destination authority.

Forwarding to us is based solely on the **Leitweg-ID** (routing ID), which must be contained in the invoice itself:

Leitweg-ID: 05911-06001-11

This value belongs in the field **BT-10 Buyer reference (Käuferreferenz)** of the XML document. It is mandatory on every delivery channel. It must be reproduced exactly – no spaces, no additional characters, no altered separators.

2. ACCEPTED FORMATS

The platform accepts:

- **XRechnung** in its currently valid version (XML)
- **ZUGFeRD in the XRECHNUNG profile only**, and only as a standalone XML file

The platform does not accept:

- × plain PDF invoices
- × scanned documents or image files
- × hybrid PDF files with embedded XML (ZUGFeRD/Factur-X in a PDF container)

Of the ZUGFeRD profiles, only the **XRECHNUNG** profile is permitted. **Not accepted are:**

- × **MINIMUM** and **BASIC WL** – these do not contain complete invoice data and are not electronic invoices under EN 16931
- × **BASIC**
- × **EN 16931** (formerly COMFORT)
- × **EXTENDED**

BASIC, EN 16931 and EXTENDED are technically valid invoice formats; the state platform simply does not accept them. What counts for the check is the profile identifier inside the XML (BT-24 Specification identifier).

Supporting documents (delivery notes, timesheets and similar) **must** be embedded as attachments **inside** the XML in accordance with EN 16931.

3. SUBMISSION CHANNELS

There are three channels through which electronic invoices can reach us: direct submission by e-mail (recommended), Peppol, and the web capture module of the state platform.

3.1 DIRECT SUBMISSION BY E-MAIL (RECOMMENDED)

The simplest route. No registration and no Peppol connection are required.

Recipient address: eingang@erechnung.nrw

Requirements:

- The **XML file** is sent as an e-mail attachment.
- BT-10 Buyer reference (Käuferreferenz) contains the Leitweg-ID 05911-06001-11.
- Permitted are XRechnung (XML: UBL or CII) and ZUGFeRD in the XRECHNUNG profile as extracted XML. All other ZUGFeRD profiles are not permitted – see section 2, Accepted formats.
- Supporting attachments must be embedded inside the XML.

Important: on this channel the **syntax is not restricted**. Both UBL and CII are accepted. This is a key difference from the Peppol channel (section 3.2).

Only **one invoice per e-mail** may be submitted. The body text of the e-mail is not processed; all invoice-relevant information must be contained in the XML.

3.2 PEPPOL

Suitable for senders with an existing Peppol connection. **Important!** We are **not** registered as an **individual participant** in the Peppol network: the NRW state platform holds a single participant identifier (0204:05-nrw-83) covering all connected authorities of the state. Addressing therefore works on **two levels**.

Level 1 – transport (SBDH envelope / AS4)

Receiver participant identifier:

```
iso6523-actorid-upis::0204:05-nrw-83
```

The prefix 0204 is the ISO 6523 code registered by KoSIT for Leitweg-IDs. The value 05-NRW-83 is the collective identifier of the state platform. **Our own Leitweg-ID does not belong here.**

Level 2 – invoice content (payload)

Independent of the delivery channel, identical to direct submission by e-mail:

BT-10 Buyer reference (Käuferreferenz):

```
<cbc:BuyerReference>05911-06001-11</cbc:BuyerReference>
```

Only this value drives the routing from the state platform through to us.

Fields to be set in the invoice

Only **UBL** can be delivered over Peppol. We recommend Peppol BIS Billing 3.0 (UBL) with the German national ruleset – this specification satisfies the requirements for an XRechnung. Three fields are to be set. The element names refer to UBL; cbc denotes the namespace urn:oasis:names:specification:ubl:schema:xsd:CommonBasicComponents-2.

BT-24 Specification identifier (Spezifikationskennung):

```
<cbc:CustomizationID>urn:cen.eu:en16931:2017#compli-
ant#urn:fdc:peppol.eu:2017:poacc:billing:3.0</cbc:CustomizationID>
```

Alternatively, the XRechnung UBL document types are also registered for the state platform; BT-24 then contains

urn:cen.eu:en16931:2017#compliant#urn:xoev-de:kosit:standard:xrechnung_3.0

They are not recommended for new implementations: XRechnung UBL Invoice V3.0 and CreditNote V3.0 became redundant in February 2025 and are being phased out of the Peppol network.

BT-23 Business process type (Geschäftsprozesstyp):

```
<cbc:ProfileID>urn:fdc:peppol.eu:2017:poacc:billing:01:1.0</cbc:ProfileID>
```

The 01 is the number of the business process, the 1.0 its version. Neither has anything to do with the version number of the specification in BT-24, and neither is a typing error.

BT-49 Buyer electronic address (Elektronische Adresse des Käufers):

```
<cbc:EndpointID schemeID="0204">05-NRW-83</cbc:EndpointID>
```

BT-49 is a mandatory field under the Peppol rules (rule PEPPOL-EN16931-R010). Some access points additionally check whether the value matches the receiver identifier in the SBDH. BT-49 therefore mirrors the transport address, while BT-10 carries the Leitweg-ID – two different values that must not be swapped.

Each of the values given above is a single character string without spaces.

Verifying reachability

What counts is the registration in the SML and the SMP. It can be verified through the OpenPeppol SML & Business Card Lookup:

```
https://lookup.peppol.org/
```

Enter the complete participant identifier there, that is 0204:05-NRW-83. Searching for the value 05-NRW-83 alone returns no result. The query must resolve to the following addresses:

SMP:

```
https://peppol-smp.dataport.de
```

Access Point:

```
https://peppol-ap-cd.dataport.de/as4/inbound/message
```

Both addresses are operated by Dataport on behalf of the state of North Rhine-Westphalia. They apply equally to all authorities connected to the state platform and are not specific to Ruhr-Universität Bochum. The assignment to us is made solely through the Leitweg-ID in BT-10. If the values you obtain differ from those given here, something is wrong with the addressing.

The lookup also lists the document types the receiver accepts. For the specification recommended above, the entry reads:

```
urn:oasis:names:specification:ubl:schema:xsd:Invoice-2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1
```

3.3 WEB CAPTURE

For occasional single invoices without a system connection, invoices can be entered manually or uploaded through the state platform at www.erechnung.nrw. A free registration is required.

4. COMMON CAUSES OF FAILURE

If an invoice does not arrive, the sending access point will have produced a technical error message. Keeping that message verbatim is the fastest route to the cause.

Channel	Symptom	Likely cause
E-mail	No processing	PDF sent instead of XML; hybrid ZUGFeRD PDF instead of extracted XML
Both	Invoice delivered but rejected	BT-10 Buyer reference empty, incorrect or containing additional text
Peppol	Peppol Directory returns no entry	The Directory only lists participants with a published business card; it is no proof of reachability. See section “Verifying reachability”
Peppol	SMP lookup fails	Participant identifier mistyped; Leitweg-ID used as receiver instead of 0204:05-NRW-83
Peppol	Access point refuses to send	CII syntax instead of UBL; unsupported document type
Peppol	Validation error before sending	BT-49 Buyer electronic address missing or not matching the receiver identifier; BT-23 Business process type or BT-24 Specification identifier set to an incorrect value