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The below English version of the text shall only be used for a basic understanding of the subject matter. The official text in the Czech language is the only binding text.

Elektronická evidence tržeb 2.0

Electronic Registration of Sales 2.0

Format and structure of registered sale information and description of the data interface for receipt of registered sale data messages

Version 1.1

Date of last Czech version: 20.07.2026

Changes with respect to version 1.0)*

Change No	Description
1	02.06.2026 version 1.0 released
2	20.07.2026 version 1.1 released: clarification of UTF-8 message encoding enforcement (use of Content-Type header)

)* The table of changes does not describe minor formal text corrections.

Purpose and scope of the document

This document describes the data interface for the receipt and acknowledgment of data messages containing sales transaction details, which taxpayers under the EET regime are required to submit for each completed transaction subject to reporting pursuant to Act on the Registration of Sales and on Amendments to Certain Other Acts (Version 1 of this document is based on the wording of the government bill distributed to Members of the Chamber of Deputies on 11 May 2026 as [Parliamentary Document No. 189/0](#)).

Files containing the XML schema definitions and web service descriptions (WSDL), which formally specify the structure of the reported sales data messages and the web service used for their submission, are as attachments part of this document.

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1 INTRODUCTION

Registered sales data messages are transmitted as SOAP messages via the HTTPS protocol. The messages are secured with electronic signatures in accordance with the WS-Security standard.

For the purposes of simplicity, ease of integration, and to ensure compatibility with the previous solution, the following standards are applied:

- SOAP 1.1
- WS-Security 1.1

1.1 VERSION NUMBERING

The interface for sending registered sales data messages are technically prescribed by WSDL and XSD specifications. Data interface versions will be numbered by two numbers: major (first) and minor (second), i.e. 1.0, 1.1, 1.2 etc. Change of the major number means the change of data message structure (including change of formats of data items). Main version number is also a part of PG access URL (e.g. v3 for version 3.x).

1. In case of small changes without impact to taxpayer's point of sale (PoS) implementation we will only change the minor number of the version: 4.1 -> 4.2 -> 4.3 -> ... etc. XML schema and WSDL document versions in their headers will correspondently change from 4.1 to 4.2, 4.3, etc. Namespace URLs, service URL etc. are not changed inside the XML schema and WSDL document – /v4 remains at the end.
2. In case of changes of the data message structure, requiring change to taxpayer's PoS implementation, the major number of the version will change: eg 4.2 -> 5.1. The following minor changes (see 1. above) again follow the sequence: 5.2, 5.3, etc. Namespace URLs, service URL etc. will change inside the XML schema and WSDL document to /v5 at the end.

At the time of preparation of the first version of this document the EET interface version is 4.1 (previous EET system employed version 3.1 interface as the most recent and the changes introduced in 2026 are incompatible with previous system).

1.2 ABBREVIATIONS

Abbreviation	Definition
CA	Certification authority
CRL	Certificate Revocation List
EIC	Registration Identification Number of taxpayer as defined in ZoET
DŘ	Daňový řád/Tax Regulation Law
EET	Elektronická evidence tržeb/Electronic Registration of Sales
FS, FSČR	Finanční správa České republiky/Czech Tax Administration
GŘŘ	Generální finanční ředitelství/General Financial Directorate

Abbreviation	Definition
POK	Acknowledgement code generated by the tax authority's central system following successful receipt of the registered sales data message.
SEČ/CET	Central European Time (CET)
SELČ/CEST	Central European Summer Time (CEST)
SOAP	Message exchange protocol for XML messages as specified at https://www.w3.org/TR/soap/
UUID	Unique identifier in accordance with the RFC 9562 standard "Universally Unique Identifiers – UUIDs"
WS-security	Web Services Security – extension of the SOAP standard to include WWW services security as specified at http://www.oasis-open.org/committees/wss/
WSDL	Web Services Description Language – a XML-based language for description of functions offered by a WWW service as specified at https://www.w3.org/TR/wsdl
XML Schema	A XML-based language intended for definition of XML document structure as specified at https://www.w3.org/TR/xmlschema11-1/ and https://www.w3.org/TR/xmlschema11-2/
XSD	XML document structure definition which follows XML Schema (XML Schema Definition)
ZoET	Act on the Registration of Sales and on Amendments to Certain Other Acts

1.3 TERMINOLOGY

This section defines the terminology used in this document.

Term	Definition
E-sale	A data format defined by the law (ZoEZ) which includes all required sale transaction details

Term	Definition
Registered sale data message	A data structure in a legally required XML format, containing the electronic sales transaction and additional required technical data. It represents a complete XML message, including information defined by relevant web service standards such as SOAP, WSDL, and WS-Security. The registered sales data message is sent by the PoS system to the tax authority's central technical system. There is a one-to-one correspondence between a registered sale and a registered sale data message.
Acknowledgement data message	A data structure in the format in accordance with this document as required by law, containing the Acknowledgement code generated by the tax authority's central system (POK), and at the same time serving as confirmation of receipt and formal correctness of the submitted registered sales data message *)
Error data message	A data structure in the format in accordance with this document as required by law, which includes an error code and, where applicable, an accompanying description in the following cases – the received data message containing registered sales data includes critical errors that prevent its processing, – or another error has occurred that prevents further processing on the part of the tax authority. – or the data message containing registered sales data, although free of critical errors, was submitted in verification mode

Term	Definition
PoS device	A device on the taxpayer's side that transmits registered sales data to the tax authority. Depending on the context, this may refer either to an end device (e.g., a cash register/PoS) or to the supporting software and hardware responsible for transmitting the data. Data messages include a field labeled "PoS ID," which identifies the device Point of sale device. In other parts of this document, the term may refer to both the end device or to the associated software and hardware used to send the data message to tax authority
Registered sale	A registered sales transaction is a payment that meets the formal criteria for reporting and gives rise to taxable income. This also includes a payment that meets the formal criteria for a registered sale and is intended for subsequent use or settlement resulting in taxable income, as well as the actual use or settlement of such a payment
EET System	The EET system is an information system comprising of the tax authority's central technical system for the reception of registered sale data messages, and other components responsible for the subsequent processing of EET data.

)* Formal correctness refers to a data message's compliance with the prescribed data structure and the fulfillment of publicly documented critical validation checks required for its acceptance, and does not imply the factual accuracy of the registered sales data

2 COMMUNICATION SCENARIO - DATA MESSAGE SENDING

2.1 BASIC COMMUNICATION SCHEME

The point-of-sale system sends individual registered sales data messages to the tax authority's designated central technical system. If a data message submitted by the taxpayer's point-of-sale system passes the critical validation checks (see Section 2.2.3 *Critical checks (critical errors)*) and can be stored on the tax authority's side, an Acknowledgement data message is generated immediately by the tax authority's central technical system and returned to the taxpayer's PoS device that submitted the original data message.

Communication therefore follows a request/response model. The purpose of the acknowledgement data message is to confirm receipt and the formal correctness of the received data message to the taxpayer's point-of-sale system.

The Acknowledgement data message is returned as a synchronous response and is linked to the original data message by the message identifier assigned by the taxpayer (using a UUID; see Section 3 *Data message structure*). It also contains the Acknowledgement code (POK) generated by the tax authority's central technical system. The POK is unique for each correctly received registered sales data message.

If a registered sales data message does not pass a critical validation check, or if a technical error occurs on the tax authority's central technical system that prevents further processing, the taxpayer's point-of-sale system that submitted the original message will be informed via an error message, where possible.

In addition to the production mode described above, it is also possible to submit a data message in *verification mode*, where only its processability is validated; such a message is not accepted as a registered sales data message. Further details are provided in Section 2.2 *Data message Submission modes, production and non-production environment*.

The communication scenario in the production mode is shown in *Figure 1 Communication scenario in the production mode*.

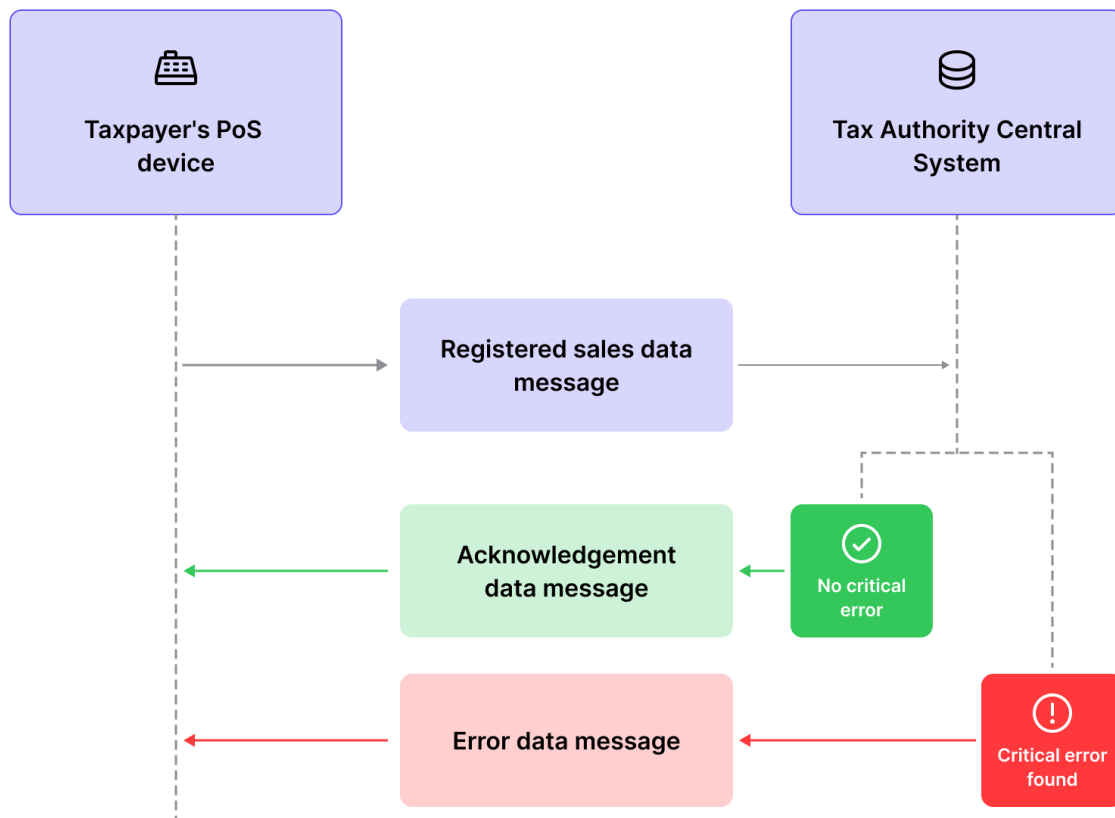


Figure 1 Communication scenario in the production mode

2.2 DATA MESSAGE SUBMISSION MODES, PRODUCTION AND NON-PRODUCTION ENVIRONMENTS

2.2.1 Data message Submission modes

EET taxpayers can submit a data message containing registered sales data in one of two modes. The desired mode can be selected by setting the verification mode flag (the *overeni* attribute) in the message header:

- **Production mode** is used for the standard submission of data messages containing registered sales data (i.e. for fulfilling the reporting obligation under the ZoET) and for obtaining the Acknowledgement code. In production mode, the message header either does not contain the verification mode flag, or the attribute is set to *false*.
- **Verification mode** is used by EET taxpayers to verify the correct configuration and functionality of the connection between the PoS system and the EET system. In this case, the data message must include the verification mode flag set to *true*. Submission of a data message in verification mode does not constitute the reporting of registered sales data as required by the ZoET.

2.2.2 Production and non-production environment

The General Financial Directorate (GŘ) publishes the web service endpoints for both the production environment and one or more non-production environments of the EET system.

- **The production environment** is used by EET taxpayers and supports day-to-day operations, in particular the submission and acknowledgment of registered sales data messages. Certificates used for the electronic registration of sales (including point-of-sale certificates and certificates of the tax authority's central system) in this environment are referred to as "production certificates."
- **The non-production environment** (playground) is intended exclusively for developers of point-of-sale systems and is not intended for end users. Submission of a data message to the non-production environment is not considered the reporting of registered sales data as required by the ZoET; therefore, any POK returned by the non-production environment is not a valid Acknowledgement code.

In the non-production environment, certificates for electronic registration of sales (including point-of-sale certificates and certificates of the tax authority's central system) may be issued using a simplified process. These certificates are also referred to as "test certificates."

Both environments support communication in both production and verification modes. The table below outlines the response returned by the tax authority's central technical system depending on:

1. The mode in which the data message was sent. The mode is selected by the value of the *overeni* attribute in the *Hlavicka* element in the registered sale data message.
2. The target environment. The environment is selected by the Web service address to which the data message is sent. Addresses for the individual environments will be published by the tax authority.
3. The validity of the data message, i.e. whether or not it contains critical errors.

Registered sale data message mode	Target environment	Use scenario	Validity of the registered sale data message	Response from the EET system
Operational The <i>Hlavicka</i> element of the data message does not contain the <i>overeni/verification</i> attribute, or contains the <i>overeni="false"</i> attribute	Production	The EET taxpayer uses the data message to send information about a registered sale	Valid	- Acknowledgement data message containing the POK and, where applicable, warnings about non-critical errors - The assigned POK is unique and represents a valid Acknowledgement code - The response includes an electronic signature (signed with a production certificate) - The registered sales transaction has been successfully received, recorded, and will be stored in the EET system *)
			Not valid	- Error data message - Non-zero error code, text description of the error - The response does not contain an electronic signature
	Non-production (playground)	A SW developer testing their application in an operational mode	Valid	- Acknowledgement data message, contains POK and possibly warnings on non-critical errors - The assigned POK has a specific value ("-ff" at the end), but is not valid - The response includes a non-production environment flag (<i>test="true"</i>) - The response contains an electronic signature (signed by a testing certificate)
			Not valid	- Error data message - Non-zero error code, text description of the error - The response includes a non-production environment flag (<i>test="true"</i>) - The response does not contain an electronic signature
Verification The <i>Hlavicka</i> element of the data message contains the <i>overeni="true"</i> attribute	Production	The EET taxpayer is verifying the functionality of the connection between their PoS and the EET system	Valid	- Error data message, contains error code 0 and possibly warnings on non-critical errors - Error code 0 – no formal errors detected - Error description "Datovou zpravu evidovane trzby v overovacim modu se podarilo zpracovat" (The registered sale data message in verification mode was successfully processed) - The response does not contain an electronic signature
			Not valid	- Error data message - Non-zero error code, text description of the error - The response does not contain an electronic signature
	Non-production (playground)	A SW developer using their application in the verification mode to test the functionality of the connection between the PoS and the EET system.	Valid	- Error data message, contains error code 0 and possibly warnings on non-critical errors - Error code 0 – no formal errors detected - Error description "Datovou zpravu evidovane trzby v overovacim modu se podarilo zpracovat" (The registered sale data message in verification mode was successfully processed). The response includes a non-production environment flag (<i>test="true"</i>) - The response does not contain an electronic signature
			Not valid	- Error data message - Non-zero error code, text description of the error - The response includes a non-production environment flag (<i>test="true"</i>) - The response does not contain an electronic signature
) in all other cases in this table, the registered sale has been received by the EET system but will be neither filed nor kept by the EET system				

Table1: EET system's reply options

2.2.3 Critical checks (critical errors)

The EET system performs critical validation checks on all received registered sales data messages. If any of these checks fail, the data message is rejected and no POK is issued.

If a critical error is detected, the EET system returns an error data message containing a numeric error code and a text description of the error (see Section 3.5.4 *List of error codes and error messages*). Depending on the nature of the error, processing of the data message on the EET system side may be terminated upon the first occurrence of a critical error. Error conditions also include possible technical processing failures, which are identified by the corresponding error codes described in Section 3.5.4 below.

If errors are detected that the EET system may interpret as a potential cyberattack, no response is returned to the client (i.e. the point-of-sale system).

The following critical validation checks are performed

- 1) Validation of the document's XML formatting – UTF-8 is required
- 2) Validation of the respective registered sale data message's XML schema (*.xsd), which contains an exact definition of the data and format structure for the individual data items and a check of presence of individual items
- 3) Verification of the electronic signature of the data message (the taxpayer's certificate is included in the SOAP envelope in accordance with the WS-Security standard):
 - a) verification of the issuing authority of the point-of-sale certificate
 - b) verification of the validity of the point-of-sale certificate, including checks against currently available CRLs (Certificate Revocation Lists)
 - c) cryptographic validation of the electronic signature against the point-of-sale certificate
- 4) Validation of the integrity of the EIC identification number of the reporting taxpayer
- 5) Verification of the size of the registered sale data message (incl. SOAP envelope) which cannot exceed 12 kB

2.2.4 Non-critical checks (non-critical errors)

Non-critical checks carried out on received data messages in the EET system do not prevent the successful acceptance of the data message and the issuance of POK.

The following non-critical validation checks are performed:

- 1) Verification that the taxpayer's identification EIC specified in the XML data message (<Trzba> element) corresponds to the EIC in the X.509 certificate used for signing the message.
- 2) Verification of the integrity of the authorizing taxpayer's EIC, if applicable
- 3) Verification that the taxpayer's EIC differs from the EIC of the authorizing taxpayer (if applicable)
- 4) Validation of the date and time of the sales transaction (as specified in the data message) against the date and time the message is received by the tax authority's central technical system. If the reported transaction time is more than 2 hours ahead of, or more than 2 years older than the time of reception of the message, it will be flagged as invalid. The transaction timestamp will also be marked as invalid if it is earlier than the minimum allowed transaction date and time defined for the given target environment, as specified in Section 2.2.2 *Production and non-production environment*.

Minimum expected transaction dates and times by target environment:

- a) **Non-production environment (playground):** July 1, 2026
 - b) **Production environment before January 1, 2027:** November 1, 2026
 - c) **Production environment:** January 1, 2027
- 5) Verification that the registering unit identifier conforms to the format used in the MOJE Daně (DIS+) portal; it must consist of at least two decimal digits, with the last digit being one of the following: 1, 2, 3, or 4.

If any non-critical check fails (and no critical error occurs) the registered sale data messages will be accepted and the POKcode will be issued.

Errors resulting from failure to meet non-critical checks are referred to as non-critical errors. If one or more such errors occur, the Acknowledgement data message is supplemented with the corresponding warning messages and their associated numerical codes. The same warnings are also included in the response with error code 0 in verification mode.

2.3 NETWORK COMMUNICATION STANDARDS

2.3.1 HTTPS/TLS

Use of HTTPS protocol is compulsory, client-side certificate authentication is not used. Supported versions of TLS are TLS 1.2 and higher.

2.3.2 HTTP

Use of HTTP/1.1 protocol is compulsory.

2.4 CERTIFICATES

Certificates used for securing HTTPS connections and signing of data messages are described in the document „Access and operational information“ relevant to given environment.

3 DATA MESSAGE STRUCTURE

3.1 DATA ITEM CODING

All items in all data messages will only use selected characters encoded as a single byte in a standard decimal ASCII character set. The allowed decimal codes are 9, 10, 13, or 32 to 126.

UTF-8 encoding is mandatory for all data message XML documents and the client must declare UTF-8 encoding in the HTTP request header `Content-Type` as follows:

```
Content-Type: text/xml; charset=utf-8
```

Alternatively, if UTF-8 encoding is not specified in `Content-Type` request header, the first line of the XML SOAP envelope must be:

```
<?xml version="1.0" encoding="UTF-8"?>
```

All XML elements of the e-sale are part of the same namespace, specified in the Web service definition (WSDL), i.e.:

```
xmlns:tns="http://fs.gov.cz/eet/schema/v4"
```

The data format mask for individual items, which is listed along with their detailed description below, is a regular expression in the sense of the XML Schema, which defines the required syntax of the given item. For clarity, the metasign for start of text strings (^) and end of text strings (\$) are also used throughout this document.

Hexadecimal numbers larger than 9 ("a" to "f") may be used as lower or upper case letters, i.e. also as "A" to "F".

3.2 DATA MESSAGE STRUCTURE OVERVIEW

All three types of data messages (registered sale data message, acknowledgement data message, error data message) have a common basic data format based on the SOAP (Simple Object Access Protocol) protocol, i.e. application XML data structures are inserted into the body of the SOAP envelope (<SOAP Body>).

The registered sale data message (*Figure 2*) and the Acknowledgement data message will be signed (*Figure 3*), the error data message will not be signed (*Figure 4*).

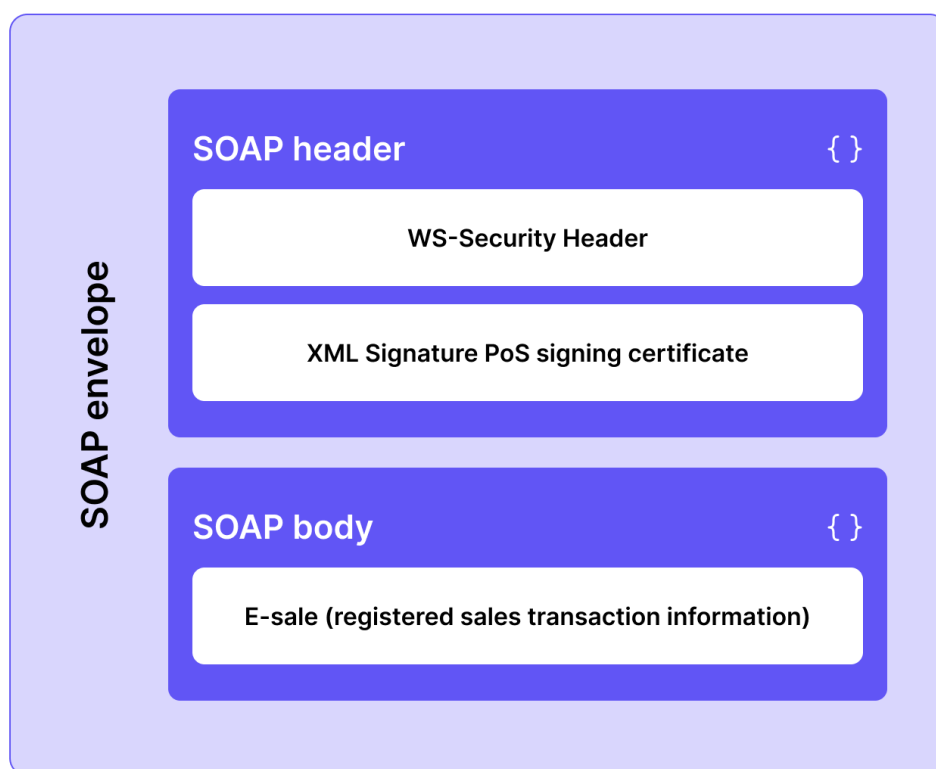


Figure 2 Registered sale data message structure

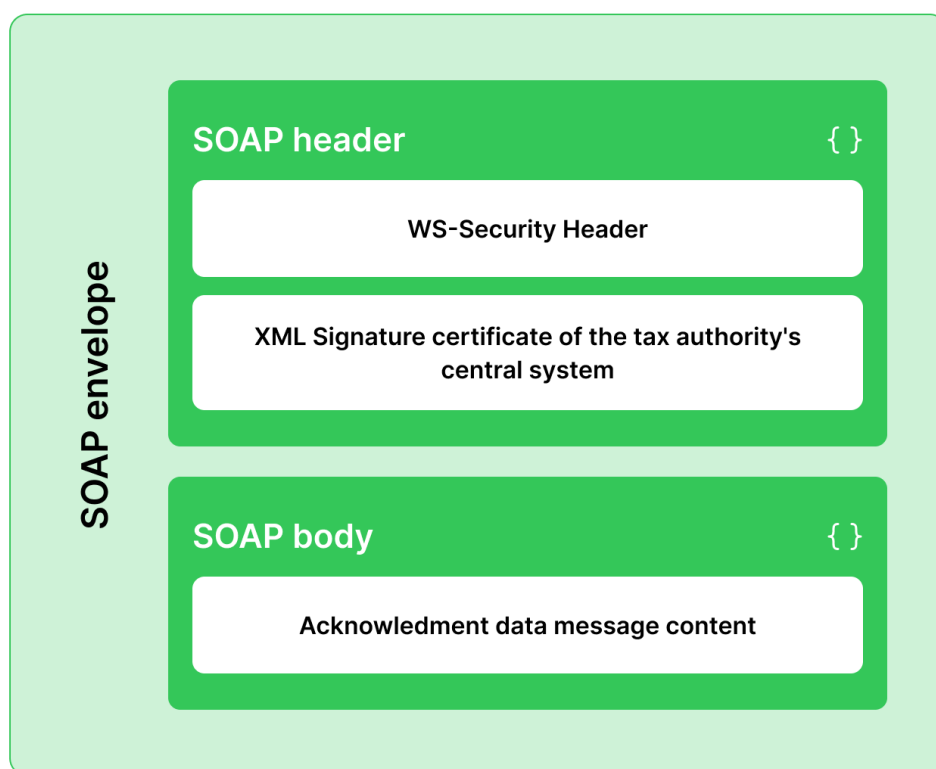


Figure 3 Acknowledgement data message structure

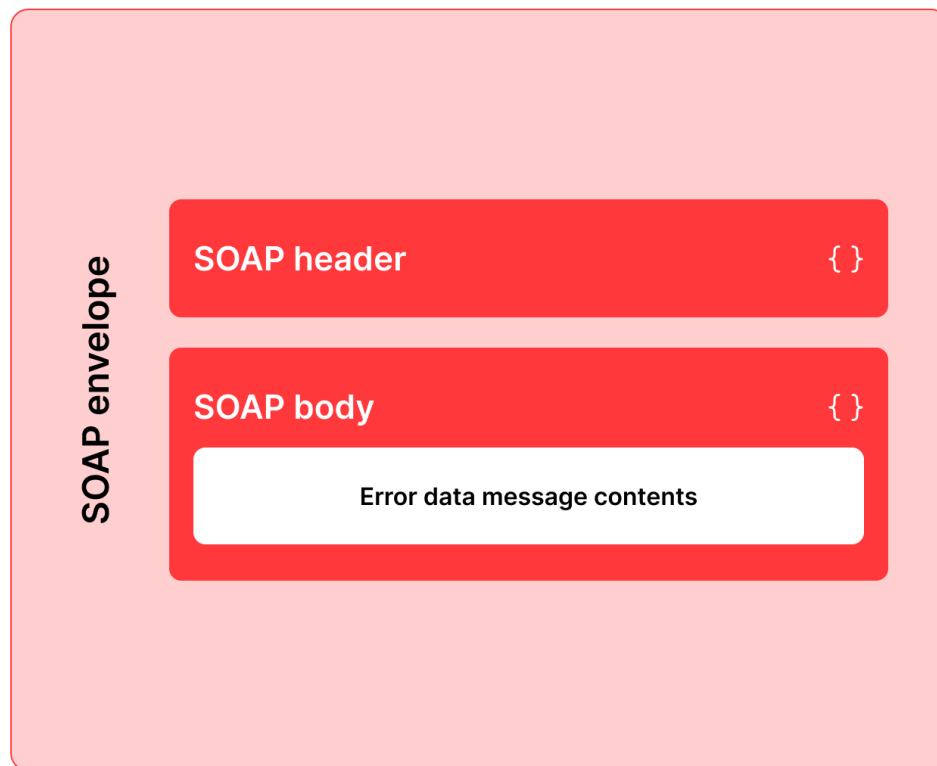


Figure 4 Error data message structure

3.3 REGISTERED SALE DATA MESSAGE

A registered sales data message is a SOAP XML structure, including the SOAP envelope, containing all information specified for a registered sales data message. The registered sale data are saved in an embedded *e-sale* structure (the <Trzba> XML element), which is part of the <SOAP Body> XML element.

The XML element <SOAP Header> contains the XML signature and the point-of-sale certificate whose corresponding private key was used to create the XML signature. If the certificate associated with the key used at the time of the transaction is no longer valid at the time of submitting the registered sales data message, the taxpayer must use a currently valid certificate for creating the XML signature.

The registered sale data message are described in detail in the definition of the relevant Web service – see *5 SOAP XML message and its security*.

The *Registered sale data message* itself is stored in the <SOAP Body> XML element as the <Trzba> element.

This element contains two embedded elements representing the <Hlavicka> and <Data> data areas.

These data areas contain the data items themselves – see *3.3.2 Overview of registered sale data message items*.

3.3.1 E-sale XML format

e-sale XML format overview:

```
<tns:Trzba>
  <tns:Hlavicka attributes... />
  <tns:Data attributes... />
</tns:Trzba>
```

XML elements' attributes and values are described below.

3.3.2 Overview of registered sale data message items

Data area		Item name	Mandatory)**	XML name)*
Hlavička (Header)	1	Message UUID	Yes	uuid_zpravy
	2	Date and time of submission	Yes	dat_odesl
	3	First sending of sales information	Yes	prvni_zaslani
	4	Verification mode flag	No	overeni
Data (Data)	5	Registered identification number	Yes	eic_popl
	6	Authorizing taxpayer registered identification number	No	eic_poverujiciho
	7	Multi-taxpayer authorization	No	povereni_vice_popl
	8	Registrating Unit ID	Yes	id_jednotky
	9	Taxpayer's PoS identifier	Yes	id_pokl
	10	Sales transaction sequence number	Yes	porad_cis
	11	Date and time the transaction occurred	Yes	dat_trzby
	12	Total amount of sale	Yes	celk_trzba
	13	Total amount of payments intended for subsequent drawing or settlement	No	urceno_cerp_zuct
	14	Total amount of payments which are payments subsequently drawn or settled	No	cerp_zuct

)* XML name is the name of a XML element or a XML attribute.

)** Items marked as mandatory must be included in every data message. Optional items must be provided if they are relevant to the registered sales transaction (e.g. if a taxpayer is authorized to report sales on behalf of another taxpayer, the EIC of the authorizing taxpayer must be included). If optional items are not provided, they are considered empty. Elements with empty values are not permitted in the XML message.

Example:

The inclusion of the following empty element in the message is considered an error:

```
eic_poverujiciho=""
```

3.3.3 Detailed description of e-sale items

In this paragraph the E-sale items are described with regards to their technical format and structure. Other information related to their factual content will be included in the document

„Popis položek datové zprávy a příklady situací při evidenci tržeb“ (“Description of data message items and examples of situations occurring at electronic registration of sales”). The text below uses the following example EIC values: CZ00000019, CZ683555118 and CZ8551015704.

3.3.3.1 Message UUID (*uuid_zpravy*)

Is an attribute of the <Hlavicka> XML element. The UUID (Universally Unique Identifier) of the registered sale data message is generated by the taxpayer's PoS system. The UUID should have the following format as per RFC 9562:

xxxxxxxx-xxxx-Mxxx-Nxxx-xxxxxxxxxxxx

where "x", "M" and "N" are hexadecimal numbers. "M" is the version of the UUID and its values are 1 to 5. The recommended UUID version is 4. Message UUID is a unique identification of the registered sale data message generated by the reporting PoS. It identifies uniquely the particular data message and, not the sale transaction. In case of repeated submission of sale data messages a unique Message ID should be generated for each submission attempt. The value of the two highest bites of N is mandatorily 1 0 (UUID variant), i.e. its allowed hexadecimal values are: 8, 9, A, B.

Data format mask:

^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[1-5][0-9a-fA-F]{3}-[89abAB][0-9a-fA-F]{3}-[0-9a-fA-F]{12}\$

where the "-" character is a dash (ASCII decimal code 45).

Length: 36 characters.

Example:

b3a09b52-7c87-4014-a496-4c7a53cf9125

3.3.3.2 Date and time of submission (*dat_odesl*)

Is an attribute of the <Hlavicka> XML element. The date and time of sending is the moment when the PoS sends the registered sale data message.

The data format is a DateTime type as per ISO 8601, as specified in the relevant W3C specification <https://www.w3.org/TR/xmlschema11-2/#dateTime>:

yyyy-mm-ddThh:mm:ss±hh:mm

where "yyyy-mm-dd" is the date in the "year-month-day" format, "hh:mm:ss" is the time in the "hour:minute:second" format and "±hh:mm" is the time zone expressed as the difference from UTC/GMT in hours and minutes. The "±" is either a "+" (plus), or a "-" (minus), depending on whether the difference from the UTC/GMT is positive or negative. As a special value, the string "Z" may be used, meaning "+00:00".

The date and time of sending of a data message is the local time in the given time zone plus the time zone code (mandatory) as per these examples:

- +01:00 for normal time in the Czech Republic – i.e. CET (Central European Time)
- +02:00 for summer time (daylight saving time) in the Czech Republic – i.e. CEST (Central European Summer Time)
- +hh:mm, or -hh:mm, or Z for other time zones (outside of the Czech Republic).

Length: 25 characters.

Example - normal time:

```
2027-01-09T04:25:28+01:00
```

which is 4 hours, 25 minutes and 28 seconds CET, i.e. 3:25:28 UTC/GMT.

Example - summer time (daylight saving time):

```
2027-06-09T05:25:28+02:00
```

which is 5 hours, 25 minutes and 28 seconds CEST, i.e. 3:25:28 UTC/GMT.

3.3.3.3 First sending of sales information (*prvni_zaslani*)

Is an attribute of the <Hlavicka> XML element. This is a flag with a value of *true* or *false* (or *1/0*), which shows whether the communication is the first (*true* or *1*), or repeated (*false* or *0*) sending of the relevant registered sale.

The data format is based on the relevant W3C specification, see:

<https://www.w3.org/TR/xmlschema11-2/#boolean>.

Length: 1 to 5 characters.

Example:

```
true
```

3.3.3.4 Verification mode flag (*overeni*)

Is an attribute of the <Hlavicka> XML element. This is a flag through which the taxpayer's PoS may set the verification mode for sending of registered sale data messages.

When the flag is present and has a value of *true* (or *1*), the data message is processed in verification mode – see 2.2 *Data message Submission modes, production and non-production environment*.

When the flag is not present, or when its value is *false* (or *0*), the data message is processed in operational mode.

The data format is based on the relevant W3C specification, see:

<https://www.w3.org/TR/xmlschema11-2/#boolean>.

Length: 1 to 5 characters.

3.3.3.5 Registered identification number (*eic_popl*)

Is an attribute of the <Data> XML element. It is the EIC/registered identification number of taxpayer sending the registered sale data message, valid at the time the transaction is carried out, or at the time of making the payment order, when such an order is made in advance. The EIC must include the country code: CZ. The attribute value is identical to the EIC listed in the certificate used for the electronic signature of data messages (the certificate is part of the SOAP envelope of the registered sale data message). The taxpayer whose EIC changes may send registered sale data messages with their new EIC in the *eic_popl* attribute, signed by the existing certificate until a new certificate is issued for them.

Data format mask:

$^{\wedge}\text{CZ}[0-9]\{8,10\}\$$

Length: 10 to 12 characters.

Examples:

CZ00000019

CZ683555118

CZ8551015704

3.3.3.6 Authorizing taxpayer Registration Identification Number (*eic_poverujiciho*)

Is an attribute of the <Data> XML element. It is the valid EIC of a taxpayer receiving the sales, who authorised another taxpayer to register the sales. The data format is identical to that of the *registered identification number* attribute.

3.3.3.7 Multiple Taxpayers Authorization (*povereni_vice_popl*)

An optional attribute of the XML <Data> element. This flag, with possible values *true* or *false* (or 1 and 0), indicates whether the transaction is recorded on behalf of multiple taxpayers to whom the registered sale relates (e.g. in the case of an unincorporated association or joint ownership, where the income is shared among members/co-owners who authorize one taxpayer—typically one of the members/co-owners—to report the transaction).

If the attribute is not specified, it is treated as having the value *false* (0).

The data format is defined by the relevant W3C specification:
<https://www.w3.org/TR/xmlschema11-2/#boolean>

Length: 1 to 5 characters

Example:

true

3.3.3.8 Registrating Unit Identifier (*id_jednotky*)

This attribute of the <Data> element represents the taxpayer's registrating unit (branch etc) identifier assigned to the taxpayer through the MOJE Daně (DIS+) portal. The identifiers of units are unique for each taxpayer and typically consist of at least two decimal digits, with the last digit being 1, 2, 3 or 4.

Data format mask:

$^{\wedge}[1-9][0-9]\{0,8\}\$$

Length: 1 to 9 characters, i.e. a range of 1 to 999 999 999.

Examples:

24

164968741

3.3.3.9 PoS ID (*id_pokl*)

An attribute of the <Data> XML element. It is an ID code for the taxpayer's PoS sending the registered sale data message to the tax authority's central technical system. This code is assigned to the PoS by the taxpayer using alphanumeric and selected special characters. For a given taxpayer,

the point-of-sale system identifier must be unique within a specific registering unit at any given time. This means that the following quadruple must be unique:

```
(eic_popl, id_jednotky, id_pokl, dat_trzby).
```

Data format mask:

```
^[0-9a-zA-Z\.,:;/#\-\_]{1,20}$
```

, where the last character in the square bracket is a space (the " " character with an ASCII decimal code of 32) and the "-" character is a dash (ASCII decimal code 45).

Length: 1 to 20 characters.

Example:

```
5a/A-q/5:22d_2
```

3.3.3.10 Sales transaction sequence number(*porad_cis*)

Is an attribute of the <Data> XML element. It is the serial number of a transaction, created on the taxpayer's side using alphanumeric and selected special characters. The code consists of alphanumeric and selected special characters.

For a given taxpayer, the transaction sequence number must be unique within a single registering unit and for a specific point-of-sale system at any given time. In practice, this means that the following combination of five attributes must be unique:

```
(eic_popl, id_jednotky, id_pokl, porad_cis, dat_trzby).
```

In practice, the transaction sequence number usually corresponds to the receipt number assigned by the taxpayer when a receipt is issued for the given transaction (e.g. under consumer protection legislation).

Data format mask:

```
^[0-9a-zA-Z\.,:;/#\-\_]{1,25}$
```

where the last character in the square bracket is a space (the " " character with an ASCII decimal code of 32) and the "-" character is a dash (ASCII decimal code 45).

Length: 1 to 20 characters.

Example:

```
#25/c-12/1A_2/2027
```

3.3.3.11 Date and time the transaction occurred (*dat_trzby*)

This is an attribute of the XML <Data> element. It represents the date and time of the registered sales transaction, i.e. the moment the payment is received or, if applicable, the moment the instruction to execute the transaction is issued, if such instruction was given earlier.

The format is identical to that of the field described in Section 3.3.3.2 *Date and time of submission* (*dat_odesl*), meaning that the relevant date and time must be provided in the local time zone in which the transaction occurred, along with a mandatory, unambiguous identification of that time zone.

3.3.3.12 Sale's financial information

All financial information for a sale are attributes of the <Data> XML element. The following numerical information/items are used for the following financial values in CZK:

11	Total amount of sale
23	Total amount of payments intended for subsequent drawing or settlement
24	Total amount of payments which are payments subsequently drawn or settled

The number values of all amounts must be provided as decimal numbers with exactly two mandatory decimals and a decimal point as per <https://www.w3.org/TR/xmlschema11-2/#decimal>. The values may be positive, zero, or negative.

To achieve a one-to-one correspondence between the numerical value of a financial item and the character string of its decimal representation, insignificant leading zeroes and a minus character (a dash character with ASCII decimal code 45) before zero value are forbidden.

Financial fields not included in the data message, or without a specified value, are considered empty. (i.e. they are *not* assumed to have the value of 0.00). Items with empty values are not allowed – see 3.3.2 *Overview of registered sale data message items*.

Data format mask:

```
^( (0|-?[1-9]\d{0,7})\.\d\d|-0\.(0[1-9]|[1-9]\d) ) $
```

Length:

- for non-negative values: 4 to 11 characters, i.e. minimum non-negative value is CZK 0.00, maximum non-negative value is CZK 99 999 999.99
- for negative values: 5 to 12 characters, i.e. minimum negative value is CZK -99 999 999.99, maximum negative value is CZK -0.01

This means that the financial items are limited in their absolute value to numbers smaller than CZK 100 million.

Examples::

250.00

-187.20

0.56

Examples of wrong numerical value string representations:

Numerical value	Wrong representation	Correct representation
20.45	020.45	20.45
10.25	00010.25	10.25
0	-0.00	0.00
0	-00.00	0.00
0.2	.20	0.20
-100	-00100.00	-100.00

3.3.4 E-sale example

The following text is an example of the <Trzba> XML element sent in production mode:

```
<tns:Trzba>
  <tns:Hlavicka
    uuid_zpravy="e23e5a5a-08d7-4a08-844d-2b6c6b60621d"
    dat_odesl="2027-01-08T21:19:40+01:00"
    prvni_zaslani="true" />
  <tns:Data eic_popl="CZ8551015704" eic_poverujiciho="CZ00000019"
    povereni_vice_popl="true" id_jednotky="181" id_pokl="00/2535/CN58"
    porad_cis="0/2482/IE25" dat_trzby="2027-01-07T22:01:00+01:00"
    celk_trzba="87988.00" urceno_cerp_zuct="343.00"
    cerp_zuct="237.00" />
</tns:Trzba>
```

This is an example of the <Trzba> XML element sent in the verification mode:

```
<tns:Trzba>
  <tns:Hlavicka
    uuid_zpravy="e23e5a5a-08d7-4a08-844d-2b6c6b60621d"
    dat_odesl="2027-01-08T21:19:40+01:00"
    prvni_zaslani="true" overeni="true" />
  <tns:Data eic_popl="CZ8551015704" eic_poverujiciho="CZ00000019"
    povereni_vice_popl="true" id_jednotky="181" id_pokl="00/2535/CN58"
    porad_cis="0/2482/IE25" dat_trzby="2027-01-07T22:01:00+01:00"
    celk_trzba="87988.00" urceno_cerp_zuct="343.00"
    cerp_zuct="237.00" />
</tns:Trzba>
```

3.4 ACKNOWLEDGEMENT DATA MESSAGE

The *acknowledgement data message* is a SOAP XML structure containing acknowledgement information on the receipt of registered sale by the tax authority's central technical system. The acknowledgement data are stored in the <SOAP Body> XML element.

The <SOAP Header> XML element contains a XML signature and a certificate for the tax authority's central technical system, whose private key was used to create the XML signature.

The acknowledgement itself is saved in the <SOAP Body> XML element as the <Odpoved> element. This element contains two embedded elements which represent data areas: <Hlavicka> and <Potvrzeni>. These data areas contain the data items – see 3.4.2 *Overview of acknowledgement data items*.

Individual replies of the EET system depending on the mode, validity of the data message and the target environment are provided in *Table 1: EET system's reply options*.

If one or more non-critical checks fail (see chapter 2.2.4 *Non-critical checks (non-critical errors)*), the acknowledgement data message includes the respective warning messages and their numerical codes.

3.4.1 Acknowledgement - XML format

The Acknowledgement XML format overview:

```
<tns:Odpoved>
  <tns:Hlavicka attributes... />
```

```

        <tns:Potvrzeni attributes ... />
        <tns:Varovani attributes... >
            content ...
        </tns:Varovani>
        ...
    </tns:Odpoved>

```

The optional XML element <Varovani> may be repeated: one instance for every warning returned. The XML element attributes and values are provided below.

3.4.2 Overview of acknowledgement data items

Data area		Item name	Mandatory	XML name)*
Hlavička (Header)	1	Message UUID	Yes	uuid_zpravy
	2	Date and time of message receipt	Yes	dat_prij
Potvrzení (Acknowledgement)	3	Acknowledgement Code	Yes	pok
	4	Non-production environment flag	No	test
Varování (Warning)	5	Warning code	No	kod_varov)**
	6	Warning message	No	Varovani)**

)* XML name is the name of a XML element or a XML attribute.

)** The XML element <Varovani> including its attribute kod_varov may be repeated.

3.4.2.1 Message UUID (uuid_zpravy)

Is an attribute of the <Hlavicka> XML element. This is the registered sale data message UUID for the data message sent by the taxpayer's PoS – see 3.3.3.1 *Message UUID*.

3.4.2.2 Date and time of message receipt (dat_prij)

Is an attribute of the <Hlavicka> XML element. The date and time of receipt of the acknowledged message is the time when the tax authority's central technical system received the registered sale data message.

The format of this item is identical to that of the date and time of sending – see 3.3.3.2 *Date and time of submission*.

3.4.2.3 Acknowledgement Code (pok)

Is an attribute of the <Potvrzeni> XML element. This is a Acknowledgement code (POK), generated by the tax authority's central technical system, which is unique for each acknowledged registered sale data message sent by the taxpayer's PoS.

The POK data format is as follows:

uuid_prijem-Device_Id

, where uuid_prijem is the UUID number generated by an individual EET system device which received the message and Device_Id is a two-digit hexadecimal number of such device.

Data format mask:

^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-4[0-9a-fA-F]{3}-[89abAB][0-9a-fA-F]{3}-[0-9a-fA-F]{12}-[0-9a-fA-F]{2}\$

Length: 39 characters.

Example:

```
b3a09b52-7c87-4014-a496-4c7a53cf9125-03
```

If a POK code (Acknowledgement code) is issued in a non-production environment, it does not represent a valid POK under the ZoET. In these cases, the last two characters of the POK are set to “ff” (mnemonic: Fictitious Fictitious = ff).

Example:

```
b3a09b52-7c87-4014-a496-4c7a53cf9125-ff
```

3.4.2.4 Non-production environment flag (test)

Is an attribute of the <Potvrzeni> XML element. It is a flag by which the tax authority's central technical system informs the taxpayer's PoS whether the registered sale data message has been sent into the production or non-production environment.

When the flag is present and has a value of *true* (or 1), the data message was received in the non-production environment – see 2.2 *Data message Submission modes, production and non-production environment*.

When the flag is not present, the data message was received in the production environment.

The data format is based on the relevant W3C specification, see: <https://www.w3.org/TR/xmlschema11-2/#boolean>.

Length: 1 to 5 characters.

Example:

```
true
```

3.4.2.5 Warning code (kod_varov)

It is an attribute of the XML element <Varovani>. It is a positive integer with maximum 3 decimal places, where its value denotes a particular warning as defined in the respective code list.

Data format mask:

```
^[1-9]\d{0,2}$
```

Length: 1 to 3 characters.

Examples:

```
1
```

```
3
```

3.4.2.6 Warning message (Varovani)

It is the value of the XML element <Varovani>. It is a character string which shortly describes in the Czech language which non-critical check of the registered sale data message failed.

To avoid any consistency problems of all data messages, only characters from the lower ASCII range permitted by XML are allowed, i.e. characters with decimal codes 9, 10, 13, or in the range 32 to 126. As a result, error descriptions do not include diacritics.

Length: maximum 100 characters.

3.4.3 Example of acknowledgement

The following is an example of the <Odpoved> XML element from the production environment, with no warnings:

```
<tns:Odpoved>
  <tns:Hlavicka uuid_zpravy="123e4567-e89b-42d3-a456-
426655440000"
    dat_prij="2027-03-04T18:25:21+01:00" />
  <tns:Potvrzeni pok="987a6be5-6af5-44f3-b4fc-987654321000-02" />
</tns:Odpoved>
```

Below is an example of the <Odpoved> XML element from the non-production environment which includes warnings about non-critical errors:

```
<tns:Odpoved>
  <tns:Hlavicka uuid_zpravy="123e4567-e89b-42d3-a456-
426655440000"
    dat_prij="2027-03-04T18:25:21+01:00" />
  <tns:Potvrzeni pok="987a6be5-6af5-44f3-b4fc-987654321000-03"
    test="true" />
  <tns:Varovani kod_varov="1" >
    EIC poplatnika v datove zprave se neshoduje s EIC
v certifikatu
  </tns:Varovani>
  <tns:Varovani kod_varov="2" >
    Chybny format EIC poverujiciho poplatnika
  </tns:Varovani>
</tns:Odpoved>
```

3.4.4 List of warning codes and warning messages

Warning code	Warning message text)*
1	EIC poplatnika v datove zprave se neshoduje s EIC v certifikatu (The taxpayer identification codes (EIC) in the message and certificate differ)
2	Chybny format EIC poverujiciho poplatnika (Invalid structure of tax identification number of the authorizing taxpayer)
3	)***
4	The date and time of the transaction are later than the date and time the message was received.
5	The date and time of transaction is far in the past
6	The registering unit identifier (id_jednotky) does not match the expected format
7	The EIC of the authorizing taxpayer matches the EIC of the reporting taxpayer
8 – 999	)**

)* The warning message (as in all EET system messages) contains no diacritics – see 3.1 *Data item coding*.

)** Reserved for future use.

)*** Was applicable to data messages prior to version 4 of the interface specification

3.5 ERROR DATA MESSAGE

The error data message is a SOAP XML structure containing an error code and an error message text concerning:

1. a critical error in the received registered sale data message, or
2. a temporary technical error in the processing at the tax authority's central technical system's side (requires the registered sale data message to be re-sent later).

The error message data are stored in the <SOAP Body> XML element as the <Odpoved> element. This element contains two embedded elements representing the <Hlavicka> and <Chyba> data areas. These data areas contain the data items themselves – see 3.5.2 *Overview of error data items*.

In this case, the <SOAP Header> does not include an XML signature nor certificate.

Reply types of the EET system depending on the mode, validity of the data message and the target environment are provided in *Table1: EET system's reply options*.

In case that the data message sent in the verification mode contains non-critical errors only (see 2.2.4 *Non-critical checks (non-critical errors)*), i.e. the corresponding error message has the error code 0 („Datovou zpravu evidovane trzby v overovacim modu se podarilo zpracovat“ - the original data message has been processed successfully), warnings on non-critical errors will be included in the error message in the same way as in case of an Acknowledge data message.

3.5.1 Error - XML format

The Error XML format overview:

```
<tns:Odpoved>
  <tns:Hlavicka attributes ... />
  <tns:Chyba attributes ...>
    content ...
  </tns:Chyba>
  <tns:Varovani attributes ...>
    content ...
  </tns:Varovani>
  ...
</tns:Odpoved>
```

The XML element attributes and values are provided below.

3.5.2 Overview of error data items

Data area		Item name	Mandatory	XML name)*
Hlavička (Header)	1	Message UUID	No	uuid_zpravy
	2	Date and time of message rejection	No	dat_odmit
Chyba (Error)	3	Error code	Yes	kod
	4	Text description of the error	Yes	Chyba
Warning	5	Non-production environment flag	No	test
	6	Warning code	No	<u>kod_varov)**</u>
	7	Warning message	No	<u>Varovani)**</u>

)* XML name is the name of a XML element or a XML attribute.

)** XML element <Varovani> (warning) makes only sense in case that the corresponding error message has the error code 0 (the original data message has been processed successfully). The XML element <Varovani> with the attribute kod_varov may occur repeatedly in the error message.

3.5.2.1 Message UUID (uuid_zpravy)

Is an attribute of the <Hlavicka> XML element. This is the UUID of the original registered sale data message sent by the taxpayer's PoS and containing an error – see 3.3.3.1 *Message UUID*.

3.5.2.2 Date and time of message rejection (dat_odmit)

Is an attribute of the <Hlavicka> XML element. It is the date and time of rejection of a message containing an error, i.e. the time the registered sale data message with an error is processed at the tax authority's central technical system.

The format of this item is identical to that of the date and time of sending – see 3.3.3.2 *Date and time of submission*.

3.5.2.3 Error code (kod)

Is an attribute of the <Chyba> XML element. This is a decimal integer with a maximum of three digits, which is assigned to an individual critical error in the defined code-list. The error code values may be positive, zero, or negative.

Data format mask:

$^-? \backslash d\{1,3\} \$$

Length:

- for non-negative values: 1 to 3 characters, i.e. minimum non-zero value is 0, maximum non-zero value is 999
- for negative values: 2 to 4 characters, i.e. minimum zero value is -999, maximum zero value is -1

Examples::

10

-1

560

3.5.2.4 Error message (Chyba)

Is a value of the <Chyba> XML element. This is a character string in the Czech language describing the error which occurred during processing of the data message.

To ensure consistency of all data messages, only characters in the lower ASCII set of XML-allowed characters are being used, i.e. characters with decimal codes of 9, 10, 13, or 32 to 126. This means that error descriptions do not include diacritics.

Max. length: 100 characters.

3.5.2.5 Non-production environment flag (test)

Is an attribute of the <Chyba> XML element. It is a flag by which the tax authority's central technical system informs the taxpayer's PoS whether the registered sale data message has been sent into the production or non-production environment.

When the flag is present and has a value of *true* (or 1), the data message was received in the non-production environment – see 2.2 *Data message Submission modes, production and non-production environment*.

When the flag is not present, the data message was received in the production environment.

The data format is based on the relevant W3C specification, see:

<https://www.w3.org/TR/xmlschema11-2/#boolean>.

Length: 1 to 5 characters.

Example:

```
true
```

3.5.3 Example of an error

The following are examples of the error reply in the <Odpoved> XML element containing information on the error.

These are production environment reply examples for the <Odpoved> XML element containing information on the error:

Example 1 (The data message exceeds the maximum allowed size.):

```
<tns:Odpoved>
  <tns:Hlavicka
    uuid_zpravy="123e4567-e89b-42d3-a456-426655440000"
    dat_odmit="2027-03-04T18:25:21+01:00" />
  <tns:Chyba kod="7">
    Datova zprava je prilis velka
  </tns:Chyba>
</tns:Odpoved>
```

Example 2 (the registered sale data message could not be analysed):

```
<tns:Odpoved>
  <tns:Hlavicka dat_odmit="2027-03-04T18:25:21+01:00" />
  <tns:Chyba kod="3">
    XML zprava nevyhovela kontrole XML schematu
  </tns:Chyba>
</tns:Odpoved>
```

Example 3 (technical problem with the tax authority's central technical system):

```
<tns:Odpoved>
  <tns:Hlavicka dat_odmit="2027-03-04T18:25:21+01:00" />
  <tns:Chyba kod="-1">
    Docasna technicka chyba zpracovani - odeslete prosim
    datovou zpravu pozdeji
  </tns:Chyba>
</tns:Odpoved>
```

This is an example of an error message in the <Odpoved> XML element from the non-productive environment:

```
<tns:Odpoved>
  <tns:Hlavicka
    uuid_zpravy="123e4567-e89b-42d3-a456-426655440000"
    dat_odmit="2027-03-04T18:25:21+01:00" />
  <tns:Chyba kod="7" test="true" >
    Datova zprava je prilis velka
  </tns:Chyba>
</tns:Odpoved>
```

3.5.4 List of error codes and error messages

Code	Error message text)*
-999 – -2	)**
-1	Docasna technicka chyba zpracovani – odeslete prosim datovou zpravu pozdeji (Temporary technical error in processing - please re-send the data message later)
0	Datovou zpravu evidovane trzby v overovacim modu se podarilo zpracovat (The registered sale data message in verification mode was successfully processed)
1	)**
2	Kodovani XML neni platne (The XML encoding is not valid)***
3	XML zprava nevyhovela kontrole XML schematu (The XML message failed the XML schema check)
4	Neplatny podpis SOAP zpravy (Invalid SOAP message signature)
5	)***
6	EICpoplatnika ma chybnou strukturu (Invalid structure of tax identification number)
7	Datova zprava je prilis velka (The data message is too big)
8	Datova zprava nebyla zpracovana kvuli technicke chybe nebo chybe dat (The data message was not processed because of a technical error or a data error)
9 – 999	)**

)* Error message texts are provided without diacritics, in accordance with the character encoding used for all EET data messages – see Section 3.1 Data Encoding.

)** Reserved for future use.

) *** Was applicable to data messages prior to version 4 of the interface definition.

)*** Depending on the situation, this error may also be reacted to by returning a technical error, i.e. the SOAP fault, or by ignoring the data message when it appears to be a cyber attack.

4 UNIQUE TRANSACTION IDENTIFICATION – CRITERIA FOR DETECTING UNIQUE TRANSACTION

A registered sales transaction is uniquely identified by normalized (canonicalized) values of the key data elements of the XML <Data> element of e-sale structure, as listed in the table below.

If a data message is received with the same values of these key data elements as a previously received data message, the new message is considered to represent the same previously registered sales transaction.

The processing described below is not required to be performed by the PoS system; it is included here for explanatory purposes to clarify how the uniqueness of a transaction is determined.

Data area		Name of item – basic	Mandatory	XML name
Data	5	Registration identification number	Yes	eic_popl
	8	Registrating unit ID	Yes	id_jednotky
	9	PoS ID	Yes	id_pokl
	10	Sales transaction sequence number	Yes	porad_cis
	11	Date and time of the transaction	Yes	dat_trzby
	12	Total amount of sale	Yes	celk_trzba

A distinct composite value used to determine the uniqueness of a given transaction is constructed as a text string ("plaintext") by concatenating the above data elements of the registered sales data message in the specified order, using ASCII encoding, with the delimiter "|" (ASCII character with decimal value 124) between individual elements.

If an optional item is not provided, it must be included in the string as an empty value ("").

Example:

Let the values of the above items be the following:

	Name of item – basic	XML name	Value
5	Registration identification number	eic_popl	CZ00000019
8	Registrating unit ID	id_jednotky	243
9	PoS ID	id_pokl	24/A-6/Brno_2
10	Sales transaction sequence number	porad_cis	#135433c/11/2027
11	Date and time of sale	dat_trzby	2027-01-09T16:45:36+01:00
12	Total amount of sale	celk_trzba	3264.50

Then text string ("plaintext") from which the unique transaction code is calculated will have the following value:

CZ00000019|243|24/A-6/Brno_2|#135433c/11/2027|2027-01-09T16:45:36+01:00|3264.50

5 SOAP XML MESSAGE AND ITS SECURITY

The Web service interface is formally defined by the WSDL (Web Services Description Language). The WSDL document links the relevant XML Schema document, which describes the XML structure of the e-sale itself. The XML structure of e-sale is the only content in the <soap:Body> SOAP element.

The XML schema and WSDL files are provided as Attachments to this document.

The Web service security complies with the Web Services Security (WSS) standard in the following areas.

5.1 COMMUNICATION ENCRYPTION USING THE HTTPS PROTOCOL

The tax authority's central technical system uses a server TLS certificate for providing authentication.

The PoS must, as part of the TLS connection initialisation (TLS handshake) with the tax authority's central technical system mandatorily verify the validity of the TLS server certificate (whether it was issued by a trustworthy authority and whether the name for which it was issued corresponds to the central technical system's address).

The SSL client (PoS) authentication is not required as part of the SSL handshake.

5.2 SIGNATURE OF REGISTERED SALE DATA MESSAGES

Each registered sale data message must mandatorily be signed with a key for which a X509 taxpayer's certificate has been issued. The taxpayer's certificate must be valid at the time of processing of the registered sale data message at the tax authority's central technical system's side.

In the digital signature of a SOAP message, only a single element may be included: the <soap:Body> element containing the XML structure of the e-sale (<tns:Trzba>) according to the valid XML Schema (XSD). The digital signature must comply with the XML Signature Syntax and Processing (Second Edition) standard <https://www.w3.org/TR/xmlsig-core2/> and the following requirements:

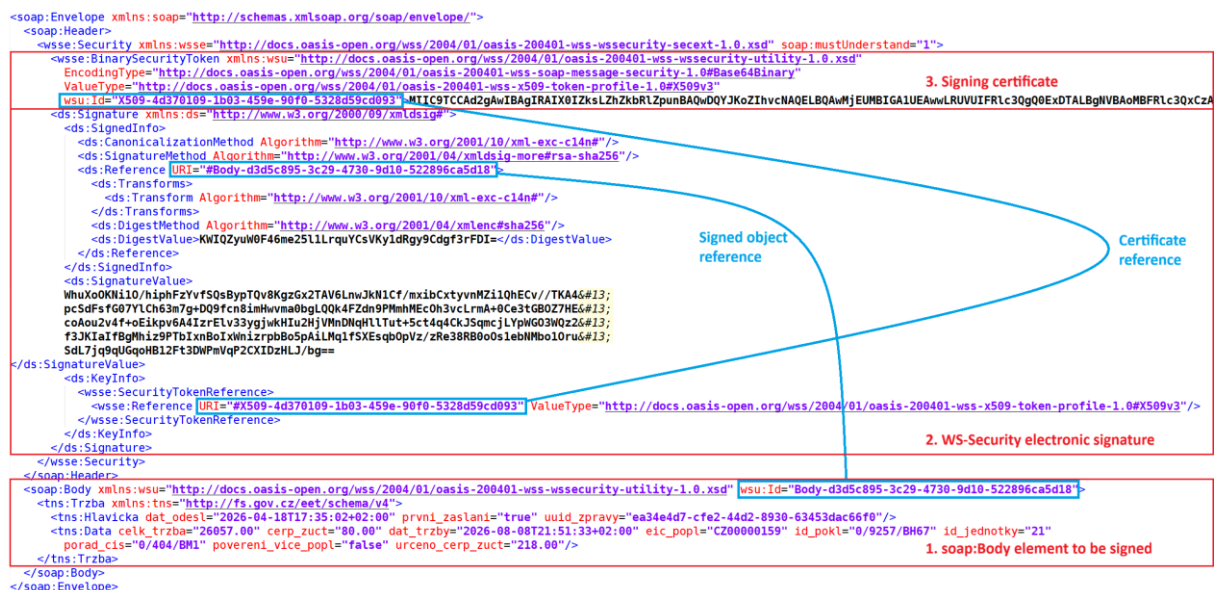
- The WS-Security and XML Digital Signature standards are used for the electronic signature
- The digital signature must be included in the SOAP header of a data message in the WS-Security section. The signed object (the <soap:Body> element) is referenced using relative link in context of the SOAP message.
- The "Exclusive C14N" signed object canonicalization algorithm must be used (Exclusive XML Canonicalization Version 1.0, <https://www.w3.org/TR/xml-exc-c14n/>, identifier "<http://www.w3.org/2001/10/xml-exc-c14n#>")
- To calculate the hash (digest) of the signed object (the <soap:Body> element) for SOAP message's signature, the SHA256 algorithm must be used

(<https://www.w3.org/TR/xmlenc-core/#sec-SHA256>, identifikátor
"http://www.w3.org/2001/04/xmlenc#sha256")

- For the SOAP message's electronic signature, the RSA-SHA256 algorithm must be used (identifier "http://www.w3.org/2001/04/xmldsig-more#rsa-sha256")
- The X509 certificate belonging to the private key used to calculate the electronic signature of the registered sale data message must be attached in the BinarySecurityToken element within WS-Security section of SOAP message header (type "http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-soap-message-security-1.0#Base64Binary") in X509v3 format (type "http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3"). The certificate is referenced from within the digital signature element using standard mechanisms.

The data message should not include any other headers (e.g. Timestamp or WS-Addressing) and only the <soap:Body> element should be signed. If not, the size of the SOAP message can be larger than expected and therefore the message can be evaluated as a security attack and rejected.

An example of the expected data message structure is shown on the following picture:



5.3 ELECTRONIC SIGNATURE OF THE ACKNOWLEDGEMENT DATA MESSAGES

Acknowledgement data message in the SOAP format includes the tax authority's central technical system's electronic signature.

5.4 SUPPLEMENTARY TECHNICAL INFORMATION FOR TRACING

The tax authority's central technical system includes the following HTTP header in its HTTP responses (acknowledgement data messages, error data messages, and certain technical error responses):

```
X-Global-Transaction-Id: XXXX
```

The value XXXX is unique for each processed transaction and can be used in particular for diagnosing technical or processing errors. It is recommended that point-of-sale device (cash register or other implementation) vendors log or store this value be able to use it when investigating the causes of specific issues or unexpected behavior.

The use of this header is especially important in the non-production environment (playground), for troubleshooting communication issues.

The value XXXX is a string consisting of alphanumeric and punctuation characters. Its typical length is less than 32 characters, with a maximum length of 64 characters.