XML Guide

Uploading data reports in the LUCID Packaging Register

Version	Date	Amended by	Amendments
1.0	10 May 2023	Stiftung Zentrale Stelle Verpackungsregister	First version
1.1	13 October 2023	Stiftung Zentrale Stelle Verpackungsregister	Update Tabel 2.3.4.1. System operator
1.2	28 June 2024	Stiftung Zentrale Stelle Verpackungsregister	Update Tabel 2.3.4.1. System operator

Contents

1 General

1.1 Who is this guide for?

In addition to manually submitting a data report, the LUCID Packaging Register has XML upload functionality for report submission. This guide is for anyone interested in creating an XML file for this purpose, but it only relates to producer data reports.

1.2 When is it helpful to use the XML interface?

Using XML interfaces can make submitting data reports in the LUCID Packaging Register simpler. The producer uses the file to automatically upload the same data report that it submitted to its system operator.
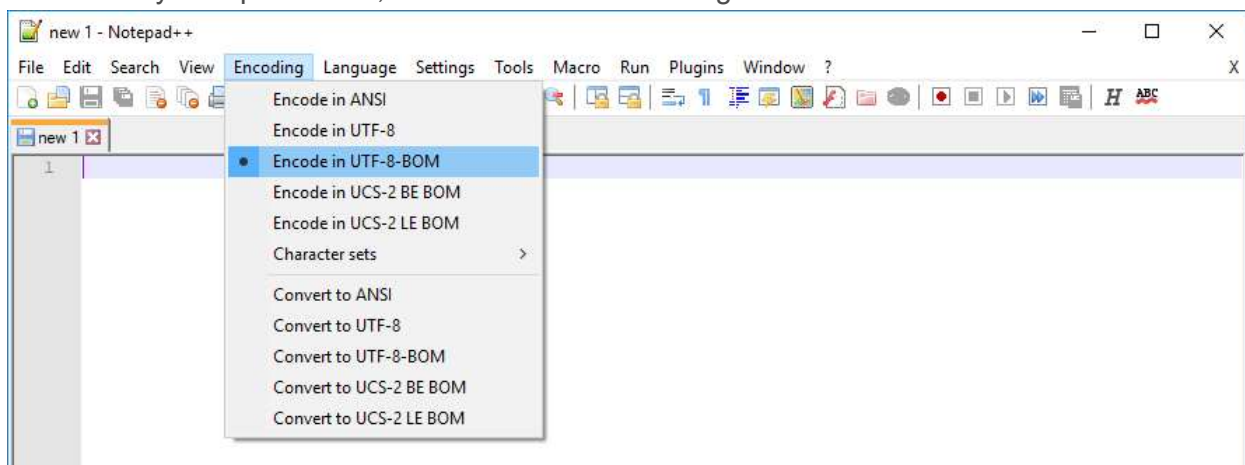
1.3 General information about the XML interface

1.3.1 Character encoding

The character encoding for the XML file must be UTF-8-BOM.

To check the character encoding of the file, you can use Notepad++ (for example). In the menu bar, click on *Encoding* and make sure that *Encode in UTF-8-BOM* is selected.

LUCID only accepts Latin-1, Latin-2 and Latin-3 coding characters.


1.3.2 XML file validation

An XML file can be validated with the help of an XML schema. The usual file extension for an XML schema is '.xsd'. To carry out the check, you can use Notepad++ with the 'XML Tools' plugin (for example).

Follow these steps to validate the XML file:

1. Open Notepad++.

2. Click on *File => Open*, select the XML file you would like to validate and click *Open.*

3. Click on *Plugins => XML tools => Validate now*.
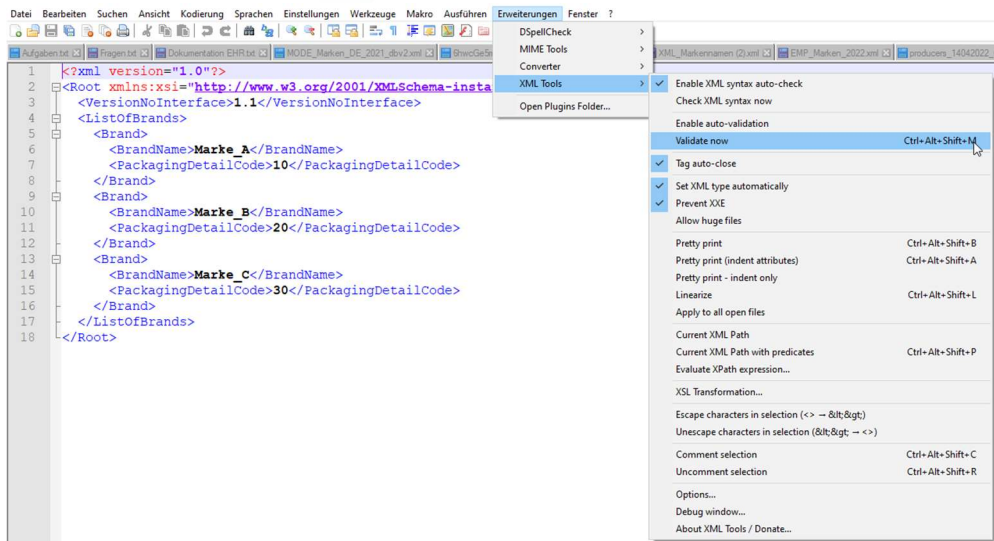
4. Click on the button with the three dots, select the XML schema and confirm by clicking *OK.*
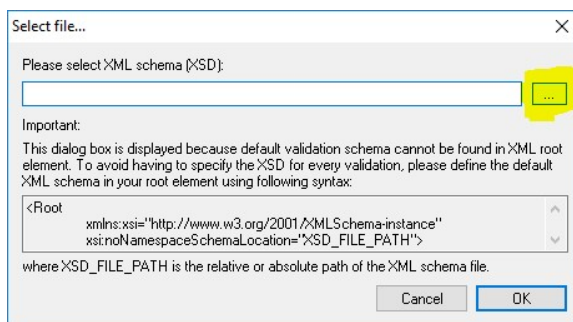
5. Repeat this process until no further errors are displayed. A file must be valid to be up-loaded in LUCID. If the XML file is valid, the following message will be displayed:
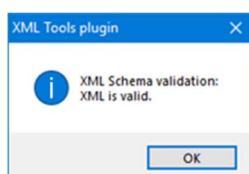
2 Producer volume report interface (section 10 VerpackG)

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2.1 How can I use the XML interface?

To be able to use the XML interface, you need to create and upload a valid XML file with the correct schema.

In order to make XML data reporting as simple as possible, all of the information that is relevant for the fields in a manual report is included in the XML file. After the file has been uploaded, the data is displayed and must be confirmed by the user.

Below is a sample XML file for uploading volume reports with explanations:

```xml
<?xml version="1.0"?>
<Root>
    <VersionNoInterface>1.0</VersionNoInterface>
    <PackagingTypeCode>V</PackagingTypeCode>
    <TypeOfReportCode>HPM1</TypeOfReportCode>
    <ReportingPeriodFrom>2019-01-01</ReportingPeriodFrom>
    <ReportingPeriodTo>2019-12-31</ReportingPeriodTo>
    <ListOfSystemOperators>
      <SystemOperator>
        <SystemOperatorID>XX1234543456789</SystemOperatorID>
        <ListOfMaterials>
          <Material>
            <MaterialCode>10000</MaterialCode>
            <Mass>3244,000</Mass>
          </Material>
          <Material>
            <MaterialCode>20000</MaterialCode>
            <Mass>1234,542</Mass>
          </Material>
          <Material>
            <MaterialCode>30000</MaterialCode>
            <Mass>54,125</Mass>
          </Material>
          <Material>
            <MaterialCode>40000</MaterialCode>
            <Mass>19518,456</Mass>
          </Material>
          <Material>
            <MaterialCode>80000</MaterialCode>
            <Mass>2084,254</Mass>
          </Material>
          <Material>
            <MaterialCode>50000</MaterialCode>
            <Mass>21003,999</Mass>
          </Material>
          <Material>
            <MaterialCode>60000</MaterialCode>
            <Mass>541,258</Mass>
          </Material>
        </ListOfMaterials>
      </SystemOperator>
    </ListOfSystemOperators>
</Root>
```

Enter the PackagingTypeCode here (currently only V is allowed).

Enter the TypeOfReportCode here.

Enter the start date for the reporting period here.

Enter the end date for the reporting period here.

Enter the SystemOperatorID for the volume you are reporting here.

Enter the MaterialCode here.

Enter the mass of the packaging for that MaterialCode here.

Other information:
- The first, second, third and last lines create the framework for the XML file. They are mandatory and must not be changed.
- A list of valid codes can be found in the next chapter.
- If you have contracted with multiple system operators, you can copy the section starting with <SystemOperator> up to and including </SystemOperator> under ListOfSystemOperators to add other system operators.

2.2 Information about the elements

- ◈ The first two lines and the last line are the 'bones' of the XML file. These lines may not be changed.
- ◈ VersionNoInterface: the version number relates to the technical version of the interface; the current interface version number is 1.0.

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- PackagingTypeCode: code for 'packaging' (V). Other options are technically possible, but not permitted at this time. For details, refer to 2.3.1.2 Table: Packaging types.
- TypeOfReportCode: code for initial planned volume report, intra-year volume report, year-end volume report, supplementary volume report or deducted volumes. For details, refer to 2.3.1.3 Table: Producer report types.
- ReportingPeriodFrom: period of the report (date YYYY-MM-DD); only month and year are applied.
- ReportingPeriodTo: period of the report (date YYYY-MM-DD); only month and year are applied.
- SystemOperatorID: conclusive identification number of the system operator for the ZSVR. For details, refer to 2.3.1.4 Table: System operator.
- MaterialCode: code for material type. Depending on the reporting period, the material types are based on the Packaging Ordinance (Verpackungsverordnung – VerpackV) (year-end report, supplementary volume report, deducted volume report for 2018) or the Packaging Act (Verpackungsgesetz – VerpackG) (from 2019 onwards, even if filed in 2018). The MaterialCodes can be found in 2.3.1.1 Table: Material type overview.
- Mass: packaging material mass in kg to the third decimal place without thousands separators (decimal place demarcated with comma).

2.2.1 Reported volumes

Depending on report types, a distinction needs to be made between different reported volumes. The report types *initial planned volume report*, *intra-year volume report*, *year-end volume report* and *deducted volumes* are always full reports. The *supplementary volume report* is an additive report.

- Full report: provides the total volume for the reporting period. Where information already exists for a given reporting period, a new file will replace it if the correction window is still open.
- Where information already exists for a given reporting period, a new file will replace it if the correction window is still open.
- Additive report: provides the difference between the previous and the new volume for the reporting period. Where information already exists for a given reporting period, the new information will be added to the existing information. Negative values can also be entered.

2.3   Information about the codes

The reports in 2019 for the 2018 reporting year must be filed according to the material types in the Verpackungsverordnung (VerpackV) exclusively. Reports for 2019 onwards are filed on the basis of the material types in the Verpackungsgesetz (VerpackG).

2.3.1.1 Table: Material type overview

Material types	VerpackV MaterialCode	VerpackG MaterialCode
Glass	10000	10000
PPC	20000	20000
Tinplate	39000	
Ferrous metals		30000
Aluminium	49000	40000
Plastics	50000	50000
Beverage carton packaging		60000
Composite materials	79000	
Other composite packaging		70000
Other materials	80000	80000

2.3.1.2 Table: Packaging types

The packaging types are listed in the following table. Currently the only packaging type allowed is 'packaging'.

Packaging type	PackagingTypeCode
Packaging	V

2.3.1.3 Table: Producer report types

Type of report	TypeOfReportCode:	Reported volumes
Initial planned volume report	HPM1	Full report
Intra-year volume report	HMM1	Full report
Year-end volume report	HJM1	Full report
Supplementary volume report	HNM1	Additive report
Deducted volumes	HAM1	Full report

2.3.1.4   Table: System operator

System operator	SystemOperatorID
Interzero Circular Solutions Germany GmbH	DE6005779374130
Reclay Systems GmbH	DE6005973594801
RKD Recycling Kontor Dual GmbH & Co. KG	DE6006382012686
Der Grüne Punkt – Duales System Deutschland GmbH	DE6004919627351
Landbell AG für Rückhol-Systeme	DE6005906579671
Noventiz Dual GmbH	DE6005959764031
Zentek GmbH & Co. KG	DE6007094250999
Veolia Umweltservice Dual GmbH	DE6007086225568
ELS Europäische LizenzierungsSysteme GmbH	DE6007168805143
BellandVision GmbH	DE6004738522858
PreZero Dual GmbH	DE6004844021815
EKO-PUNKT GmbH & CO. KG	DE6007780383579
Recycling Dual GmbH	DE6257129182400
Interzero Recycling Alliance GmbH / / Lizenzero	DE6161328237553
Altera System GmbH	DE6229413357273

2.4   Other information

The XML file is not saved permanently by the ZSVR and only serves to transfer the data to the web interface. Being able to submit a data report can depend on factors like registration status or packaging details; this applies to both manual and XML upload data report submission. In addition, there are technical plausibility checks, such as version, format, logic, completeness and structural checks. As such, a valid XML file (in relation to the XML schema) may be refused. Only once the XML file has been corrected, made free of any errors and uploaded can the data be saved.

The 'ReportingPeriodFrom' and 'ReportingPeriodTo' must always be in the same calendar year. XML data reports that span multiple years are not permitted. In such a case, two files must be uploaded.

The material codes in the XML file can be entered in any order. If the volume of a material is 0.000 kg, then the entire MaterialCode with mass (including the *Material* start and end tag) can be left out as an alternative.