European Commission

Webinar CCCEV evolution

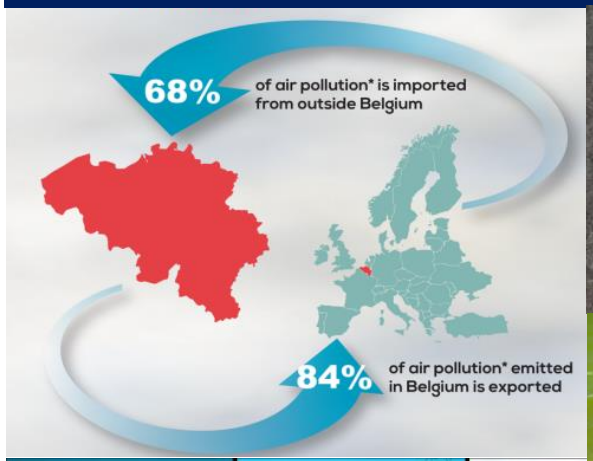
An environmental use case for semantic interoperability

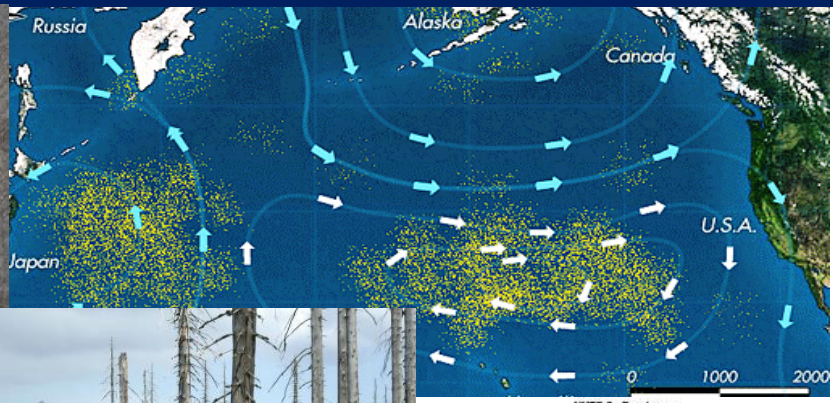
25 June 2019

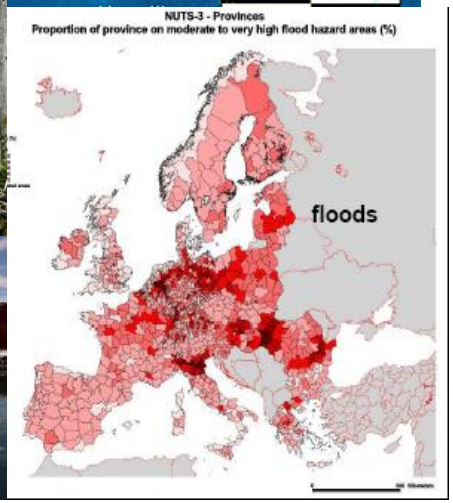
European Commission
Directorate General for Environment
Directorate E - Implementation and Support to Member States
Unit E.4 – Compliance & Better Regulation

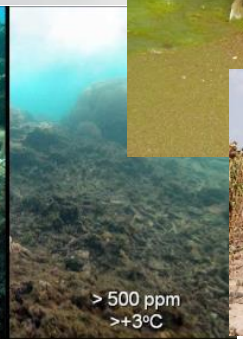
European Commission

Environment knows no borders!





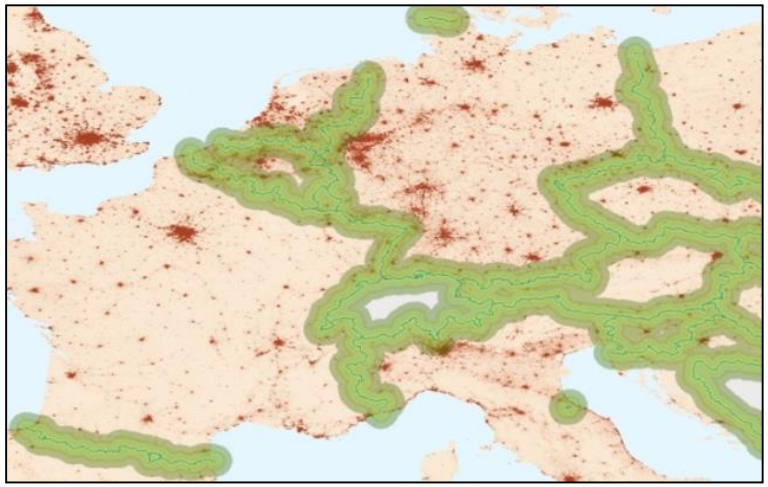


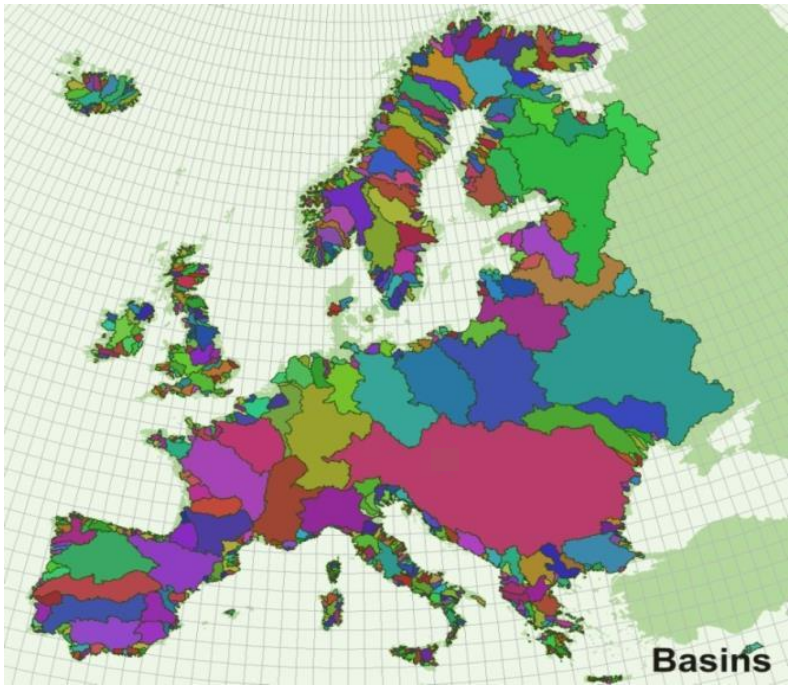


Cross-border collaboration is essential

Natural Disasters as well as other environmental phenomena do not stop at national borders!

20% of the EU citizens (115 million) live within 50 km from a border





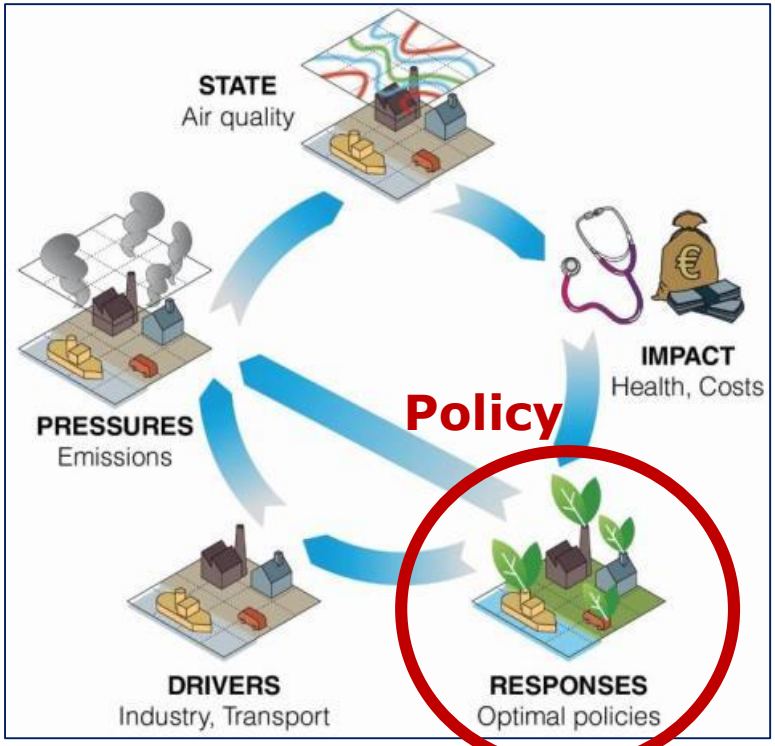
70% of all fresh water bodies in Europe are part of a trans-boundary river basin !!

Evidence-driven policy is data hungry

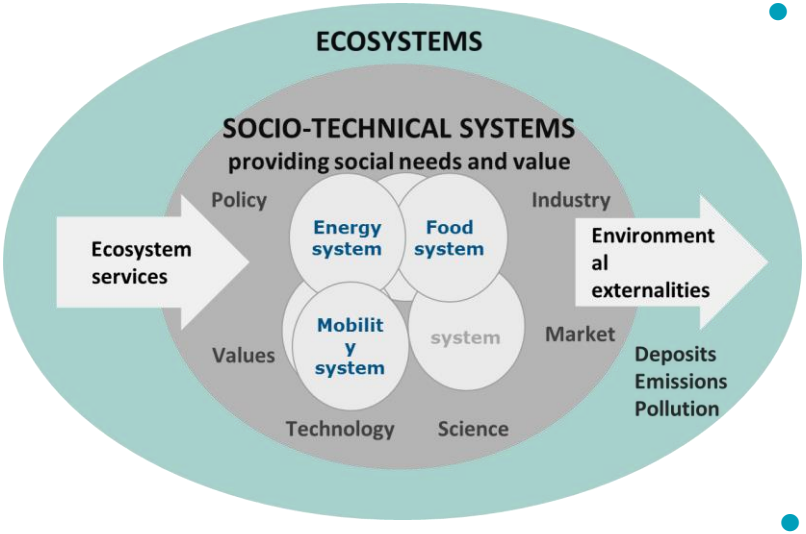
The Policy cycle

Quality data and information are essential resources for policy development, implementation and evaluation at all levels of government.

Driver-Impact-Pressure-State-Response analytical framework to model the eco-system. Policy is developed to remediate impact by addressing drivers or pressures.



Modeling the interactions between complex eco systems (biodiversity, agriculture, energy, transport …) makes it even more challenging



- Legislation should be complementary and streamlined to:
  - strengthen the envisaged impact of the policy,
  - to support reuse of monitoring and reporting data to minimize burden on Member States and competent authorities,
  - support integrated assessments.

- Better regulation
- Better policy implementation

Policy development, implementation and evaluation would greatly benefit from interoperable evidence bases (cross-policy, cross-domain).

- Legal interoperability and semantic interoperability are needed.
- On the legal interoperability we have ELI
- On the semantic interoperability for spatial data we have the INSPIRE Directive, to which the ISA Core Vocabulary is aligned

Asset

European Legislation Identifier (ELI)

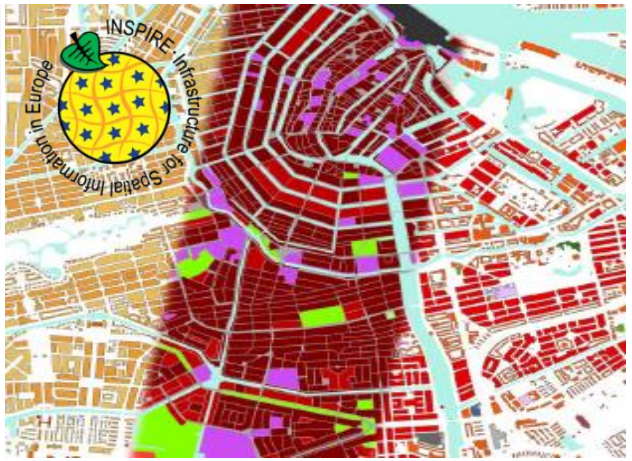
Ontology

URI: http://publications.europa.eu/resource/dataset/eli

About | Documentation

The European Legislation Identifier rests on three pillars:

1. Identification of legislation: URI templates at the European, national and regional levels based on a defined set of components
2. Properties describing each legislative act: Definition of a set of metadata and its expression in a formal ontology
3. Serialisation of ELI metadata elements: Integration of metadata into the legislative websites using RDFa



Coding legal provisions as core criteria in CCCEV would promote legal interoperability and drive business process automation and improvement

An example of legal artefacts that could be coded in core EU environmental criteria:

- **Reporting obligations**
- **Greening criteria (ecolabel, ecodesign, car emission levels, use of materials …)**
- **Protection measures (birds, habitats, Invasive species …)**

Together with a common ontology for the underlying concepts (e.g. core vocabulary extensions) it would allow to streamline similar concepts in different domains such as physical features (agricultural holding, production facility, administrative units …), codelists …

A common ontology could be the fundament of a European dataspace to boost the European data economy and support digital transition.

Use case 1: Green procurement requirements as reference datasets hosted by open data portals

EU ECOLABEL CRITERIA

Criterion 1 — Energy savings

(a) Energy savings for desk top computers, integrated desk top computers and thin clients

The energy efficiency performance of desk top and integrated desk top computers shall exceed the appropriate category energy efficiency requirements set out in the Agreement as amended by Energy Star v5.0 by at least the following:

— category A: 40 %,

— category B: 25 %,

— category C: 25 %,

— category D: 30 %.

The energy efficiency performance of thin clients shall meet at least the energy efficiency requirements for thin clients set out by Energy Star v5.0.

Capability adjustments allowed under the Agreement as amended by Energy Star v5.0 may be applied at the same level, except in the

Check-list (for a first assessment only)

This is a non exhaustive list of EU Ecolabel criteria requirements. Please see the Official criteria document for full details.

Life cycle step	Criterion	Expectations
Manufacturing	Hazardous substances and mixtures	• The product or any part of it does not contain substances identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1272/2008 nor substances or mixtures meeting the criteria for classification in the hazard classes or categories. • Concentration limits for substances meeting criteria or Regulation (EC) No 1907/2006 should not exceed 0,1 % weight by weight.
Manufacturing	Substances listed in accordance with Article 59 (1) of Regulation (EC) No 1907/2006	No derogation from the exclusion in Article 6(6) maybe given concerning substances identified as substances of very high concern, present in mixtures, in an article or in any homogenous part of a complex article in concentrations higher than 0,1 %. Specific concentration limits apply in case it is lower than 0,1 %.
Manufacturing	Power management	• Power management settings should be 10 minutes to screen off (display sleep); 30 minutes to computer sleep. • Personal computers with Ethernet capability should have the ability to enable and disable wake on LAN (WOL) for sleep mode. • Personal computers with Ethernet capability must meet specific requirements.
Manufacturing	Internal power supply	Internal power supplies should meet at least the energy efficiency requirements for internal power supplies set out by Energy Star v5.0.
Manufacturing	Mercury in fluorescent lamps	Mercury or its compounds should not intentionally be added to the backlights of the computer display.
Manufacturing	Plastic parts	• Plastic parts should not contain a chlorine content greater than 50 % by weight. • Only biocidal products containing biocidal active substances included in Directive 98/8/EC and authorised for use in computers, can be used.
Manufacturing	Recycled content	The external plastic case of the system unit, monitor and keyboard should have a post-consumer recycled content of not less than 10 by mass.

- Ecolabel criteria are documented in legal acts, and factsheets.
- Coding these legal provisions as core criteria in CCCEV could support greening of ICT procurements.
- This would strengthen the implementation of the circular economy and mitigate negative impact of digital transformation on the environment.

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Draft Business Model – Expose Main GPP and Eco label criteria in a machine readable format.

Key Partners

- OP
- ISA2
- TC440
- Norway DIFI
- DG ENV

Key Activities

- To establish a list of prioritized GPP criteria
- To include the product grouping requirements in the new CPV

Key Resources

- European GPP Experts
- Publication Office IT experts
- MDR (OP infrastructure)

Value Proposition

Procurement Officers can make use of Green Public Procurement criteria:

to express their catalogue request and /or

To call for tenders award criteria,

to evaluate the tenders from a GPP point of view.

Customer Relationships

- Access harmonized and translated Green Procurement Criteria across MS
- Access via a unique source
- No need to check for updates

Channels

- Open Data Portal

Customer Segments

- Contracting Authorities
- Suppliers
- IT solution providers

Cost Structure

- Maintain at European level
- Create at European level

Revenue Streams

- Ease of reporting on Green procurement
- Ease of access and use by Procurement systems. Ease of evaluation

Courtesy of Cécile GUASCH (**DIGIT D2 – Interoperability**)

Problem

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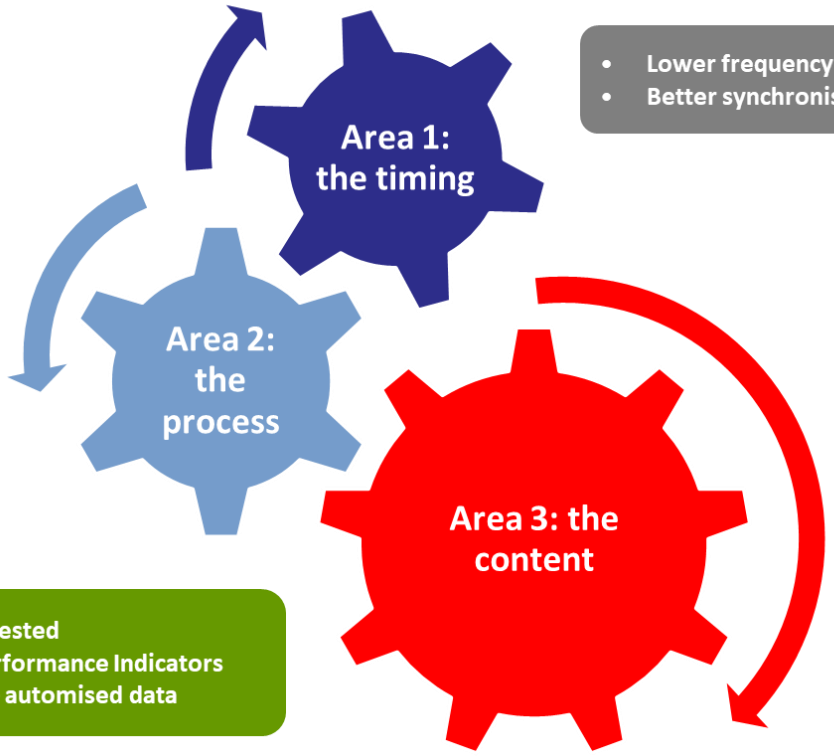
Use case 2: Streamlining of reporting

Better Regulation Fitness Check on Environmental Monitoring and Reporting: New, horizontal review of reporting

Three areas of work



- Lower frequency of reporting
- Better synchronisation

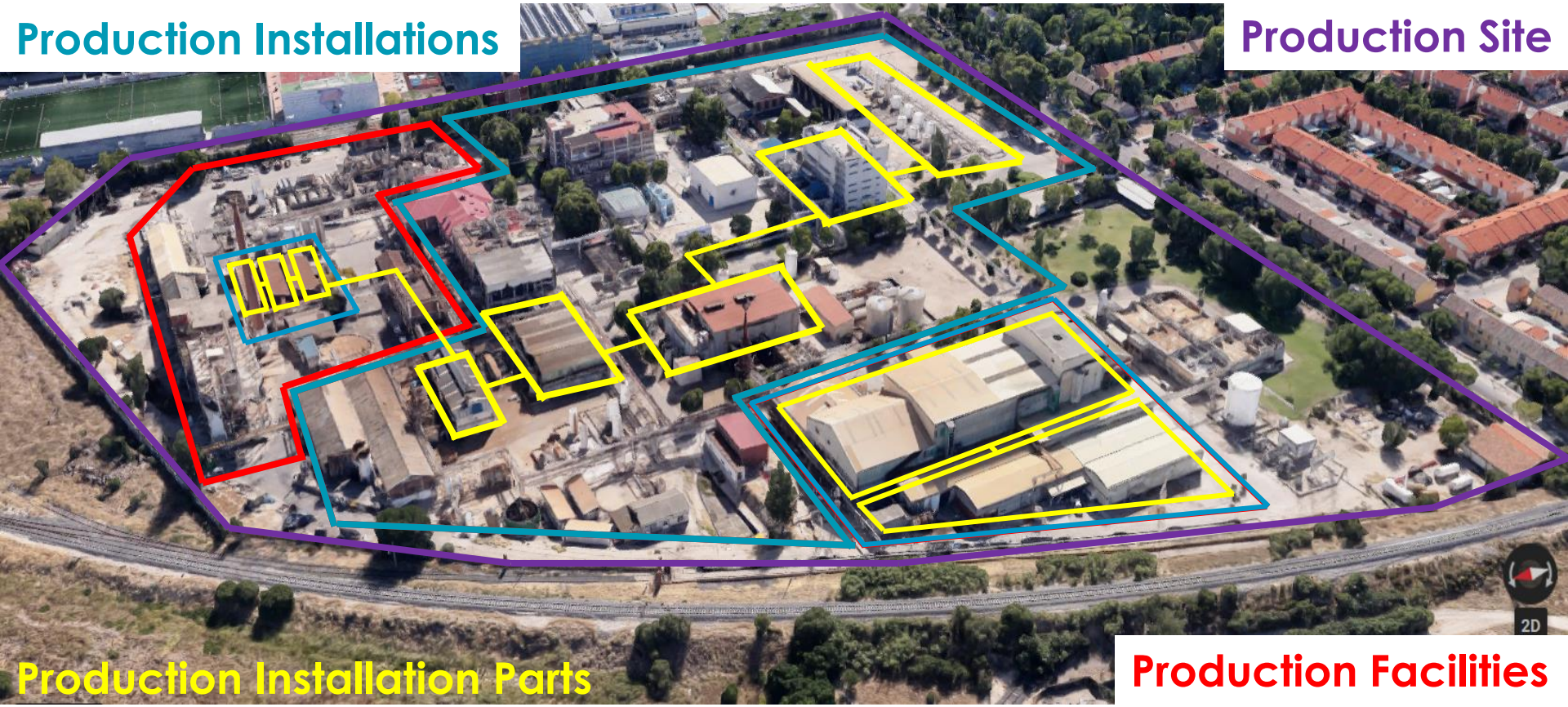
Efficiency gains through
- automisation
- harmonisation
- centralisation

- Less data requested
- Ensure key performance Indicators
- Less text more automised data

Streamlining environmental reporting re-using INSPIRE: The EU Registry on Industrial sites

- The EU Registry on Industrial Sites centralises the collection of administrative data (permits and **geospatial information**) for:
  - **E-PRTR** Facilities (>30000)
  - **IED** installations (around 50000)
  - Large Combustion Plants (**LCPs**)
  - Waste incineration / co-incineration plants (**WI**)
- Reporting obligation for **33 countries** (EU MS + EFTA + Serbia)
- **Reference dataset** to which thematic data reporting will refer to.
- The EU Registry data model is:
  - Consistent with the **underlying thematic legislation** (Regulation 166/2006 (E-PRTR, Directive 2010/75/EU on Industrial Emissions);
  - Compliant with the **INSPIRE Data Specifications** (D2.8.III.8 Production and Industrial Facilities).
  - Encoded in the **Commission Implementing Decision** (2018/1135) of 10/08/18, establishing type, format and frequency regarding reporting.

EU Registry - Scope



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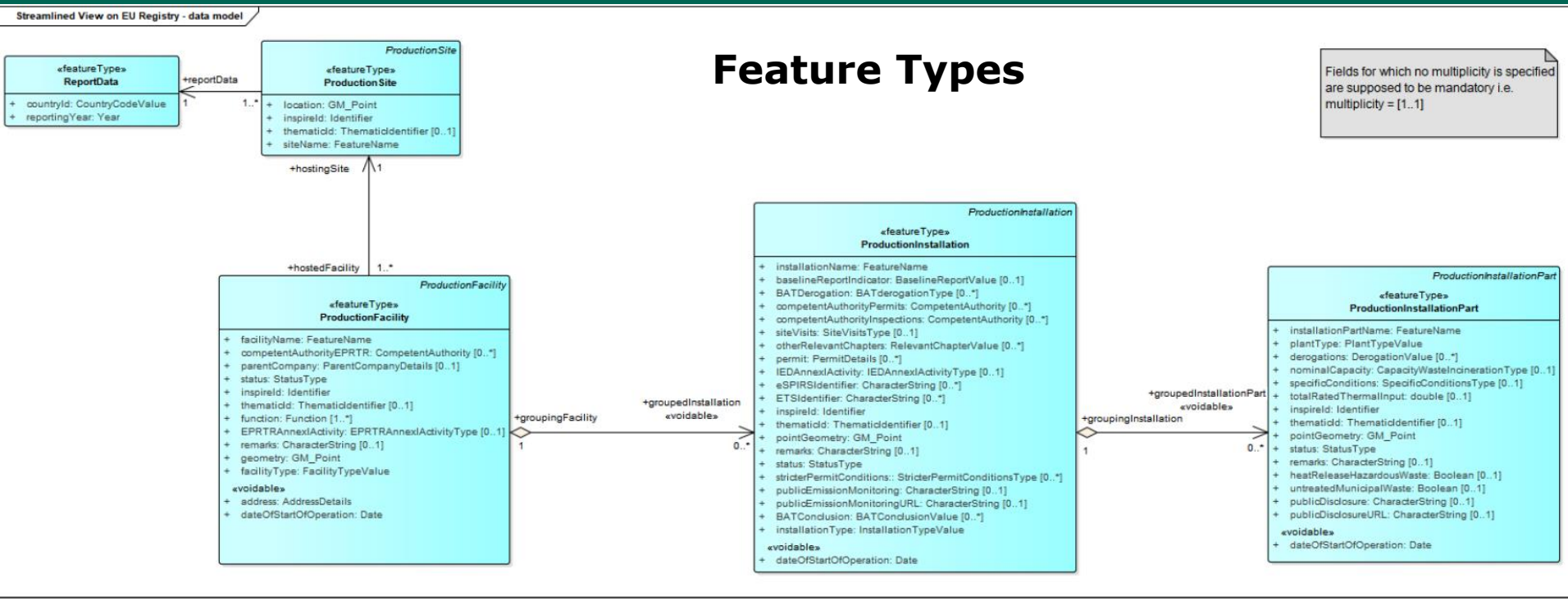
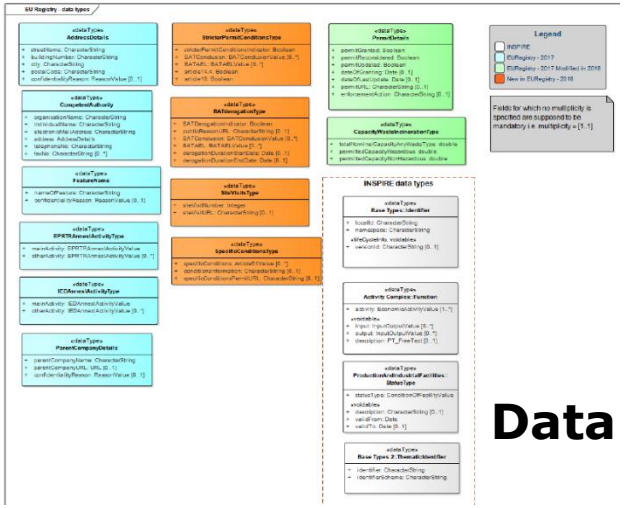
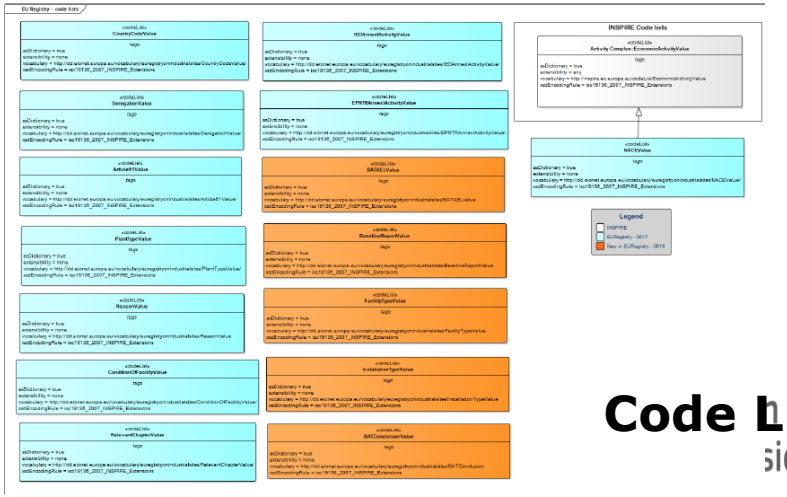
EU Registry: Final streamlined view



Feature Types



Data Types



Code Lists

Thank you for your attention

ENV INSPIRE mailbox env-inspire@ec.europa.eu

More information: http://inspire.ec.europa.eu