

EU Registry on Industrial Sites

Access template

Version 0.5 – 22/02/2019



Cover design: EEA

Cover photo: Jorge Franganillo, Creative Commons Attribution 2.0 Generic (<https://goo.gl/rqHYk6>)

Layout: EEA

Acknowledgments

This manual for the use of the EU Registry's Access template was prepared by the [European Environment Agency](#) (EEA) in cooperation with the [European Topic Centre for Air Pollution and Climate Change Mitigation](#) (ETC/ACM).

Should you have any need of clarification, please contact industrial.emissions@eea.europa.eu.

Version control

Version ID	Date	Description
0.1	August 2017	Internal version for beta testing of the conversion service.
0.2	September 2017	ETC/ACM revisions and further beta testing
0.3	December 2017	Minor corrections (e.g. reporting accuracy for location data).
0.4	September 2018	Updates to reflect publication of CID 2018/1135/EU.
0.5	February 2019	Updated to resolve remaining issues before finalisation of the workflow.

Contents

Acknowledgments	2
Version control	2
Contents	3
1 Introduction	4
1.1 Purpose of this document	4
1.2 Resources for the conversion service	4
2 Use of the conversion service	5
2.1 The conversion service explained	5
2.2 Structure of the template	6
2.3 Key aspects when populating the template	9
2.4 Means to populate the template.....	10
2.5 Description of the data tables and fields	10

1 Introduction

1.1 Purpose of this document

Reporting countries will make submissions to the EU Registry on Industrial Sites (hereafter the EU Registry) using Geography Markup Language (GML) files that are compliant with the GML schema definition (XSD) for the EU Registry data model. Such files will be submitted to the EEA Central Data Repository (CDR) using existing EEA reporting infrastructure. This process is described in the EU Registry Manual for Reporters¹.

There are two mechanisms to prepare GML files:

1. **Direct GML route:** Countries generate their own GML files that must comply with the requirements of the XSD and be validated, on top of the basic GML syntax, against INSPIRE Geography Markup Language (GML) requirements. This option will typically be used by reporting countries with a high degree of IT expertise and who are capable of mapping data fields in their data systems to the EU Registry data model and of producing fully compliant GML files.
2. **Microsoft Access route:** Countries populate a predefined Microsoft Access template that is then converted into a valid GML file by an EEA online conversion service. Many reporting countries may not have access to expert IT resources and may also be more comfortable populating Microsoft Access databases. This may well be the case for many thematic experts who will be more familiar with Microsoft Access than with GML. Therefore, to help ensure the success of the EU Registry and the requisite data flow between reporting countries and the EEA, the EEA is committed to providing this alternative GML-generation route that will help reporting countries with limited IT resources.

Once the GML file has been generated by one of these two routes the reporting country will then submit it to the EU Registry via the CDR.

This document offers guidance in understanding the structure of the Access template that can be populated by reporting countries to then produce compliant GML files using the EEA's conversion service.

1.2 Resources for the conversion service

The resources provided to use the Access template route are:

- The Access template, which can be downloaded from the EU Registry project website;
- The web-based conversion service, which is accessible via the EU Registry project website.

It is assumed the user will already have an understanding of the EU Registry data model. Reference should be made to EU Registry Data Model Documentation or to the EU Registry Manual for Reporters for details on the data model structure and requirements for each attribute.

¹ Please refer to the EU Registry project website for all referenced documentation:
http://cdrtest.eionet.europa.eu/help/ied_registry

2 Use of the conversion service

2.1 The conversion service explained

The EEA developed and maintains an online conversion service. Users can populate an Access file with data from their systems, upload this Access file to an EEA server, and the server returns a URL (by email) where the converted GML file can then be downloaded.

The conversion service is programmed using FME, a software that allows for a flexible and visual transformation of data formats. Users do not need a software license as the EEA uses FME Server, a package that allows running of the processes via a web interface.

Countries can however re-use and adapt the FME process which is why the full file with the conversion process is posted in the EU Registry project website (see Section 1.2).

Figure 1 includes a screenshot of the conversion service where the Access template and the web-form to upload and execute the conversion are available.

Figure 1 Screenshot of the EU Registry conversion service

Access to GML - EU Registry conversion tool

About the tool

Version of the tool: [Version 0.2](#)

Code of the FME process

The process that runs behind this website is also available for reuse. For that to be possible, the software Feature Manipulation Engine (FME) is necessary.

- Current version of the FME process: [download here](#)

Access template

The EU Registry conversion tool uses a **pre-defined template in MS Access format**. Countries must **populate the template** with data referred to a **single reporting year** without any change in its structure. Once populated the conversion tool below generates a GML file compliant with the EU Registry's GML Schema.

Details of the template:

- Microsoft Access template: [download here](#) Version 0.2
- Instructions to populate the MS Access template: [download here](#) - Version 0.3
- Dummy-data example: [download here](#) Version 0.2

Conversion tool

The following tool converts a populated Access file to GML format. The output GML file has to then be uploaded to the relevant CDR envelope.

Form for the conversion:

No file chosen

File list:

E-mail address:

Instructions:

- 1) Choose a file (*the button displays different messages depending on the browser e.g. "Choose File" or "Browse..."*)
- 2) Select the MS Access file that you want to convert
- 3) Click "Upload File" to upload the file (*this action may take several minutes depending on the file size*)
- 4) Provide a valid e-mail address and click "Execute"
- 5) When the conversion is ready, the system will send you an e-mail, with the link to the converted file
- 6) Click in the link and download the file
- 7) Add the XML file to the relevant envelope in CDR.

Note:

EEA Reportnet works best with Google Chrome (recommended) or Mozilla Firefox.

The use of Internet Explorer is not recommended.

2.2 Structure of the template

The Access template mirrors, to a large extent, the Unified Modelling Language (UML) data model of the EU Registry. The template is intended to be a bridge between reporting countries data systems and the EU Registry data model. However, the constraints of Access lead to slight changes in the structure. Furthermore, the need to offer a flexible, user-friendly framework, means the template's design will not be fully optimised from an IT expert's point of view.

Two key principles governed the development of the template:

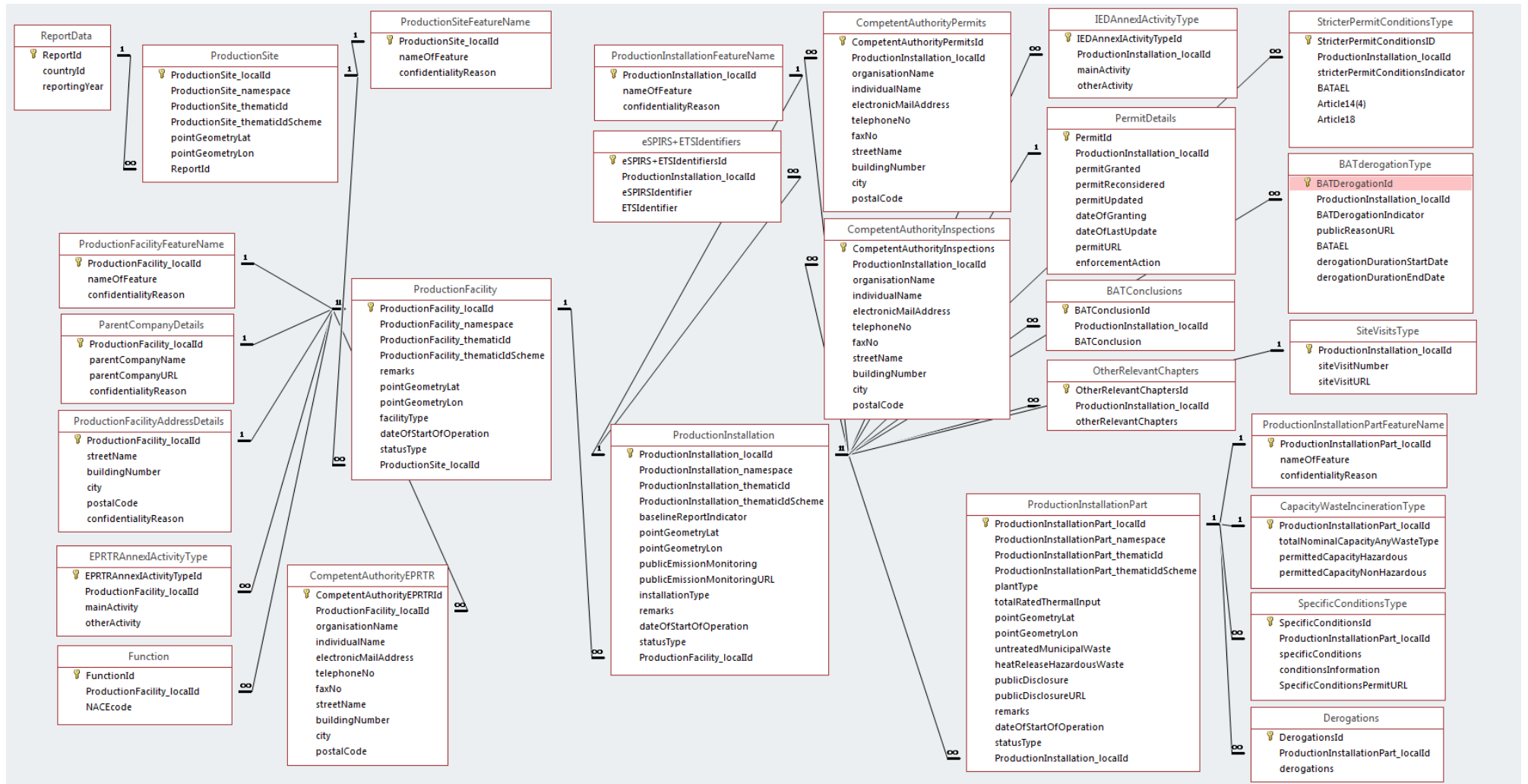
- Understandability and intuitiveness – The data structure should match the EU Registry UML data model wherever possible and field names should either match attributes in the EU Registry data model directly or else be easily understood by a thematic expert.
- A robust self-contained structure – It should be possible to easily populate the template from reporting countries databases with export queries that can be based on countries' own INSPIRE-compliant identifiers. The need to track and relate identifiers that are internal to the template should be avoided wherever possible.

Figure 2 offers an overview of the template's structure. The template only contains the attributes that are included in the so-called streamlined view of the EU Registry's data model (more details are available in the EU Registry data model documentation). Attributes for which the INSPIRE Production Facilities data specification either permits a multiplicity of zero or allows to be voidable are not included. The attributes covered here constitute the EU Registry and represent those with which reporting countries need to be concerned with reporting.

Certain tables in the template will repeat the same values multiple times (e.g. the same competent authority details will be repeated for each relevant facility). While this is inefficient from a data base structure point of view, it means the tables can be populated with simple queries and where only the (required) identifier for each industrial entity needs to be tracked. Some reporting countries may already have their own internal ID's for competent authorities or parent companies. However, by repeating such information for each relevant entity, the template can also be used by reporting countries who do not have such a sophisticated system for tracking such data (e.g. they might use a simple 'flat file' for all information associated with a facility or installation).

To reiterate, the overarching purpose for this Access template is to serve as an understandable stepping stone between reporting countries' databases and generating GML files that are compliant with the EU Registry data model. Therefore, robustness and ease of understanding by a range of users (who will include thematic experts or others with limited IT experience) are paramount to the design of the template. Direct population of GML files that are compliant with the EU Registry XSD by exporting directly from reporting countries' data systems remains another option for organisations with sufficient IT capabilities.

Figure 2 Structure and relationships of the EU Registry Access template



2.3 Key aspects when populating the template

There are certain aspects that need to be taken into account to successfully populate the Access template:

- The data need to refer **to a single reporting year**. If a country would like to report for several reporting years, independent Access files must be produced for each year and need to be converted separately.
- The conversion service **does not implement comprehensive quality assurance**; this only happens in the Central Data Repository (CDR) envelope where the converted GML file is reported. There are some limited checks and validations within the Access template. These include checks on referential integrity (a parent entity must exist for a new lower-level entity) and values are required for certain fields.
- When populating fields dependent on code lists, please ensure the values are **admitted values in the approved lists** in the [EEA Data Dictionary folder for the EU Registry](#).
- INSPIRE v4.0 (the version to which the EU Registry data model is referred to) requires codes to be reported as uniform resource locators (URLs). This means that all attributes populated using a code list need to provide a full valid URL to the EEA Data Dictionary code. For example:

The code list 'ConditionOfFacilityValue' is used to report the status of an industrial entity. In a case where an entity needs to be reported as 'decommissioned', the valid way to populate the relevant attribute would be:

<http://dd.eionet.europa.eu/vocabulary/euregistryonindustrialsites/ConditionOfFacilityValue/decommissioned>

- The hosting relationships between the levels (i.e. site, facility, installation and part) need to be complied with. This means that, whenever an entity in a lower level is populated, all the higher (parent) levels must be populated. In cases where a lower level entity (e.g. waste incinerator) is not regulated as an installation under the Industrial Emission Directive Chapter II nor as a facility under the E-PRTR Regulation, a parent site, facility and installation will still have to be populated as geographical objects.
- The tables that relate to the main feature types of the EU Registry data model (i.e. site, facility, installation and part) are linked with each other on the basis of the 'local identifier' of the INSPIRE identifier for the relevant feature type. These identifiers are used wherever possible as the link between the main tables (representing the feature types) and the ancillary tables (representing the data types). In general, these identifiers act as the primary key of the relevant tables. However, when the relationship between an attribute and the parent table has a multiplicity that is NOT 1:1, an ID specific to the Access template which is populated with an auto-number acts as the primary key (i.e. a unique identifier for each record in the table) in the background. Reporting countries should not need to track these auto-number generated values.
- Where multiplicity of zero or voidable is permitted for an attribute within the main feature types of the EU Registry data model then the corresponding field should be left as blank (i.e. null) in the Access template. Where multiplicity of zero or voidable is permitted for an attribute that is linked to a data type in the EU Registry data model then no record should be provided in the corresponding ancillary table in the Access template.
- It is recommended that users populate the highest level tables first in sequence. Specifically, internal referential integrity warnings can be avoided by populating tables in the following order:

1. 'ReportData'
2. 'ProductionSite', followed by its ancillary table, i.e. 'ProductionSiteFeatureName'.
3. 'ProductionFacility', followed by its ancillary tables; these ancillary tables can be filled out in any order.
4. 'ProductionInstallation', followed by its ancillary tables.
5. 'ProductionInstallationPart', followed by its ancillary tables.

2.4 Means to populate the template

Countries are expected to develop their own means to populate the Microsoft Access template, e.g. using Access queries and macros. As all reporting countries operate with a different data storage mechanism, the EEA is not in the position to produce a populating mechanism that fits all circumstances.

The EEA offers, however, assistance to clarify further with IT experts in the reporting countries on the possible ways of populating the template, the mapping of the Access template structure with the GML schema tags, and any other support that may be needed. Should you need such assistance, please contact the EEA staff via the email listed in the "Acknowledgements" section of this document.

2.5 Description of the data tables and fields

This section describes the data tables and fields of the Access template and how these relate to the EU Registry data model feature types, data types and attributes.

ReportData

This table is analogous to the ReportData feature type in the EU Registry data model.

- **ReportId** – Internal ID to the Access template which is populated with an auto-number. Since there should only be one record in the ReportData table the value of this field should be expected to be 1.
- **countryId** – Correlates directly to this attribute in the EU Registry data model.
- **reportingYear** – Correlates directly to this attribute in the EU Registry data model.

ProductionSite

This table is analogous to the ProductionSite feature type in the EU Registry data model.

- **ProductionSite_localId** – This is the first of two components that make up the INSPIRE identifier for the production site. It is assigned by the data provider and may be a national identifier, provided this satisfies INSPIRE requirements for uniqueness, persistence, traceability and feasibility. For more information and recommended examples, see Annex 4 of the EU Registry Data Model Documentation. Values for this field must be unique amongst all production sites in the reporting country. This field will be used to link to the ProductionSiteFeatureName table.
- **ProductionSite_namespace** – This is the second of two components that make up the INSPIRE identifier for the production site and should identify the data source. This field should be populated with the same value for all production site records (and indeed, for identifiers for all entities). Use of the ISO2 country code plus the acronym CAED (for Competent Authority for Environment Data) is recommended, e.g. "ES.CAED".
- **ProductionSite_thematicId** – This is the first of two components that make up the ThematicIdentifier for the production site. It is a unique identifier that may be internal to each reporting country's own national reporting system. The field is an opportunity for the reporting country to provide an additional identifier, but is not mandatory.

- **ProductionSite_thematicIdScheme** – This is the second of two components that make up the ThematicIdentifier for the production site and should identify the scheme used to assign the identifier, if one is provided.
- **pointGeometryLat** – Latitude of the approximate centre of the production site using the ETRS89 (2D)-EPSG:4258 coordinate reference system with a 10-meter precision (i.e. to four decimal places).
- **pointGeometryLon** - Longitude of the approximate centre of the production site using the ETRS89 (2D)-EPSG:4258 coordinate reference system with a 10-meter precision (i.e. to four decimal places).
- **ReportID** – Used to link to the parent ReportData table. Since there should only be one record in the ReportData table it is expected that all values for this field would be 1.

ProductionSite Ancillary Tables:

ProductionSiteFeatureName

This table is based upon the Feature Name data type in the EU Registry data model and contains information specific to the production site.

- **ProductionSite_localId** – Used to link to the parent ProductionSite table.
- **nameOfFeature** – Correlates directly to this attribute in the EU Registry data model.
- **confidentialityReason** – This field is populated with a valid URL for the relevant value in the code list 'ReasonValue' in the [EEA Data Dictionary](#) folder for the EU Registry. For example, if confidentiality is claimed by Article 4(2)(a), in accordance with Directive 2003/4/EC, then the field should be populated with:
[http://dd.eionet.europa.eu/vocabulary/euregistryonindustrialsites/ReasonValue/Article4\(2\)\(a\)](http://dd.eionet.europa.eu/vocabulary/euregistryonindustrialsites/ReasonValue/Article4(2)(a)).

ProductionFacility

This table is analogous to the ProductionFacility feature type in the EU Registry data model although various ancillary tables are used to hold some of the facility information.

- **ProductionFacility_localId** – This is the first of two components that make up the INSPIRE identifier for the production facility. It is assigned by the data provider and likely may well be a national identifier, provided this satisfies INSPIRE requirements for uniqueness, persistence, traceability and feasibility. For more information and recommended examples, see Annex 4 of the EU Registry Data Model Documentation. Values for this field must be unique amongst all production facilities in the reporting country. This field will be used to link to multiple other tables that hold some facility information.
- **ProductionFacility_namespace** – This is the second of two components that make up the INSPIRE identifier for the production facility and should identify the data source. This field should be populated with the same value for all production facility records (and indeed, for identifiers for all entities). Use of the ISO2 country code plus the acronym CAED (for Competent Authority for Environment Data) is recommended, e.g. "ES.CAED".
- **ProductionFacility_thematicId** – This is the first of two components that make up the ThematicIdentifier for the production facility. It is a unique identifier internal to each reporting country's own national reporting system. The field is an opportunity for the reporting country to provide an additional identifier but is not mandatory.
- **ProductionFacility_thematicIdScheme** – This is the second of two components that make up the ThematicIdentifier for the production facility and should identify the scheme used to assign the identifier, if one is provided.
- **Remarks** – This is an optional field which allows reporting countries to provide additional information about the facility.
- **pointGeometryLat** – Latitude of the approximate centre of the production facility using the ETRS89 (2D)-EPSG:4258 coordinate reference system with a 10-meter precision (i.e. to four decimal places).

- **pointGeometryLon** - Longitude of the approximate centre of the production facility using the ETRS89 (2D)-EPSG:4258 coordinate reference system with a 10-meter precision (i.e. to four decimal places).
- **facilityType** – This field is populated with a valid URL for the relevant value in the code list 'FacilityTypeValue' in the EEA Data Dictionary folder for the EU Registry.
- **dateOfStartOfOperation** – correlates directly to this attribute in the EU Registry data model.
- **statusType** – This field is populated with a valid URL for the relevant value in the code list 'ConditionOfFacilityValue' in the EEA Data Dictionary folder for the EU Registry.
- **ProductionSite_localId** – Used to link to the parent ProductionSite table.

ProductionFacility Ancillary Tables:

ProductionFacilityFeatureName

This table is based upon the FeatureName data type in the EU Registry data model and contains information specific to the production facility.

- **ProductionFacility_localId** – Used to link to the parent ProductionFacility table.
- **nameOfFeature** – Correlates directly to this attribute in the EU Registry data model.
- **confidentialityReason** – This field is populated with a valid URL for the relevant value in the code list 'ReasonValue' in the EEA Data Dictionary folder for the EU Registry.

ParentCompanyDetails

This table is analogous to the ParentCompanyDetails data type in the EU Registry data model.

- **ProductionFacility_localId** – Used to link to the parent ProductionFacility table.
- **parentCompanyName** – Correlates directly to this attribute in the EU Registry data model.
- **parentCompanyURL** – Correlates directly to this attribute in the EU Registry data model.
- **confidentialityReason** – This field is populated with a valid URL for the relevant value in the code list 'ReasonValue' in the EEA Data Dictionary folder for the EU Registry.

ProductionFacilityAddressDetails

This table is based upon the AddressDetails data type in the EU Registry data model and contains information specific to the production facility.

- **ProductionFacility_localId** – Used to link to the parent ProductionFacility table.
- **streetName** – Correlates directly to this attribute in the EU Registry data model.
- **buildingNumber** – Correlates directly to this attribute in the EU Registry data model.
- **city** – Correlates directly to this attribute in the EU Registry data model.
- **postalCode** – Correlates directly to this attribute in the EU Registry data model.
- **confidentialityReason** – This field is populated with a valid URL for the relevant value in the code list 'ReasonValue' in the EEA Data Dictionary folder for the EU Registry.

EPRTAnnexIActivityType

This table is analogous to the EPRTAnnexIActivityType data type in the EU Registry data model. Where there is more than one Other Activity to be reported separate records repeating the ProductionFacility_localId and the mainActivity values should be created.

- **EPRTAnnexIActivityTypeId** – There is not 1..1 multiplicity between the parent ProductionFacility and this table since a facility can have more than one Other Activity.

Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.

- **ProductionFacility_localId** – Used to link to the parent ProductionFacility table.
- **mainActivity** – This field is populated with a valid URL for the relevant value in the code list ‘EPTRAnnexIActivityValue’ in the EEA Data Dictionary folder for the EU Registry.
- **otherActivity** – This field is populated with a valid URL for the relevant value in the code list ‘EPTRAnnexIActivityValue’ in the EEA Data Dictionary folder for the EU Registry.

Function

This table is analogous to the Function INSPIRE data type which is used in the EU Registry data model. Where there is more than one economic activity to be reported then separate records repeating the ProductionFacility_localId should be created.

- **FunctionId** – There is not 1..1 multiplicity between the parent ProductionFacility and this table since a facility can have more than one NACE code. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionFacility_localId** – Used to link to the parent ProductionFacility table.
- **NACEcode** – This field is populated with a valid URL for the relevant values in the code list ‘NACEValue’ in the EEA Data Dictionary folder for the EU Registry. This field correlates to the ‘activity’ attribute in the EU Registry data model.

CompetentAuthorityEPTR

This table is based upon both the CompetentAuthority and the AddressDetails data types in the EU Registry data model and contains information specific to the production facility. Where there is more than one competent authority to be reported then separate records repeating the ProductionFacility_localId should be created. A field for the attribute confidentialityReason is not included here since it is not expected that the address of a competent authority would be confidential.

- **CompetentAuthorityEPTRId** – There is not 1..1 multiplicity between the parent ProductionFacility and this table since a facility could have more than one competent authority for E-PRTR reporting. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionFacility_localId** – Used to link to the parent ProductionFacility table.
- **organisationName** – Correlates directly to this attribute in the EU Registry data model
- **individualName** – Correlates directly to this attribute in the EU Registry data model.
- **electronicMailAddress** – Correlates directly to this attribute in the EU Registry data model.
- **telephoneNo** – Correlates directly to this attribute in the EU Registry data model.
- **faxNo** – Correlates directly to this attribute in the EU Registry data model.
- **streetName** – Correlates directly to this attribute in the EU Registry data model.
- **buildingNumber** – Correlates directly to this attribute in the EU Registry data model.
- **city** – Correlates directly to this attribute in the EU Registry data model.
- **postalCode** – Correlates directly to this attribute in the EU Registry data model.

ProductionInstallation

This table is analogous to the ProductionInstallation feature type in the EU Registry data model although various ancillary tables are used to hold some of the installation information.

- **ProductionInstallation_localId** – This is the first of two components that make up the INSPIRE identifier for the production installation. It is assigned by the data provider and likely may well be a

national identifier, provided this satisfies INSPIRE requirements for uniqueness, persistence, traceability and feasibility. For more information and recommended examples, see Annex 4 of the EU Registry Data Model Documentation. Values for this field must be unique amongst all production installations in the reporting country. This field will be used to link to multiple other tables that hold some installation information.

- **ProductionInstallation_namespace** – This is the second of two components that make up the INSPIRE identifier for the production installation and should identify the data source. This field should be populated with the same value for all production installation records (and indeed, for identifiers for all entities). Use of the ISO2 country code plus the acronym CAED (for Competent Authority for Environment Data) is recommended, e.g. “ES.CAED”.
- **ProductionInstallation_thematicId** – This is the first of two components that make up the ThematicIdentifier for the production installation. It is a unique identifier internal to each reporting country’s own national reporting system. The field is an opportunity for the reporting country to provide an additional identifier but it is not mandatory.
- **ProductionInstallation_thematicIdScheme** – This is the second of two components that make up the ThematicIdentifier for the production installation and should identify the scheme used to assign the identifier, if one is provided.
- **baselineReportIndicator** – This field is populated with a valid URL for the relevant values in the code list ‘BaselineReportValue’ in the EEA Data Dictionary folder for the EU Registry.
- **pointGeometryLat** – Latitude of the approximate centre of the production installation using the ETRS89 (2D)-EPSG:4258 coordinate reference system with a 1-meter precision (i.e. to five decimal places).
- **pointGeometryLon** - Longitude of the approximate centre of the production installation using the ETRS89 (2D)-EPSG:4258 coordinate reference system with a 1-meter precision (i.e. to five decimal places).
- **publicEmissionMonitoring** – Member States should describe how the results of emission monitoring have been made available to the public, in accordance with Article 24(3)(b) of the IED. The attribute may be left unpopulated if the installation reported is not within the scope of the IED or if emission monitoring is yet to have taken place.
- **publicEmissionMonitoringURL** – This field is populated with the URL at which the results of emission monitoring are found. This may be left unpopulated if the installation reported is not within the scope of the IED or if a website has not been developed.
- **installationType** – This field is populated with a valid URL for the relevant value in the code list ‘InstallationTypeValue’ in the EEA Data Dictionary folder for the EU Registry.
- **remarks** – This is an optional field which allows reporting countries to provide additional information about the installation.
- **dateOfStartOfOperation** – correlates directly to this attribute in the EU Registry data model.
- **statusType** – This field is populated with a valid URL for the relevant value in the code list ‘ConditionOfFacilityValue’ in the EEA Data Dictionary folder for the EU Registry.
- **ProductionFacility_localId** – Used to link to the parent ProductionFacility table.

ProductionInstallation Ancillary Tables:

ProductionInstallationFeatureName

This table is based upon the FeatureName data type in the EU Registry data model and contains information specific to the production installation.

- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **nameOfFeature** – Correlates directly to this attribute in the EU Registry data model.
- **confidentialityReason** – This field is populated with a valid URL for the relevant value in the code list ‘ReasonValue’ in the EEA Data Dictionary folder for the EU Registry.

eSPIRS+ETSIdentifiers

This table is based upon the eSPIRS and ETS identifier attributes in the EU registry data model. Each individual eSPIRSIdentifier or ETSIdentifier should only be populated once in the whole table. If there are multiple identifiers that apply, add new rows to the table. Where the number of relevant eSPIRSIdentifiers and ETSIdentifiers are different, leave the relevant attribute blank instead of repeating the identifier. For example, if there are two appropriate eSPIRSIdentifiers and one appropriate ETSIdentifier for a single ProductionInstallation then this installation should have two separate entries in the eSPIRS+ETSIdentifiers table, and the ETSIdentifier should be left blank for the second entry.

- **eSPIRS+ETSIdentifiersId** – There is not 1..1 multiplicity between the parent ProductionInstallation and this table since an installation could have more than one eSPIRS or ETS Identifier. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. It is populated with an auto-number.
- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **eSPIRSIdentifier** – Correlates directly to this attribute in the EU Registry data model.
- **ETSIdentifier** – Correlates directly to this attribute in the EU Registry data model.

PermitDetails

This table is analogous to the PermitDetails data type which is used in the EU Registry data model.

- **PermitId** – There is not 1..1 multiplicity between the parent ProductionInstallation and this table since an installation could have more than one permit. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. It is populated with an auto-number.
- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **permitGranted** – Correlates directly to this attribute in the EU Registry data model.
- **permitReconsidered** – Correlates directly to this attribute in the EU Registry data model.
- **permitUpdated** – Correlates directly to this attribute in the EU Registry data model.
- **dateOfGranting** – Correlates directly to this attribute in the EU Registry data model.
- **dateOfLastUpdate** – Correlates directly to this attribute in the EU Registry data model.
- **permitURL** – Correlates directly to this attribute in the EU Registry data model.
- **enforcementAction** – If no permit has been granted under Article 5 of the IED, this field is populated with a description of what enforcement action has been taken.

IEDAnnexIActivityType

This table is analogous to the IEDAnnexIActivityType data type in the EU Registry data model. Where there is more than one Other Activity to be reported separate records repeating the ProductionInstallation_localId and the mainActivity values should be created.

- **IEDAnnexIActivityTypeId** – There is not 1..1 multiplicity between the parent ProductionInstallation table and this table since an installation can have more than one Other Activity. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **mainActivity** – This field is populated with a valid URL for the relevant value in the code list 'IEDAnnexIActivityValue' in the EEA Data Dictionary folder for the EU Registry.
- **otherActivity** – This field is populated with a valid URL for the relevant value in the code list 'IEDAnnexIActivityValue' in the EEA Data Dictionary folder for the EU Registry.

otherRelevantChapters

This table allows the population of more than one relevant value for an installation, i.e. handling multiplicity of more than 1 for this attribute in the EU Registry data model. Where there is more than one Other Relevant Chapter to be reported then separate records repeating the ProductionInstallation_localId should be created.

- **OtherRelevantChaptersId** – There is not 1..1 multiplicity between the parent ProductionInstallation table and this table since an installation can be subject to more than one Other Relevant Chapter. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **otherRelevantChapters** – This field is populated with a valid URL for the relevant value in the code list 'RelevantChapterValue' in the EEA Data Dictionary folder for the EU Registry.

CompetentAuthorityPermits

This table is based upon both the CompetentAuthority and the AddressDetails data types in the EU Registry data model and contains information specific to the production installation. Where there is more than one competent authority to be reported then separate records repeating the ProductionInstallation_localId should be created. A field for the attribute confidentialityReason is not included here since it is not expected that the address of a competent authority would be confidential.

- **CompetentAuthorityPermitsId** – There is not 1..1 multiplicity between the parent ProductionInstallation table and this table since an installation can have more than one competent authority for permits. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **organisationName** – Correlates directly to this attribute in the EU Registry data model
- **individualName** – Correlates directly to this attribute in the EU Registry data model.
- **electronicMailAddress** – Correlates directly to this attribute in the EU Registry data model.
- **telephoneNo** – Correlates directly to this attribute in the EU Registry data model.
- **faxNo** – Correlates directly to this attribute in the EU Registry data model.
- **streetName** – Correlates directly to this attribute in the EU Registry data model.
- **buildingNumber** – Correlates directly to this attribute in the EU Registry data model.
- **city** – Correlates directly to this attribute in the EU Registry data model.
- **postalCode** – Correlates directly to this attribute in the EU Registry data model.

CompetentAuthorityInspections

This table is based upon both the CompetentAuthority and the AddressDetails data types in the EU Registry data model and contains information specific to the production installation. Where there is more than one competent authority to be reported then separate records repeating the ProductionInstallation_localId should be created. A field for the attribute confidentialityReason is not included here since it is not expected that the address of a competent authority would be confidential.

- **CompetentAuthorityInspections** – There is not 1..1 multiplicity between the parent ProductionInstallation table and this table since an installation can have more than one competent authority for inspections. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **organisationName** – Correlates directly to this attribute in the EU Registry data model.

- **individualName** – Correlates directly to this attribute in the EU Registry data model.
- **electronicMailAddress** – Correlates directly to this attribute in the EU Registry data model.
- **telephoneNo** – Correlates directly to this attribute in the EU Registry data model.
- **faxNo** – Correlates directly to this attribute in the EU Registry data model.
- **streetName** – Correlates directly to this attribute in the EU Registry data model.
- **buildingNumber** – Correlates directly to this attribute in the EU Registry data model.
- **city** – Correlates directly to this attribute in the EU Registry data model.
- **postalCode** – Correlates directly to this attribute in the EU Registry data model.

BATConclusions

This table allows for the identification of the Commission Implementing Decisions on BAT conclusions that are applicable to any of the activities carried out at the installation. The table has 0..* multiplicity so may be left unpopulated if the installation reported is not within the scope of the IED or the IED installation is not subject to a BAT conclusion.

- **BATConclusionId** – There is not 1..1 multiplicity between the parent ProductionInstallation table and this table since an installation can have more than one relevant BAT conclusion. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **BATConclusion** – This field is populated with a valid URL for the relevant value in the code list ‘BATConclusion’ in the EEA Data Dictionary folder for the EU Registry.

StricterPermitConditionsType

This table is based on the StricterPermitConditionsType data type in the EU registry data model. It gives information on whether the permit sets stricter emission limit values than the lower value of the BAT-AEL range and whether those stricter emission limit values were set pursuant to Article 14(4), Article 18 of the IED or both of those Articles.

- **StricterPermitConditionsId** – There is not 1..1 multiplicity between the parent ProductionInstallation table and this table since an installation can have more than one relevant BAT AEL. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **StricterPermitConditionsIndicator** – This is a Boolean data type, i.e. a tick box (TRUE when ticked) to identify the circumstance that the permit sets stricter emission limit values than the lower value of the BAT-AEL range.
- **BATAEL** – This field is populated with a valid URL for the relevant value in the code list ‘BATAELvalue’ in the EEA Data Dictionary folder for the EU Registry.
- **Article14(4)** – This is a Boolean data type. It should be marked TRUE if the stricter emission limit values were set pursuant to Article 14(4) of the IED.
- **Article18** – This is a Boolean data type. It should be marked TRUE if the stricter emission limit values were set pursuant to Article 18 of Directive 2010/75/EU. Both **Article14(4)** and **Article18** can be marked TRUE in the case that the stricter emission limit values were set pursuant to both articles.

BATderogationType

This table is based on the BATDerogation data type in the EU registry data model. It gives information on whether a derogation was granted under Article 15(4) of Directive 2010/75/EU.

- **BATDerogationId** – There is not 1..1 multiplicity between the parent ProductionInstallation table and this table since an installation can have more than one relevant BAT AEL. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **BATDerogationIndicator** – This Boolean field indicates whether an installation is subject to derogation under Article 15(4) of the IED.
- **publicReasonURL** – This field is to be populated with the URL at which the specific reasons for the derogation are made available to the public.
- **BATAEL** – This field is populated with a valid URL for the relevant value in the code list ‘BATAELvalue’ in the EEA Data Dictionary folder for the EU Registry.
- **derogationDurationStartDate** – Where applicable, this should be populated with the date of the start of the derogation.
- **derogationDurationEndDate** – Where applicable, this should be populated with the date of the end of the derogation.

SiteVisitsType

This table is based on the siteVisits data type in the EU registry data model. The table may be left unpopulated if the installation reported is not within the scope of the IED.

- **ProductionInstallation_localId** – Used to link to the parent ProductionInstallation table.
- **siteVisitNumber** – This field should be populated with the number of site visits to the production installation which were carried out by the competent authority during the reporting year.
- **siteVisitURL** – This field should be populated with either the specific URL of the last site visit report, or a generic URL explaining how individual visit reports can be publicly accessed.

ProductionInstallationPart

This table is analogous to the ProductionInstallationPart feature type in the EU Registry data model although various ancillary tables are used to hold some of the installation information.

- **ProductionInstallationPart_localId** – This is the first of two components that make up the INSPIRE identifier for the production installation part. It is assigned by the data provider and likely may well be a national identifier, provided this satisfies INSPIRE requirements for uniqueness, persistence, traceability and feasibility. For more information and recommended examples, see Annex 4 of the EU Registry Data Model Documentation. Values for this field must be unique amongst all production installation parts in the reporting country. This field will be used to link to multiple other tables that hold some installation part information.
- **ProductionInstallationPart_namespace** – This is the second of two components that make up the INSPIRE identifier for the production installation part and should identify the data source. This field should be populated with the same value for all production installation part records (and indeed, for identifiers for all entities). Use of the ISO2 country code plus the acronym CAED (for Competent Authority for Environment Data) is recommended, e.g. “ES.CAED”.
- **ProductionInstallationPart_thematicId** – This is the first of two components that make up the ThematicIdentifier for the production installation part. It is a unique identifier internal to each reporting country’s own national reporting system. The field is an opportunity for the reporting country to provide an additional identifier, but it is not mandatory.

- **ProductionInstallationPart_thematicIdScheme** – This is the second of two components that make up the ThematicIdentifier for the production installation part and should identify the scheme used to assign the identifier, if one is provided.
- **plantType** – This field is populated with a valid URL for the relevant value in the code list ‘PlantTypeValue’ in the EEA Data Dictionary folder for the EU Registry.
- **totalRatedThermalInput** – correlates directly to this attribute in the EU Registry data model.
- **pointGeometryLat** – Latitude of the approximate centre of the production installation part using the ETRS89 (2D)-EPSG:4258 coordinate reference system with a 1-meter precision (i.e. to five decimal places).
- **pointGeometryLon** - Longitude of the approximate centre of the production installation part using the ETRS89 (2D)-EPSG:4258 coordinate reference system with a 1-meter precision (i.e. to five decimal places).
- **untreatedMunicipalWaste** – A Boolean value which correlates directly to the attribute in the EU Registry data model. If the related InstallationPart is an LCP then this attribute will be ignored and omitted by the FME conversion process. If the related InstallationPart is not an LCP and this field is left unpopulated then this will be interpreted as a FALSE value by the FME conversion process.
- **heatReleaseHazardousWaste** – A Boolean value which correlates directly to the attribute in the EU Registry data model. If the related InstallationPart is an LCP then this attribute will be ignored and omitted by the FME conversion process. If the related InstallationPart is not an LCP and this field is left unpopulated then this will be interpreted as a FALSE value by the FME conversion process.
- **publicDisclosure** – Correlates directly to this attribute in the EU Registry data model.
- **publicDisclosureURL** – Correlates directly to this attribute in the EU Registry data model. Field should be populated with a URL.
- **remarks** – This is an optional field which allows reporting countries to provide additional information about the installation part.
- **dateOfStartOfOperation** – correlates directly to this attribute in the EU Registry data model.
- **statusType** – This field is populated with a valid URL for the relevant value in the code list ‘ConditionOfFacilityValue’ in the EEA Data Dictionary folder for the EU Registry.
- **ProductionInstallation_partLocalId** – Used to link to the parent ProductionInstallation table.

ProductionInstallationPart Ancillary Tables:

ProductionInstallationPartFeatureName

This table is based upon the FeatureName data type in the EU Registry data model and contains information specific to the production installation part.

- **ProductionInstallationPart_partLocalId** – Used to link to the parent ProductionInstallationPart table.
- **nameOfFeature** – Correlates directly to this attribute in the EU Registry data model.
- **confidentialityReason** – This field is populated with a valid URL for the relevant value in the code list ‘ReasonValue’ in the EEA Data Dictionary folder for the EU Registry.

Derogations

This table allows the population of more than relevant values for an installation part, i.e. handling the permitted multiplicity of more than 1 for this attribute in the EU Registry data model. Where there is more than one derogation to be reported then separate records repeating the ProductionInstallationPart_partLocalId should be created.

- **DerogationsId** – There is not 1..1 multiplicity between the parent ProductionInstallationPart table and this table since an installation part can be subject to more than one derogation. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionInstallationPart_localId** – Used to link to the parent ProductionInstallationPart table.
- **derogations** – This field is populated with a valid URL for the relevant value in the code list ‘DerogationValue’ in the EEA Data Dictionary folder for the EU Registry.

Specific Conditions

This table is based on the SpecificConditionsType data type in the EU registry data model. Where there is more than one specific condition to be reported then separate records repeating the ProductionInstallationPart_localId should be created.

- **SpecificConditionsId** – There is not 1..1 multiplicity between the parent ProductionInstallationPart table and this table. Therefore, this ID (which is internal to the Access template) acts as the primary key for this table. This field is populated with an auto-number.
- **ProductionInstallationPart_localId** – Used to link to the parent ProductionInstallationPart table.
- **specificConditions** – This field is populated with a valid URL for the relevant values in the code list ‘Article51Value’ in the EEA Data Dictionary folder for the EU Registry.
- **conditionsInformation** – This field should be populated with a description of the nature of the change to the operating conditions which has been authorised under Article 51 of the IED.
- **SpecificConditionsPermitURL** – This field should be populated with a URL for the permit which sets out the operating conditions.

CapacityWasteIncinerationType

This table is analogous to the CapacityWasteIncinerationType data type in the EU Registry data model.

- **ProductionInstallationPart_localId** – Used to link to the parent ProductionInstallationPart table.
- **totalNominalCapacityAnyWasteType** – Total nominal capacity of the waste incineration or waste co-incineration plant. This should be reported in units of tonnes per day.
- **permittedCapacityHazardous** – Total permitted capacity for hazardous waste incineration and co-incineration. This should be reported in units of tonnes per day.
- **permittedCapacityNonHazardous** – Total permitted capacity for non-hazardous waste incineration and co-incineration. Values should be reported in units of tonnes per day.