7.8 Production and industrial facilities

Definition:


Description:

Location of production industry, mines, waste/disposal sites and energy production facilities. Concerning industry these may be chemical, hydrocarbons (oil-gas), mines or any other industry. Usage of PRTR categories as common nomenclature for such facilities is relevant as it comprises a very broad set relevant industrial activities. The categorisation may be mapped to other international categorisation systems like NACE, SERIEE or ISIC.

The definition mentions also water abstraction, mining and storage sites. The latter may be storage sites for different kinds of "products" needed as input in industrial/production processes, or may be seen as storage sites for real products and also form "waste" from the production process.

The theme production and industrial facilities* must be seen as one of several thematic groups of "facilities" such as:
- utility and government services
- environmental monitoring facilities
- agriculture and aquaculture facilities

The IMS paper (INSPIRE IMS, 2003) contained a different sub-grouping of utilities and facilities with the groups transmission lines and pipelines, environmental protection facilities, production facilities, industry, agricultural facilities, trade and service facilities. The first and last in the IMS is not mentioned as separate themes in the draft Directive text, neither is the environmental protection facility. Two new themes have been introduced: "Utility and governmental services" and "Environmental monitoring facilities".

The definition includes a reference to the IPPC directive. IPPC Directive (Directive 96/61/EC) describes the European Emission Register (EPER) in Art 15 (3). This Directive and the clauses have been affected, as the PRTR Regulation (Regulation (EG) Nr. 166/2006 of 18.01.2006) has become effective. This Regulation establishes an integrated pollutant release and transfer register at Community level (PRTR) - and it deletes (among others) Art. 15 (3) of the IPPC Directive.

Kinds of production/industry facilities:

Industrial sites: Agglomerations and individual localisation of major industry, including chemical, hydrocarbon refineries, forestry, fisheries etc. Id on firm/site. SEVESO II

Nuclear installation location: Will be used as a reference point for discharges from Nuclear Installations. Reporting on each production unit: Submission of data for the Annual Report on Liquid Discharges from Nuclear Installations from OSPAR Convention for the protection of the marine environment of the North-East Atlantic Ocean. This is a legal obligation for the following nations: Belgium, Denmark, France, Germany, Norway, Portugal, Spain, Sweden, Switzerland, the Netherlands, and United Kingdom. Not necessarily reporting on geographical location, but unit name/address or other id could link information to a geographical location. OSPAR/ HELCOM
Energy resource extraction and production site: Localisation of energy production sites for production of heat, electricity, oil and gas. The sites may include extraction sites, e.g. for oil and gas (platforms), hydropower stations, nuclear power plants. The sites also includes the distribution facilities for energy, storage sites, but not the network (See data component utilities).

Mines: Individual localisation of mines or generalised mining areas, including storage sites, landfills, sedimentation dams etc.

Scope, use examples:

Needed in modelling and assessment of pressures on the environment, in land use planning, in risk and hazards management. Needed at all geographical levels, from European to local. Needed for information to the public. Rough representation in a European dataset for some of the objects in GISCO. Also a geographical database in the EPER, with a map viewer with details about production site, see www.eper.eu.int

European Policies: 6EAP, IPPC, EPER, Ospar/Helcom, Seveso II,

Important feature types and attributes:

Facilities are described in several INSPIRE themes. Data models and attributes should as far as possible be harmonised between these themes.

The first thought of objects in this theme is point location of a production/industry facility. However, many of the production facilities cover large areas, so that area objects should also be considered. In detailed mapping/referencing building or delineation of other objects could be considered. In the IMS paper transmission lines and pipelines where included as kinds of "utilities and facilities". Transmission lines of different kinds could be viewed as linked objects to the “true” production/industry facilities.

Production/industry facility
- id
- name
- classification system
- classification of activity/production, Nace-code
- volume of production, per component and time
- volume of emission, per component and time
- owner/responsible
- emission permitted volume
- etc

Storage facility
- id
- name
- classification system
- class/type
- component, name and volume
- owner/responsible organisation

Waste/disposal site
- id
- name
- classification system
- class/type
- component, name and volume
- owner/responsible organisation
Antennas/transmission facilities for data/signals

- id
- name
- class/type: category of object (feature type) e.g. antennas, base-stations, relay-antennas
- category of data/signal, e.g. radio, data, mobile, TV
- date of construction
- responsible organization

**Links and overlaps with other themes:**

The datasets addressed in this theme may overlap with other themes and borders between themes should be identified. Particular care towards

- Land use
- Agricultural and aquaculture facilities. Closely related
- Utility and government services; which includes utility facilities such as sewage, waste management, energy supply and water supply
- Environmental monitoring facilities. marginal link, when the monitoring facility is located at a production facility location

Links also to:
- Buildings
- Addresses
- Energy resources
- Mineral resources

**Reference documents:**

Directive 96/61/EC (IPPC) and water abstraction facilities, mining, storage

EPER database, European Pollution Emission register, reporting of different kinds of production

GISCO database, industry etc

INTESA GIS: 1n1007_1-2 - Specifiche per la realizzazione dei data base topografici di interesse generale. Il catalogo degli oggetti (v.3_3). (Italy)

Norwegian feature catalogue and standards

PRTR Regulation (Regulation (EG) Nr. 166/2006 of 18.01.2006)

PRTR, NACE and SERIEE classifications

RAVI: NEN3610 - Basic scheme for geo-information - Terms, definitions, relations and general rules for the interchange of information of spatial objects related to the earth's surface (The Netherlands)

Teleatlas database