

Online Register EN 15085

interface documentation

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1 basics

The Online Register EN 15085 can import data from external data sources if there are available in XML format.

The following must be observed for the format of the XML data:

1. Character set: UTF-8
2. Namespace: May not be specified
3. Exactly 1 XML file is created and transmitted per certificate. If several certificates are transferred simultaneously in one file, this is rejected.

1.1 Technologies

The SOAP network protocol is used as the interface technology in conjunction with the XML data exchange format.

1.1.1 SOAP

Further information can be found in the documentation of your development environment or at

<https://wikipedia.org/wiki/SOAP>

1.1.1.1 Funktionen

The following functions are provided by the SOAP interface:

1.1.1.1.1 testSOAP

```
string testSOAP()
```

The testSOAP function checks the connection to the SOAP server and returns the value "SOAP Server is running" if successful.

1.1.1.1.2 testXML

```
int testXML(string)
```

The testXML function validates the XML data of type string and returns the integer value 1 if successful. If a validation error occurs, the integer value 0 is returned. In case of a general error the integer value -1

1.1.1.1.3 getXMLErrors

```
string getXMLErrors(string)
```

The getXMLErrors function returns possible validation errors within the XML document. This function can be used for debugging if the function testXML(string) returns the integer value 0.

1.1.1.1.4 uploadXML

`string uploadXML(string)`

The uploadXML function imports the XML data of type `string` and returns the unique ID of the data record in the database after successful import.

1.1.1.1.5 uploadFILE

`int uploadFILE(string, string, string)`

The uploadFILE function imports a BASE64 encoded data stream of type string and converts it into a PDF document after successful import. This PDF is stored in the register as proof for the auditing/monitoring of a maintenance company according to DIN 27201-6. The parameters stand for the following data:

- Parameter 1 of data type `string`: BASE64-encrypted binary data stream of the PDF document
- Parameter 2 of data type `string`: Abbreviation of the manufacturer certification body as under point 2.1.4
- Parameter 3 of data type `string`: complete nomenclature of the certificate

Only the PDF format is supported.

1.1.1.2 Call

The functions described under 1.1.1.1 are called up via the Internet address:

<https://en15085.joincert.eu/soap/>

The corresponding WSDL file can be found under:

<https://en15085.joincert.eu/soap/?wsdl>

For testing the interface, please use the following links:

<https://en15085.test.joincert.eu/soap/>
<https://en15085.test.joincert.eu/soap/?wsdl>

For additional information about accessing a SOAP interface, see the documentation for your development environment.

1.1.2 Requesting the certificate as a PDF document

To request a certificate as a PDF document, use the following call:

<https://en15085.joincert.eu/print/<ID>/<LANGUAGE>/<APIKEY>>

For testing the interface, please use the following link:

<https://en15085.test.joincert.eu/print/<ID>/<LANGUAGE>/<APIKEY>>

The <ID> is the return value of the import function under 1.1.1.1.4
<LANGUAGE> corresponds to the values defined in point 2.1.3
<APIKEY> corresponds to the value from point 2.1.1

1.1.3 XML-files

For more information, see the documentation for your development environment or see

https://wikipedia.org/wiki/Extensible_Markup_Language

1.2 Validation of your export data

You can validate your export data online at any time by using the test procedure described under 1.1.1.1.2 and 1.1.1.1.3

1.3 Change and delete of existing certificates

For deleting or changing an existing certificate, the following data must match in the XML data of certificates:

1. APIKEY (see under 2.1.1)
2. MCB_SHORTSIGN (see under 2.1.4)
3. NUMBER (see under 2.1.8)
4. YEAR (see under 2.1.10)

If the YEAR or NUMBER is to be changed, the old certificate must first be deleted and then created with new data.

1.3.1 Change of existing certificates

When matching of certificate is successful the old version of certificate is logically deleted, a new version of certificate will be created and a link between old and new version is generated.

1.3.2 Delete of existing certificates

When matching of certificate is successful and the status (see under 2.1.2) of the new version is 0 so the certificate will be logically deleted.

1.4 Further information

A sample XML file can be found under point 3. You will find the XML schema under:

<https://en15085.joincert.eu/soap/EN15085.xsd>

For testing the interface, please use the following link:

<https://en15085.test.joincert.eu/soap/EN15085.xsd>

2 XML-data

2.1 CERT

Element:	CERT
Description:	The root element of a record. Between the opening tag <CERT> and the closing tag </CERT> the following elements can be entered.
Data type:	complex
Remark:	
Example:	<pre> <CERT> <STATUS>1</STATUS> <LANGUAGE>de</LANGUAGE> ... </CERT> </pre>

2.1.1 APIKEY

Element:	APIKEY
Description:	access key for saving data in database
Data type:	STRING
Accepted values:	max. 40 signs
Remark:	Contains the given api key to save the data in the database for the right mcb you can get the API key from the Administrator of online register via e-mail
Required field:	Yes
Example:	<APIKEY>C0F084A0D94628966395AEFH22E3</APIKEY>

2.1.2 STATUS

Element:	STATUS
Description:	Determines the status of the certificate.
Data type:	STRING
Accepted values:	0 deactivated 1 activated 2 ongoing certification process 3 retracted 4 exposed
Remark:	-
Required field:	Yes
Example:	<STATUS>1</STATUS>

2.1.3 LANGUAGE

Element:	LANGUAGE
Description:	main language of certificate
Data type:	STRING
Accepted values:	de german en english it italian fr french pl polish es Spanish hu hungarian
Remark:	-
Required field:	Yes
Example:	<LANGUAGE>de</LANGUAGE>

2.1.4 MCB_SHORTSIGN

Element: MCB_SHORTSIGN
 Description: short sign of manufacture certification body
 Data type: STRING
 Accepted values: max. 10 signs
 Remark: Contains the abbreviation of the manufacturer certification body from the online register EN15085.
 Required field: Yes
 Example: `<MCB_SHORTSIGN>MCB</MCB_SHORTSIGN>`

2.1.5 OWN_CERT_NUMBER

Element: OWN_CERT_NUMBER
 Description: Nomenclature number of the certificate
 Data type: STRING
 Accepted values: min. 0, max. 50 signs
 Remark: -
 Required field: Yes
 Example: `<OWN_CERT_NUMBER>XXXX-00815-YYYY</OWN_CERT_NUMBER>`

2.1.6 STANDARD

Element: STANDARD
 Description: current standard of the certificate
 Data type: STRING
 Accepted values: EN15085
 Remark: -
 Required field: Yes
 Example: `<STANDARD>EN15085</STANDARD>`

2.1.7 CLASS

Element: CLASS
 Description: class of certificate
 Data type: STRING
 Accepted values: CL1, CL2, CL3
 Remark: -
 Required field: Yes
 Example: `<CLASS>CL1</CLASS>`

2.1.8 NUMBER

Element: NUMBER
 Description: consecutive number of the certificate
 Data type: STRING
 Accepted values: 000 - 999
 Remark: -
 Required field: Yes
 Example: `<NUMBER>815</NUMBER>`

2.1.9 TYPE

Element: TYPE
 Description: Defines the type (new entry, renewal, change) of the certificate.
 Data type: STRING
 Accepted values: 0, 0A1, 0A2, 0A3, 0A4, ..., 0A9

1, 1A1, 1A2, ..., 1A9
 2, 2A1, ..., 2A9
 9, ..., 9A9
 Remark: 0: new entry, 1: first renewal, 2: second renewal ...
 0A1: first change of new entry, 0A2: second entry of new entry ...
 5A3: 3. Change of 5. renewal
 Required field: Yes
 Example: `<TYPE>1</TYPE>`

2.1.10 YEAR

Element: YEAR
 Description: Issue year of the certificate
 Data type: STRING
 Accepted values: four-digit year yyyy
 Remark: here the year of the first issue of the certificate is handed over. This year will not change.
 Required field: Yes
 Example: `<YEAR>2018</YEAR>`

2.1.11 LASTUSER_FIRSTNAME

Element: LASTUSER_FIRSTNAME
 Description: first name of editor
 Data type: STRING
 Accepted values: max. 100 signs
 Remark: -
 Required field: Yes
 Example: `<LASTUSER_FIRSTNAME>Max</LASTUSER_FIRSTNAME>`

2.1.12 LASTUSER_LASTNAME

Element: LASTUSER_LASTNAME
 Description: name of editor
 Data type: STRING
 Accepted values: max. 100 signs
 Remark: -
 Required field: Yes
 Example: `<LASTUSER_LASTNAME>Mustermann</LASTUSER_LASTNAME>`

2.1.13 DATE_OF_ISSUE

Element: DATE_OF_ISSUE
 Description: start of validity
 Data type: DATE
 Accepted values:
 Remark: date in format: yyyy-mm-dd
 Required field: Yes
 Example: `<DATE_OF_ISSUE>2014-01-20</DATE_OF_ISSUE>`

2.1.14 VALID_FROM

Element: VALID_FROM
 Description: end of validity
 Data type: DATE
 Accepted values:
 Remark: date in format: yyyy-mm-dd
 Required field: Yes
 Example: `<VALID_FROM>2014-01-20</VALID_FROM>`

2.1.15 VALID_UNTIL

Element: VALID_UNTIL
 Description: Date of issue of the certificate
 Data type: DATE
 Accepted values:
 Remark: date in format: yyyy-mm-dd
 Required field: Yes
 Example: <VALID_UNTIL>2014-01-20</VALID_UNTIL>

2.1.16 AUDITOR

Element: AUDITOR
 Description: name of auditors
 Data type: STRING
 Accepted values:
 Remark: max. 50 sign
 Required field: Yes
 Example: <AUDITOR>Mustermann</AUDITOR>

2.1.17 AUDITOR_FIRST_NAME

Element: AUDITOR_FIRST_NAME
 Description: first name of auditor
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: <AUDITOR_FIRST_NAME>Max</AUDITOR_FIRST_NAME>

2.1.18 COAUDITOR

Element: COAUDITOR
 Description: name of auditors
 Data type: STRING
 Accepted values:
 Remark: max. 50 sign
 Required field: Yes
 Example: <COAUDITOR>Mustermann</COAUDITOR>

2.1.19 COAUDITOR_FIRST_NAME

Element: COAUDITOR_FIRST_NAME
 Description: first name of auditor
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: <COAUDITOR_FIRST_NAME>Max</COAUDITOR_FIRST_NAME>

2.1.20 CURRENT_AUDIT

Element: CURRENT_AUDIT
 Description: date of current audit
 Data type: STRING

Accepted values: date
 Remark: max. 50 signs
 Required field: Yes
 Example: `<CURRENT_AUDIT>2014-01-20</CURRENT_AUDIT>`

2.1.21 NEXT_AUDIT

Element: NEXT_AUDIT
 Description: date of next audit
 Data type: STRING
 Accepted values: date
 Remark: max. 50 signs
 Required field: Yes
 Example: `<NEXT_AUDIT>2014-01-20</NEXT_AUDIT>`

2.1.22 COMPANY

Element: COMPANY
 Description: address of manufacturer
 Data type: COMPLEX
 Accepted values:
 Remark: minOccurs = 1, maxOccurs = 1
 Required field: Yes
 Example: `<COMPANY>`
 `<NAME1>company name 1</NAME1>`
 `...`
 `</COMPANY>`

2.1.22.1 NAME1

Element: NAME1
 Description: name of company
 Data type: STRING
 Accepted values:
 Remark: min. 1, max. 50 signs
 Required field: Yes
 Example: `<NAME1>company name 1</NAME1>`

2.1.22.2 NAME2

Element: NAME2
 Description: second name of company
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: `<NAME2>company name 2</NAME2>`

2.1.22.3 NAME3

Element: NAME3
 Description: third name of company
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes

Example: `<NAME3>company name 3</NAME3>`

2.1.22.4 STREET

Element: STREET
 Description: street of address
 Data type: STRING
 Accepted values:
 Remark: min. 1, max. 50 signs
 Required field: Yes
 Example: `<STREET>street name</STREET>`

2.1.22.5 DISTRICT

Element: DISTRICT
 Description: District of the company address
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs, minOccurs = 0
 Required field: Yes
 Example: `<DISTRICT>district</DISTRICT>`

2.1.22.6 CITY

Element: CITY
 Description: city of the company address
 Data type: STRING
 Accepted values:
 Remark: min. 1, max. 50 signs
 Required field: Yes
 Example: `<CITY>name of city</CITY>`

2.1.22.7 ZIPCODE

Element: ZIPCODE
 Description: zipcode of the company address
 Data type: STRING
 Accepted values:
 Remark: min. 1, max. 10 signs
 Required field: Yes
 Example: `<ZIPCODE>12345</ZIPCODE>`

2.1.22.8 STATE

Element: STATE
 Description: State in the company address
 Data type: STRING
 Accepted values: BW, BY, BE, BB, HB, HH, HE, MV, NI, NW, RP, SL, SN, ST, SH, TH
 Remark: max. 2 signs, currently only for Germany
 Required field: Yes
 Example: `<STATE>ST</STATE>`

2.1.22.9 COUNTRY

Element: COUNTRY
 Description: country code
 Data type: STRING
 Accepted values: ISO-3166-1
 Remark: max. 2 signs
 Required field: Yes
 Example: <COUNTRY>DE</COUNTRY>

2.1.22.10 PUBLIC

Element: PUBLIC
 Description: Certificate is released for the Internet (1 – Yes, 0 – No)
 Data type: BOOLEAN
 Accepted values: 0, 1
 Remark: max. 1 sign
 Required field: Yes
 Example: <PUBLIC>0</PUBLIC>

2.1.22.11 PHONE

Element: PHONE
 Description: phone number
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: <PHONE>+49 123 456789</PHONE>

2.1.22.12 FAX

Element: FAX
 Description: Fax number
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: <FAX>+49 123 456789</FAX>

2.1.22.13 EMAIL

Element: EMAIL
 Description: E-Mail address
 Data type: STRING
 Accepted values:
 Remark: max. 70 signs
 Required field: Yes
 Example: <EMAIL>johndoe@company.com</EMAIL>

2.1.22.14 WEB

Element: WEB
 Description: internet address
 Data type: STRING

Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: `<WEB>www.company.com</WEB>`

2.1.22.15 VAT_NUMBER

Element: VAT_NUMBER
 Description: VAT number of certified company
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: `<VAT_NUMBER>0815</VAT_NUMBER>`

2.1.22.16 CUSTOMER_NUMBER

Element: CUSTOMER_NUMBER
 Description: customer number of certified company
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: `<CUSTOMER_NUMBER>0815</CUSTOMER_NUMBER>`

2.1.22.17 TYPE_OF_ACTIVITY

Element: TYPE_OF_ACTIVITY
 Description: Type of activity of the manufacturer
 Data type: STRING
 Accepted values: D, P, M, S
 Remark: max. 1 signs, maxOccurs = unbounded, minOccurs=1
 Required field: Yes
 Example: `<TYPE_OF_ACTIVITY>D</TYPE_OF_ACTIVITY>`

2.1.22.18 WORKSHOP

Element: WORKSHOP
 Description: workshop data of certificate
 Data type: COMPLEX
 Accepted values:
 Remark: maxOccurs = unbounded, minOccurs=0
 Required field: Yes
 Example: `<WORKSHOP>
 <NAME1>workshop name 1</NAME1>
 <NAME2>workshop name 2</NAME2>
 </WORKSHOP>`

2.1.22.18.1 NAME1

Element: NAME1
 Description: name of company
 Data type: STRING
 Accepted values:
 Remark: min. 1, max. 50 signs
 Required field: Yes

Example: `<NAME1>workshop name 1</NAME1>`

2.1.22.18.2 NAME2

Element: NAME2
 Description: second name of company
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: `<NAME2> workshop name 2</NAME2>`

2.1.22.18.3 NAME3

Element: NAME3
 Description: third name of company
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs
 Required field: Yes
 Example: `<NAME3> workshop name 3</NAME3>`

2.1.22.18.4 STREET

Element: STREET
 Description: street of address
 Data type: STRING
 Accepted values:
 Remark: min. 1, max. 50 signs
 Required field: Yes
 Example: `<STREET>street</STREET>`

2.1.22.18.5 DISTRICT

Element: DISTRICT
 Description: District of the company address
 Data type: STRING
 Accepted values:
 Remark: max. 50 signs, minOccurs = 0
 Required field: Yes
 Example: `<DISTRICT>district</DISTRICT>`

2.1.22.18.6 CITY

Element: CITY
 Description: city of the company address
 Data type: STRING
 Accepted values:
 Remark: min. 1, max. 50 signs
 Required field: Yes
 Example: `<CITY>city</CITY>`

2.1.22.18.7 ZIPCODE

Element: ZIPCODE
 Description: zipcode of the company address
 Data type: STRING
 Accepted values:
 Remark: min. 1, max. 10 signs
 Required field: Yes
 Example: `<ZIPCODE>12345</ZIPCODE>`

2.1.22.18.8 STATE

Element: STATE
 Description: State in the company address
 Data type: STRING
 Accepted values: BW, BY, BE, BB, HB, HH, HE, MV, NI, NW, RP, SL, SN, ST, SH, TH
 Remark: max. 2 signs, currently only for Germany
 Required field: Yes
 Example: `<STATE>ST</STATE>`

2.1.22.18.9 COUNTRY

Element: COUNTRY
 Description: country code
 Data type: STRING
 Accepted values: ISO-3166-1
 Remark: max. 2 signs
 Required field: Yes
 Example: `<COUNTRY>DE</COUNTRY>`

2.1.22.18.10 TYPE_OF_ACTIVITY

Element: TYPE_OF_ACTIVITY
 Description: Type of activity of the workshop
 Data type: STRING
 Accepted values: D, P, M, S
 Remark: max. 1 signs, maxOccurs = 4, minOccurs=1
 Required field: Yes
 Example: `<TYPE_OF_ACTIVITY>D</TYPE_OF_ACTIVITY>`

2.1.23 PERSON

Element: PERSON
 Description: person data of certificate
 Data type: COMPLEX
 Accepted values:
 Remark: maxOccurs = unbounded
 Required field: Yes
 Example: `<PERSON>`
 `<LASTNAME>Mustermann</LASTNAME>`
 `<FIRSTNAME>Max</FIRSTNAME>`
 `...`
 `</PERSON>`

2.1.23.1 LASTNAME

Element:	LASTNAME
Description:	lastname of person
Data type:	STRING
Accepted values:	
Remark:	min. 1, max. 50 signs
Required field:	Yes
Example:	<LASTNAME>Mustermann</LASTNAME>

2.1.23.2 FIRSTNAME

Element:	FIRSTNAME
Description:	firstname of person
Data type:	STRING
Accepted values:	
Remark:	max. 50 signs
Required field:	Yes
Example:	<FIRSTNAME>Maxi</FIRSTNAME>

2.1.23.3 DATE

Element:	DATE
Description:	date of birth
Data type:	STRING
Accepted values:	
Remark:	nillable="true", date format: yyyy-mm-dd
Required field:	Yes
Example:	<DATE>2000-01-20</DATE>

2.1.23.4 TITLE

Element:	TITLE
Description:	title of person
Data type:	STRING
Accepted values:	Dr., Dr.-Ing., Ing., Prof., Prof. Dr.-Ing., Dipl.-Ing. (FH), B.A., B.Sc., B.Eng., M.A., M.Sc., M.Eng., Dipl.-Ing. (TU), Dipl.-Wirt.-Ing. (FH)
Remark:	max. 50 signs
Required field:	Yes
Example:	<TITLE>Dr.</TITLE>

2.1.23.5 QUALIFICATION

Element:	QUALIFICATION
Description:	welding qualification of the person
Data type:	STRING
Accepted values:	IWE, IWI, IWP, IWS, IWT, EWE, EWI, EWP, EWS, EWT, SFI, SFM, ST
Remark:	
Required field:	Yes
Example:	<QUALIFICATION>IWE</QUALIFICATION>

2.1.23.6 TYPE

Element:	TYPE
Description:	function of the person

Data type: STRING
 Accepted values: head of certification body
 deputy head of certification body
 responsible welding coordinator
 deputy rwc with equal rights
 additional welding coordinator
 contact person company
 contact person certification body
 Remark:
 Required field: Yes
 Example: <TYPE>head of certification body</TYPE>

2.1.23.7 LEVEL

Element: LEVEL
 Description: welding level of the person
 Data type: STRING
 Accepted values: Level A, Level B, Level C
 Remark: maxOccurs = 1, minOccurs = 0
 Required field: No
 Example: <LEVEL>Level A</Level>

2.1.23.8 AREA_RESPONSIBLE

Element: AREA_RESPONSIBLE
 Description: responsible area of a person
 Data type: COMPLEX
 Accepted values:
 Remark: maxOccurs = unbounded
 Required field: Yes
 Example: <AREA_RESPONSIBLE>
 <LASTNAME>Mustermann</LASTNAME>
 <FIRSTNAME>Max</FIRSTNAME>
 ...
 </AREA_RESPONSIBLE>

2.1.23.8.1 LANGUAGE

Element: LANGUAGE
 Description: language for responsible area of a person
 Data type: STRING
 Accepted values: de german
 en english
 it italian
 fr french
 pl polish
 es spanish
 hu hungarian
 Remark: -
 Required field: Yes
 Example: <LANGUAGE>de</LANGUAGE>

2.1.23.8.2 TEXT

Element: TEXT
 Description: text for responsible area of a person
 Data type: STRING
 Accepted values:

Remark: max. 100 signs
 Required field: Yes
 Example: `<TEXT>training</TEXT>`

2.1.23.9 GENDER

Element: GENDER
 Description: gender of the person
 Data type: STRING
 Accepted values: F, M
 Remark:
 Required field: Yes
 Example: `<GENDER>M</GENDER>`

2.1.23.10 EXTERNAL

Element: EXTERNAL
 Description: contract with the person is extern (1) or intern (0)
 Data type: STRING
 Accepted values: 0, 1
 Remark:
 Required field: Yes
 Example: `<EXTERNAL>1</EXTERNAL>`

2.1.23.11 ANONYM_CERT

Element: ANONYM_CERT
 Description: GDPR: person is visible on certificate (1) or not (0)
 Data type: STRING
 Accepted values: 0, 1
 Remark:
 Required field: Yes
 Example: `<ANONYM_CERT>1</ANONYM_CERT>`

2.1.23.12 ADDRESS

Element: ADDRESS
 Description: salutory in the address
 Data type: STRING
 Accepted values: Ms.
 Ms. Dr.
 Mr.
 Mr. Dr.
 Remark:
 Required field: Yes
 Example: `<ADDRESS>Ms.</ADDRESS>`

2.1.23.13 LETTER

Element: LETTER
 Description: salutory in the letter
 Data type: STRING
 Accepted values: Dear Ms.
 Dear Ms. Dr.
 Dear Mr.
 Dear Mr. Dr.

Remark:
 Required field: Yes
 Example: `<LETTER>Dear Mr.</LETTER>`

2.1.23.14 ANONYM

Element: ANONYM
 Description: GDPR: visible in register yes (0)/no (1)
 Data type: STRING
 Accepted values: 0, 1
 Remark:
 Required field: Yes
 Example: `<ANONYM>1</ANONYM>`

2.1.23.15 EXAM

Element: EXTERNAL
 Description: person is entitled to take exams (1) or not (0)
 Data type: STRING
 Accepted values: 0, 1
 Remark:
 Required field: Yes
 Example: `<EXAM>1</EXAM>`

2.1.23.16 EMAIL

Element: EMAIL
 Description: E-Mail-Adresse of person
 Data type: STRING
 Accepted values: valid E-Mail-Address
 Remark:
 Required field: Yes
 Example: `<EMAIL>1</EMAIL>`

2.1.24 AREA_OF_APPLICATION

Element: AREA_OF_APPLICATION
 Description: area of application
 Data type: COMPLEX
 Accepted values:
 Remark: maxOccurs = unbounded, minOccurs=0
 Required field: no
 Example: `<AREA_OF_APPLICATION>
 <LANGUAGE>de</LANGUAGE>
 ...
 </AREA_OF_APPLICATION>`

2.1.24.1 LANGUAGE

Element: LANGUAGE
 Description: language of text
 Data type: STRING
 Accepted values: de, en, it, fr, es, pl, hu
 Remark:
 Required field: Yes
 Example: `<LANGUAGE>de</LANGUAGE>`

2.1.24.2 ROW

Element: ROW
 Description: row on the certificate for area of application
 Data type: STRING
 Accepted values: numbers
 Remark:
 Required field: Yes
 Example: `<ROW>1</ROW>`

2.1.24.3 HEADLINE

Element: HEADLINE
 Description: main group of area of application (depending on class see 2.1.7)
 Data type: STRING
 Accepted values: see file EN15085.xsd
 Remark:
 Required field: Yes
 Example: `<HEADLINE>Design</HEADLINE>`

2.1.24.4 REMARK

Element: REMARK
 Description: remark for main group of area of application
 Data type: STRING
 Accepted values:
 Remark:
 Required field: Yes
 Example: `<REMARK>dummy text</REMARK>`

2.1.25 PROCESS_DATA

Element: PROCESS_DATA
 Description: Data of the scope table
 Data type: COMPLEX
 Accepted values:
 Remark: maxOccurs = unbounded, minOccurs=0
 Required field: no
 Example: `<PROCESS_DATA>`
 `<MAIN>...</MAIN>`
 `...`
 `</PROCESS_DATA>`

2.1.25.1 MAIN

Element: MAIN
 Description: first welding process
 Data type: COMPLEX
 Accepted values:
 Remark: maxOccurs = 1, minOccurs=1
 Required field: no
 Example: `<MAIN>`
 `<PROCESS_NUMBER>111</PROCESS_NUMBER>`
 `...`
 `</MAIN>`

2.1.25.1.1 PROCESS_NUMBER

Element: PROCESS_NUMBER
 Description: number of welding process according to ISO 4063
 Data type: STRING
 Accepted values:
 Remark: max. 3 signs
 Required field: Yes
 Example: `<PROCESS_NUMBER>111</PROCESS_NUMBER>`

2.1.25.1.2 MECHANIZATION

Element: MECHANIZATION
 Description: Degree of mechanization, not standardized, no output on certificate
 Data type: STRING
 Accepted values: `<empty>` - no degree of mechanization
 a - automatic
 m - manuell
 r - robotic
 t - partly mechanized
 v - fully mechanized
 Remark: max. 1 sign
 Required field: Yes
 Example: `<MECHANIZATION>a</MECHANIZATION>`

2.1.25.1.3 MATERIAL_GROUP

Element: MATERIAL_GROUP
 Description: material group according to CEN ISO/TR 15608 and X120Mn12
 Data type: STRING
 Accepted values:
 Remark: maxOccurs = 1, minOccurs=1
 Required field: Yes
 Example: `<MATERIAL_GROUP>1.1</MATERIAL_GROUP>`

2.1.25.2 COMBI

Element: COMBI
 Description: second welding process
 Data type: COMPLEX
 Accepted values:
 Remark: maxOccurs = 1, minOccurs=1
 Required field: No
 Example: `<COMBI>`
 `<PROCESS_NUMBER>111</PROCESS_NUMBER>`
 ...
 `</COMBI>`

2.1.25.2.1 PROCESS_NUMBER

Element: PROCESS_NUMBER
 Description: number of welding process according to ISO 4063
 Data type: STRING
 Accepted values:
 Remark: max. 3 signs

Required field: Yes
 Example: `<PROCESS_NUMBER>111</PROCESS_NUMBER>`

2.1.25.2.2 MECHANIZATION

Element: MECHANIZATION
 Description: Degree of mechanization, not standardized, no output on certificate
 Data type: STRING
 Accepted values: „“, a, m, r, t, v
 Remark: max. 1 Zeichen
 Required field: Yes
 Example: `<MECHANIZATION>a</MECHANIZATION>`

2.1.25.2.3 MATERIAL_GROUP

Element: MATERIAL_GROUP
 Description: material group according to CEN ISO/TR 15608 and X120Mn12
 Data type: STRING
 Accepted values:
 Remark: maxOccurs = 1, minOccurs=1
 Required field: Yes
 Example: `<MATERIAL_GROUP>1.1</MATERIAL_GROUP>`

2.1.25.3 SHEET_MIN

Element: SHEET_MIN
 Description: minimum sheet thickness
 Data type: FLOAT
 Accepted values:
 Remark: maxOccurs = 1, minOccurs=1
 Required field: Yes
 Example: `<SHEET_MIN>2.5</SHEET_MIN>`

2.1.25.4 SHEET_MAX

Element: SHEET_MAX
 Description: maximum sheet thickness
 Data type: FLOAT
 Accepted values:
 Remark: maxOccurs = 1, minOccurs=1
 Required field: Yes
 Example: `<SHEET_MAX>2.5</SHEET_MAX>`

2.1.25.5 PIPE_MIN

Element: PIPE_MIN
 Description: minimum pipe diameter
 Data type: FLOAT
 Accepted values:
 Remark: maxOccurs = 1, minOccurs=1
 Required field: Yes
 Example: `<PIPE_MIN>2.5</PIPE_MIN>`

2.1.25.6 PIPE_MAX

Element: PIPE_MAX
 Description: maximum pipe diameter
 Data type: FLOAT
 Accepted values:
 Remark: maxOccurs = 1, minOccurs=1
 Required field: Yes
 Example: `<PIPE_MAX>2.5</PIPE_MAX>`

2.1.25.7 SEAM_TYPE

Element: SEAM_TYPE
 Description: Seam type of process data if available
 Data type: string
 Accepted values: BW; FW; FW, BW; T-BW/FW; <empty>
 Remark: maxOccurs = 1, minOccurs=1
 Required field: Yes
 Example: `<SEAM_TYPE>BW</SEAM_TYPE>`

2.1.25.8 REMARK

Element: REMARK
 Description: remark on the scope of process data
 Data type: COMPLEX
 Accepted values:
 Remark: maxOccurs = 6, minOccurs=0
 Required field: Yes
 Example: `<REMARK>`
 `<LANGUAGE>DE</LANGUAGE>`
 `...`
 `</REMARKS>`

2.1.25.8.1 LANGUAGE

Element: LANGUAGE
 Description: language of the remark
 Data type: STRING
 Accepted values: de, en, es, fr, it, pl, hu
 Remark:
 Required field: Yes
 Example: `<LANGUAGE>de</LANGUAGE>`

2.1.25.8.2 TEXT

Element: TEXT
 Description: text of remark for scope of process data
 Data type: STRING
 Accepted values:
 Remark: max. 500 signs
 Required field: Yes
 Example: `<REMARK>text of remark</REMARK>`

2.1.26 REMARKS

Element:	REMARKS
Description:	remarks for the certificate
Data type:	COMPLEX
Accepted values:	
Remark:	maxOccurs = unbounded, minOccurs=0
Required field:	no
Example:	<pre> <REMAKRS> <LANGUAGE>DE</LANGUAGE> ... </REMARKS> </pre>

2.1.26.1 LANGUAGE

Element:	LANGUAGE
Description:	language of the remark
Data type:	STRING
Accepted values:	de, en, es, fr, it, pl, hu
Remark:	
Required field:	Yes
Example:	<pre> <LANGUAGE>de</LANGUAGE> </pre>

2.1.26.2 ROW

Element:	ROW
Description:	Sequence of remarks on the certificate
Data type:	INTEGER
Accepted values:	
Remark:	
Required field:	Yes
Example:	<pre> <ROW>1</ROW> </pre>

2.1.26.3 REMARK

Element:	REMARK
Description:	text of remark
Data type:	STRING
Accepted values:	
Remark:	max. 500 signs
Required field:	Yes
Example:	<pre> <REMARK>text of remark</REMARK> </pre>

3 Example for classification class CL1

```

<CERT>
  <APIKEY>1</APIKEY>
  <STATUS>1</STATUS>
  <LANGUAGE>de</LANGUAGE>
  <MCB_SHORTSIGN>Z-STELLE</MCB_SHORTSIGN>
  <OWN_CERT_NUMBER>8150-3834-001</OWN_CERT_NUMBER>
  <STANDARD>EN15085</STANDARD>
  <CLASS>CL1</CLASS>
  <NUMBER>00815</NUMBER>
  <TYPE>0</TYPE>
  <YEAR>2015</YEAR>
  <LASTUSER_FIRSTNAME>Max</LASTUSER_FIRSTNAME>
  <LASTUSER_NAME>Mustermann</LASTUSER_NAME>
  <DATE_OF_ISSUE>2016-08-01</DATE_OF_ISSUE>
  <VALID_FROM>2016-08-01</VALID_FROM>
  <VALID_UNTIL>2018-08-01</VALID_UNTIL>
  <AUDITOR>Muster</AUDITOR>
  <AUDITOR_FIRST_NAME>Maxi</AUDITOR_FIRST_NAME>
  <COAUDITOR>Muster</COAUDITOR>
  <COAUDITOR_FIRST_NAME>Maxi</COAUDITOR_FIRST_NAME>
  <CURRENT_AUDIT>2018-08-01</CURRENT_AUDIT>
  <NEXT_AUDIT>2018-08-01</NEXT_AUDIT>
  <COMPANY>
    <NAME1>Musterbau</NAME1>
    <NAME2/>
    <NAME3/>
    <STREET>Musterstraße 1</STREET>
    <DISTRICT></DISTRICT>
    <CITY>Musterdorf</CITY>
    <ZIPCODE>12345</ZIPCODE>
    <STATE/>
    <COUNTRY>DE</COUNTRY>
    <PUBLIC>1</PUBLIC>
    <PHONE/>
    <FAX/>
    <EMAIL/>
    <WEB/>
    <VAT_NUMBER/>
    <CUSTOMER_NUMBER/>
    <TYPE_OF_ACTIVITY>D<TYPE_OF_ACTIVITY/>
    <TYPE_OF_ACTIVITY>P<TYPE_OF_ACTIVITY/>
    <WORKSHOP>
      <NAME1>Musterbau</NAME1>
      <NAME2/>
      <NAME3/>
      <STREET>Musterstraße 1</STREET>
      <DISTRICT></DISTRICT>
      <CITY>Musterdorf</CITY>
      <ZIPCODE>12345</ZIPCODE>
      <STATE/>
      <COUNTRY>DE</COUNTRY>
      <TYPE_OF_ACTIVITY>P<TYPE_OF_ACTIVITY/>
    </WORKSHOP>
  </COMPANY>
  <PERSON>
    <LASTNAME>Mustermann</LASTNAME>
    <FIRSTNAME>Max</FIRSTNAME>
    <DATE>2000-01-01</DATE>
    <TITLE>Dipl.-Ing.</TITLE>
    <QUALIFICATION/>
    <TYPE>head of certification body</TYPE>
    <AREA_RESPONSIBLE>
      <LANGUAGE>de</LANGUAGE>
      <TEXT>blind text</TEXT>
    </AREA_RESPONSIBLE>
    <GENDER>M</GENDER>
    <EXTERNAL>1</EXTERNAL>
    <ANONYM_CERT>1</ANONYM_CERT>
    <ADDRESS/>
    <LETTER/>
    <ANONYM>1</ANONYM>
    <EXAM>1</EXAM>
  </PERSON>

```

```

    <EMAIL>mail@test1.de</EMAIL>
  </PERSON>
  <PERSON>
    <LASTNAME>Mustermann</LASTNAME>
    <FIRSTNAME>Max</FIRSTNAME>
    <DATE>2000-01-01</DATE>
    <TITLE>Dipl-Ing.</TITLE>
    <QUALIFICATION/>
    <TYPE>responsible welding coordinator</TYPE>
    <LEVEL>Level A</LEVEL>
    <AREA_RESPONSIBLE>
      <LANGUAGE>de</LANGUAGE>
      <TEXT>blind text</TEXT>
    </AREA_RESPONSIBLE>
    <GENDER>M</GENDER>
    <EXTERNAL>1</EXTERNAL>
    <ANONYMCERT>1</ANONYMCERT>
    <ADDRESS/>
    <LETTER/>
    <ANONYM>1</ANONYM>
    <EXAM>1</EXAM>
    <EMAIL>mail2@test1.de</EMAIL>
  </PERSON>
  <AREA_OF_APPLICATION>
    <LANGUAGE>de</LANGUAGE>
    <ROW>1</ROW>
    <HEADLINE/>
    <REMARK>text</REMARK>
  </AREA_OF_APPLICATION>
  <PROCESS_DATA>
    <MAIN>
      <PROCESS_NUMBER>135</PROCESS_NUMBER>
      <MECHANIZATION/>
      <MATERIAL_GROUP>1.1</MATERIAL_GROUP>
    </MAIN>
    <SHEET_MIN>1.5</SHEET_MIN>
    <SHEET_MAX>0</SHEET_MAX>
    <PIPE_MIN>15</PIPE_MIN>
    <PIPE_MAX>0</PIPE_MAX>
    <SEAM_TYPE>BW</SEAM_TYPE>
    <REMARK>
      <LANGUAGE>de</LANGUAGE>
      <TEXT>text</TEXT>
    </REMARK>
  </PROCESS_DATA>
  <REMARKS>
    <LANGUAGE>de</LANGUAGE>
    <ROW>text</ROW>
    <REMARK>text</REMARK>
  </REMARKS>
</CERT>

```

4 Version tracking

- version 2018.03.01 (2018-03):
 - o original of document
- version 2019.01.29 (2019-01):
 - o revised version
- version 2019.03.18 (2019-03):
 - o english translation
- version 2019.12.12 (2019-12)
 - o correct some mistakes
- version 2020.12.01 (2020-12)
 - o add languages in 2.1.3
 - o change accepted values in 2.1.7
 - o add COAUDITOR in 2.1.18
 - o add COAUDITOR_FIRST_NAME in 2.1.19
 - o add CURRENT_AUDIT in 2.1.20
 - o change length of field in 2.1.22.13
 - o change accepted values in 2.1.23.5
 - o change accepted values in 2.1.23.6
 - o change of typ in complex and add two separate fields in complex type in 2.1.23.8
 - o add ANONYMCERT in 2.1.23.11
 - o add EXAM in 2.1.23.15
 - o change accepted values in 2.1.24.1
 - o change of typ in complex and add two separate fields in complex type in 2.1.25.8
 - o remove AREA_OF_VALIDITY for CL4
 - o actualization of example in 3
 - o add TYPEOFACTIVITY in 2.1.22.17 for 2.1.22
 - o add WORKSHOP in 2.1.22.18
 - o add SEAM_TYPE in 2.1.25.7
- version 2020.12.21 (2020-12)
 - o change endpoint for interface in 1.1.2 and 1.1.1.2
- version 2021.02.09 (2021-02)
 - o add APIKEY in 2.1.1
- version 2021-03-03 (2021-03)
 - o change accepted values in 2.1.25.7
- version 2021-03-16 (2021-03)
 - o add LEVEL in 2.1.23.7
 - o update example in 3
 - o update links to interface and add links for test interface in 1.1.1.2 and 1.3
 - o correct all links in 1
- version 2021-03-17 (2021-03)
 - o correct all links in 1
 - o change accepted values in 2.1.23.5
- version 2021-03 (2021-03-22)
 - o add additional parameter for link in 1.1.2
- version 2021-03 (2021-03-24)
 - o correct remark for 2.1.25.7
- version 2021-04 (2021-04-01)
 - o small changes for 2.1.22.17 (maxOccurs), 2.1.22.18 (maxOccurs), 2.1.25.7 (accepted values), 2.1.25.8 (maxOccurs)
- version 2021-04 (2021-04-21)
 - o change name of 2.1.5

- version 2021-07 (2021-07-26)
 - o add accepted values in 2.1.24.3
- version 2023-06 (2023-06-14)
 - o add accepted values in 2.1.3, 2.1.23.8.1, 2.1.24.1, 2.1.25.8.1, 2.1.26.1
 - o add accepted values in 2.1.24.3 (see EN15085.xsd)
- version 2024-01 (2024-01-19)
 - o new comments about changing and deleting certificates under 1.3