

Manual XML-Generator-tool



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Summary:

This manual describes how to use the XML-generator-tool to upload information to the PRO TRACE system.

System requirements:

The described XML-generator-tool requires MS Excel 2007, 2010 or 2016.

It was tested on the operating systems MS Windows 7 and Windows 10.

It does not run on MS Excel 2003, 2000 or older versions.

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1. Preparatory steps for first use (one time)

For each category, you need to enter a different set of attributes for traceability.

This is why there are four different versions of this XML-generator-tool, depending on the information you want to process. If you do not have the suitable version for your products, please contact the following e-mail address:

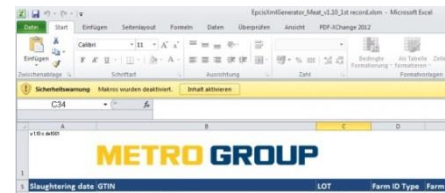
EPCONxls@eecc.info.

1.1 Align the source data (e.g. export from ERP-system)

If you are using a ERP system which contains all necessary traceability information, you need to generate an export which is aligned to the table structure of the XML-generator-tool. That means the order of the columns and the value they contain need to be equals. More details which columns are required for the XML-generator-tool can be found in the [Meat](#) chapter. After the proper alignment, the exported values can just be copied into the “Input” sheet of the XML-generator tool and the XML file can be generated ([see chapter 2.2](#)).

1.2 Add Masterdata

When you open the tool for the very first time, you may see depending on the security settings in your company or your Excel configuration e.g. the following two informatory messages: (1) ‘Macros have been deactivated’. In this case press the button ‘Activate content’ to allow the macros in this Excel sheet to be executed. (2) This file originates from an email attachment and may represent a risk. Click here to show further details.’ In this case press the button ‘Activate editing’.



Before you can start entering your traceability data, you need to enter your master data first. There are 3 different types of master data; “Article Masterdata”, “Location Masterdata” and “Farm Address Masterdata” you need to provide upfront to make the input process as easy as possible.

Article Masterdata

Select the “Article Masterdata” worksheet and enter all your GTINs you want to use.

You also need to enter the Global Company Prefix (GCP)-length ([see Appendix for further explanation](#)).

Finally, you can assign an article text to each GTIN. This will make it easier to work with the tool later on. The column “GTIN Validation” show, if you entered a valid GTIN (correct check-digit and GTIN length).

METRO GROUP					ARTICLE MASTERDATA EPCIS XML EVENT GENERATOR meat				
GTIN14	GCP Length	Article Text	GTIN Validation						
94000001100036	8	DummyMeatFinished	valid						

Location Masterdata

Select the “Location Masterdata” worksheet and enter all your GLNs you want to use as Slaughter GLN. You also need to enter the Global Company Prefix (GCP)-length ([see Appendix for further explanation](#)). Finally, you can assign a location text to each GLN. This will make it easier to work with the tool later on. The column “GTIN Validation” show, if you entered a valid GTIN (correct check-digit and GTIN length).


METRO GROUP				LOCATION MASTERDATA EPCIS XML EVENT GENERATOR meat			
GLN13	GCP Length	Location Text	GLN Validation				
4000000110002	8	GSI-sample-company	valid				
40000001000005	7	GSI	valid				
4004876000009	7	Keinhörster	valid				

Farm Address Masterdata

If you the Farm where the animals came from, do not have a GLN or VVVO as Identification, it is possible to add an address. Those address have to be entered in the “Farm Address Masterdata” worksheet. All fields except the “Additional Address Line” are mandatory. The column “I” add the end of each row, turn green and display “OK” if you entered all necessary fields.

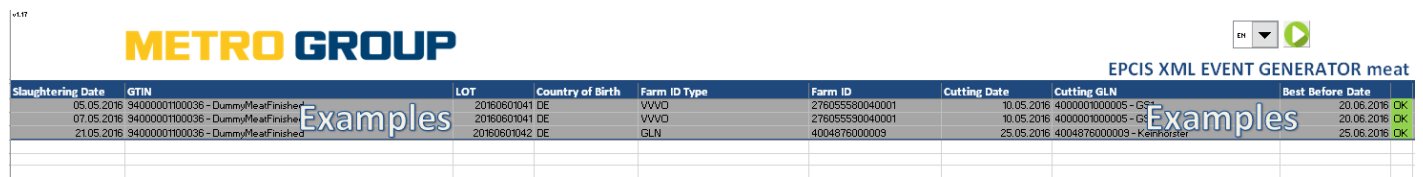
	A	B	C	D	E	F	G	H	I
	METRO GROUP			FARM ADDRESS MASTERDATA			EPCIS XML EVENT GENERATOR meat		
1									
2	Name	Street, Number	Additional Address Line (optional)	Postal Code	City	County	State	Country	
3	Jon Doe	Mainstr. 1	A	55555	Doetown	Doe County	Doe Federal State	DE	OK
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2. Steps for regular use: enter the relevant information

When you had completed the master data maintenance as described in chapter 1, navigate to the “Input” tab where you can enter information to specific lots associated with those GTINs for which you entered master data. When you finished entering lot IDs and the related attribute information, press the  button. You will be asked, where to store the generated XML-file, which you will need later on to upload it to the PRO TRACE-system.

2.1 Enter data

For the meat assortment, the input sheet looks like this:



Slaughtering Date	GTIN	LOT	Country of Birth	Farm ID Type	Farm ID	Cutting Date	Cutting GLN	Best Before Date
05.05.2016	34000001100036 - DummyMeatFinished	20160601041	DE	VVVO	276055580040001	10.05.2016	40000001000005 - GS	20.06.2016 OK
07.05.2016	34000001100036 - DummyMeatFinished	20160601041	DE	VVVO	276055530040001	10.05.2016	40000001000005 - GS	20.06.2016 OK
21.05.2016	34000001100036 - DummyMeatFinished	20160601042	DE	GLN	4004876000009	25.05.2016	4004876000009 - Kernhorster	25.06.2016 OK

Basically, you will need to give the following indications for each article:

- Slaughtering date
- Slaughter GLN (any GLN from the list in “Location Masterdata” can be chosen)
- GTIN (any GTIN from the list in “Article Masterdata” can be chosen)
- Lot-number


Attributes specifying the input(s):

- Country of birth
- Farm ID Type: → please choose from the list
 - GLN: The indication of the farm location in the next column will be a GLN.
(see also further explanation on the next page)
 - VVVO: The indication of the farm location in the next column will be a VVVO.
(VVVO means **V**ieh**V**erkehrs**V**erordnung)
- Farm ID: → please enter a 13-digit GLN or a VVVO-number
- Farm Address (any address from the list in “Farm Address Masterdata” can be chosen)
If the farm can not be identified using a GLN or VVVO-number, the Farm Address field have to be used otherwise the field is optional.
- Cutting date
- Best before date

At the end of the line you get the status “OK”, if the rough check of the data you entered was positive. If not, you will get a hint in the column “Input advice”.

Input Advice	
OK	
OK	
OK	

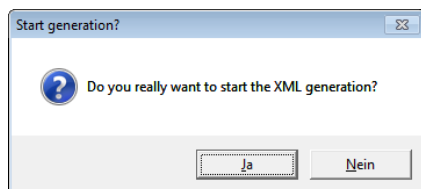
2.2 Create XML files

Once, you entered all data, press on the play icon :

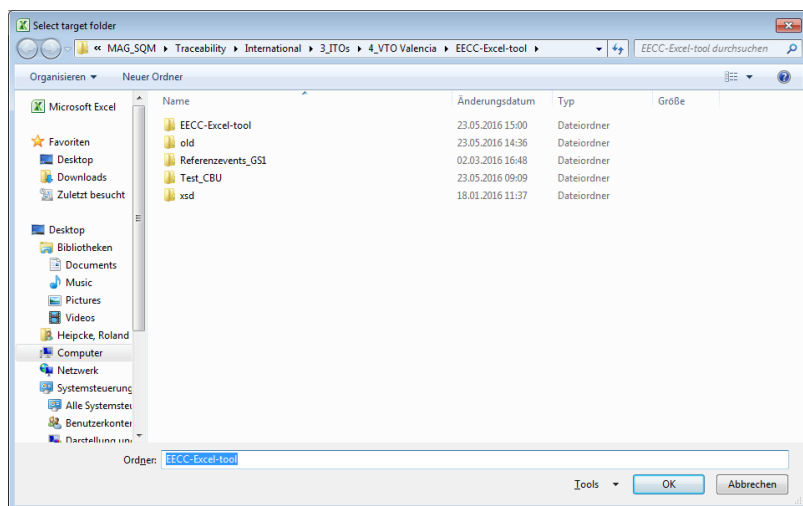
METRO GROUP EPCIS XML EVENT GENERATOR meat

Slaughtering Date	Slaughterer GLN	GTIN	LOT	Country of Birth	Farm ID Type	Farm ID	Farm Address	Cutting Date	Best Before Date	In
05.05.2016	4000001000005 - GS	340000011000036 - DummyMeatFinished	20160601041	DE	YVVO	*26055530040001	Jon Doe, Mainstr. 15555, Dextown, Dec County, Dec Federal St	10.05.2016	20.05.2016	OK
07.05.2016	4000001000005 - GS	340000011000036 - DummyMeatFinished	20160601041	DE	GLN	*40048760000009	Jon Doe, Mainstr. 15555, Dextown, Dec County, Dec Federal St	10.05.2016	20.05.2016	OK
21.05.2016	4004876000009 - Kambierstr.	340000011000036 - DummyMeatFinished	20160601042	DE	GLN	*40048760000009	Jon Doe, Mainstr. 15555, Dextown, Dec County, Dec Federal St	25.05.2016	25.05.2016	OK
01.06.2016	4000001000002 - GS1-sample-company	340000011000036 - DummyMeatFinished	741852	ES			Jon Doe, Mainstr. 15555, Dextown, Dec County, Dec Federal St	02.06.2016	30.06.2016	OK
16.05.2018	4000001000005 - GS1	340000011000036 - DummyMeatFinished	*20160518150	DE	GLN	*40048760000009	Jon Doe, Mainstr. 15555, Dextown, Dec County, Dec Federal St	17.05.2018	30.05.2018	OK

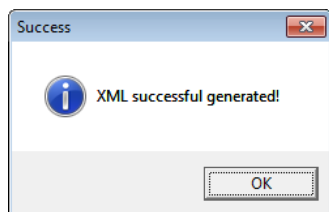
Then, you are asked for confirmation, please press “Yes”. (“No” will stop the process)



Select a folder, where the generated XML-files should be stored



Finally, you get a result-message like this:



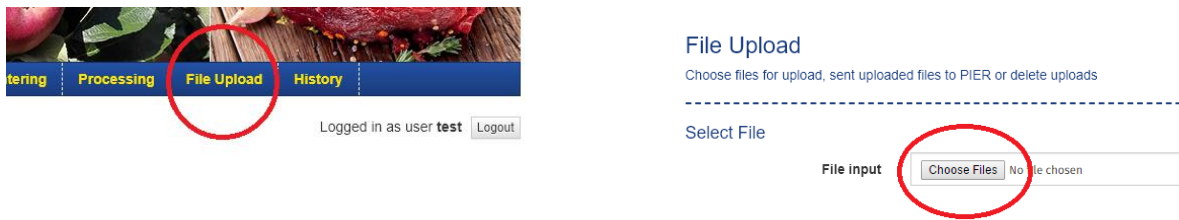
Then, please proceed to upload the file to the PRO TRACE-System ([see chapter 3.](#)).

3. Upload to the PRO TRACE DATA ENTRY-website

Once you generated an XML-file, you can upload it to PRO TRACE like this:

Login to the data entry-website of PRO TRACE: <https://dataentry.protrace.metrosystems.net/login> using the login-data you were provided with during your company's PRO TRACE onboarding process. In case you didn't receive any login data, please contact protrace@metro.de

Chose "File Upload" in the menu and then press the button "Choose files":



Click "Upload" and choose the file you generated as described in the previous chapter. After successful uploading the file/s you can see them in the "Pending Uploads" section listed with the status "UPLOADED":

Pending Uploads

	Last update	Filename	Status
<input type="checkbox"/>	2018-02-18T13:37:01.001	20180116_142600_epcis_event_meat.xml	UPLOADED
<input type="checkbox"/>	2018-02-18T13:37:00.001	20180116_135522_epcis_event_meat.xml	UPLOADED

Selecting one or all rows and pressing "Send" will submit the uploaded files to the PRO TRACE Event Repository (PIER).

	Last update	Filename	Status
<input checked="" type="checkbox"/>	2018-02-18T13:37:01.001	20180116_142600_epcis_event_meat.xml	UPLOADED
<input type="checkbox"/>	2018-02-18T13:37:00.001	20180116_135522_epcis_event_meat.xml	UPLOADED

After this was successful, please check the result. If the file/s were processed successful the status changed to "SUBMITTED" in case of any error, an error message is shown and the status is changing to "FAILED". To delete failed files, you can select them and press "Delete". This deletes the file on the system. Already submitted data is not affected from this delete!

The uploaded data can be shown on the "History" page, choose "History" from the navigation:





On the "History" page you can see all of your– successful – submitted events.



History

Last Events

Page 1 of 2 pages. Displaying 20 of 36 Events

Creation Date	Event Type	Event ID	Created By	
2018-02-18T14:47:08.015	fishing	07032121-6a6a-441e-0211-1322e6539f70	TEST	
2018-02-15T16:52:45.944	file-upload	847e6f19-0154-4afb-1424-09814df915e2	TEST	

The original XML structure can be displayed by clicking on the magnifier icon

Creation Date	Event Type	Event ID	Created By	
2018-02-18T14:47:08.015	fishing	07032121-6a6a-441e-0211-1322e6539f70	TEST	
2018-02-15T16:52:45.944	file-upload	847e6f19-0154-4afb-1424-09814df915e2	TEST	

The EPCIS Event-XML will look similar to the file which was used during the upload and submit process on the “File Upload” page:

Event-Details

Showing Event-Details for event with id '07032121-6a6a-441e-82a1-1322e6539f70'.

EPCIS Event-XML

```
<epcis:ObjectEvent xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:epcismd="urn:epcglobal:epcis-masterdata:xsd:1"
xmlns:ft_fruit="http://ns.fruit.ftrace.com" xmlns:ft_fish="http://ns.fish.ftrace.com"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcisq="urn:epcglobal:epcis-query:xsd:1" xmlns:epcglobal="urn:epcglobal:xsd:1"
xmlns:ft="http://ns.ftrace.com/epcis" xmlns:eccc="http://ns.eccc.info/epcis">
  <eventTime>2018-03-12T00:00:00Z</eventTime>
  <recordTime>2018-03-19T10:59:37.767Z</recordTime>
  <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
  <epcList>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
    <readPoint>
      <id>urn:epc:id:sgln:4047111.00000.0</id>
    </readPoint>
    <bizLocation>
      <id>urn:epc:id:sgln:4047111.00000.0</id>
    </bizLocation>
    <extension>
      <quantityList>
        <quantityElement>
          <epcClass>urn:epc:class:lgtn:48951979.01002.1234</epcClass>
          <quantity>20</quantity>
          <uom>KGM</uom>
        </quantityElement>
      </quantityList>
    </extension>
    <ilmd>
      <ft:storageStateCode>NOT_PREVIOUSLY_FROZEN</ft:storageStateCode>
      <ft_fish:catchingPeriodEnd>2018-03-18T00:00Z</ft_fish:catchingPeriodEnd>
      <ft_fish:vesselCatchInformation>
        <ft:catchArea>21.4</ft:catchArea>
        <ft:catchMethod>TB</ft:catchMethod>
      </ft_fish:vesselCatchInformation>
    </ilmd>
  </extension>
  <eccc:eventId>07032121-6a6a-441e-82a1-1322e6539f70</eccc:eventId>
</epcis:ObjectEvent>
```

The submitted values can be queried using the PRO TRACE app for Android or iOS ([see chapter 4.](#)).

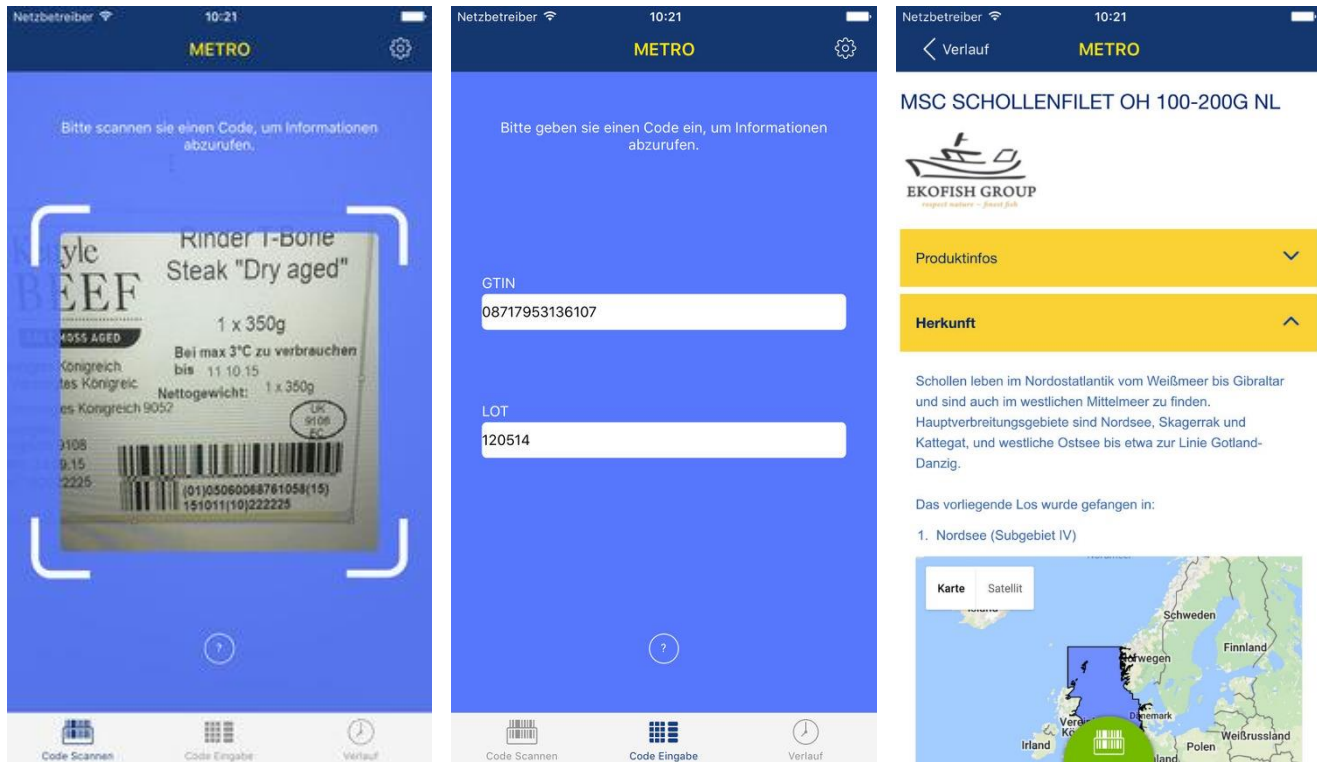
4. Request traceability information via the PRO TRACE app

To query traceability information stored in PRO TRACE the PRO TRACE mobile app is available in the app stores:

Android: <https://play.google.com/store/apps/details?id=net.metrosystems.followMETRO>

iOS: <https://itunes.apple.com/de/app/pro-trace/id886168099>

After downloading and installing the app on your mobile phone, you are able to directly scan a product code or manually enter a GTIN and LOT of a processed product.



Advise:

Your master data (GLN, supplier name, sourcing country, and GTIN with description, product type, etc.) have to be provided to protrace@metro.de or your responsible METRO contact person upfront to be able to query for traceability information via the PRO TRACE mobile app!

5. Appendix

5.1 GLN (Global Location Number) and GCP (Global Company Prefix):

With the help of the GEPIR-tool (provided online by GS1), you can find out more about a supplier for a given GTIN.

German version: <http://www.gepir.de>

Spanish version: <http://sede.aecoc.es:8000/GEPIR/consultas/SearchByGTIN.aspx>

to be found on: <http://www.gs1es.org/>

The output looks a little bit different and you do not get a direct feedback for the global company prefix.

International site: <http://gepir.gs1.org/v32/xx/default.aspx?Lang=en-US/>

To understand more about the GCP, please take a look at the following example:

If you start from a GTIN like 08411030020135 (LONGANIZA MAGRO 2.2KG BL SRR), you can enter it to the GEPIR-system, to retrieve the related supplier data.



Then you get a result like this:

Unternehmen

[Drucken](#) [Exportieren](#)

GLN	8411030000007
Firmenname	CARNICAS SERRANO S.L.
Adresse	Villa de Madrid 45 Poligono Fuente Del Jarro 46988 Paterna
Kontakt	+34961341112 +34961322511 jgarcia@cserrano.es
Letzte Änderung	22.03.2017
Basisnummer	8411030

‘Unternehmen means ‘company’

‘Firmenname’ means ‘company name’

‘Adresse’ means ‘address’

‘Kontakt’ means ‘contact’

‘Letzte Änderung’ means ‘last updated’

Basisnummer means ‘Global company prefix’

So, the related GLN for the supplier is: 8411030000007

Thereof, the **G**lobal **C**ompany **P**refix (GCP) is: 8411030

This **G**lobal **C**ompany **P**refix is of variable length, so, the GCP-length is 7 for this supplier!

A GTIN contains basically an ID that identifies a company in a globally unique way and an item reference that is assigned to a certain item type by the owner of the global company prefix. The global company prefix is typically

assigned to a company by the local GS1 organization. For further Information please refer to the GS1-general specifications.

5.2 Example XML file

The XML-generator-tool generate an XML file which contains several EPCIS Events ([see GS1 global](#)). For example, one row from the “Input” sheet has the following lines as result:

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:epcis="urn:epcglobal:epcis:xsd:1" schemaVersion="1.1" creationDate="2013-06-04T14:59:02.099+02:00" xm
  <EPCISBody>
    <EventList>
      <ObjectEvent>
        <eventTime>2018-05-16T00:00:00Z</eventTime>
        <eventTimeZoneOffset>+02:00</eventTimeZoneOffset>
        <epcList/>
        <action>ADD</action>
        <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
        <readPoint>
          <id>urn:epc:id:sgln:4000001.00000.0</id>
        </readPoint>
        <bizLocation>
          <id>urn:epc:id:sgln:4000001.00000.0</id>
        </bizLocation>
        <extension>
          <quantityList>
            <quantityElement>
              <epcClass>urn:epc:class:lgtn:40000011.90003.201805181150b</epcClass>
              <quantity>1</quantity>
              <uom>KGM</uom>
            </quantityElement>
          </quantityList>
          <ilmd>
            <ft:preStageDetails>
              <ft:agricultureDetails>
                <ft:farmIdentificationNumber ft:farmIdentType="GLN">4004876000009</ft:farmIdentificationNumber>
                <ft:proportionPercentOfLot>100</ft:proportionPercentOfLot>
                <ft:proportionRankingOfLot>1</ft:proportionRankingOfLot>
                <ft:countriesOfBirth>
                  <ft:countryCode>DE</ft:countryCode>
                </ft:countriesOfBirth>
              </ft:agricultureDetails>
            </ft:preStageDetails>
          </ilmd>
        </extension>
      </ObjectEvent>
      <extension>
        <TransformationEvent>
          <eventTime>2018-05-17T00:00:00Z</eventTime>
          <eventTimeZoneOffset>+02:00</eventTimeZoneOffset>
          <inputQuantityList>
            <quantityElement>
              <epcClass>urn:epc:class:lgtn:40000011.90003.201805181150b</epcClass>
              <quantity>1</quantity>
              <uom>KGM</uom>
            </quantityElement>
          </inputQuantityList>
          <outputQuantityList>
            <quantityElement>
              <epcClass>urn:epc:class:lgtn:40000011.90003.201805181150</epcClass>
              <quantity>1</quantity>
              <uom>KGM</uom>
            </quantityElement>
          </outputQuantityList>
          <bizStep>urn:epcglobal:cbv:bizstep:transforming</bizStep>
          <readPoint>
            <id>urn:epc:id:sgln:40799999.0000.0</id>
          </readPoint>
          <bizLocation>
            <id>urn:epc:id:sgln:40799999.0000.0</id>
          </bizLocation>
          <ilmd>
            <ft:bestBeforeDate>2018-05-30</ft:bestBeforeDate>
          </ilmd>
        </TransformationEvent>
      </extension>
    </EventList>
  </EPCISBody>
</epcis:EPCISDocument>
```

Note: The file contains two events, a commissioning and a transformation event. Uploading this file to the PRO TRACE System will return a message uploaded 2 events, this could lead to misunderstandings due to only one row was filled as input.