This project is co-financed by the European Union and the Republic of Turkey

Technical Assistance for Capacity Building on European Pollutant Release and Transfer Register (E-PRTR) in Turkey

Workshop /Seminar

E-PRTR System – Software Architecture and Operating: Details

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Workflow management in the system

The facility operator

- collects all necessary information for E-PRTR annual report for the current reference year
- enters the information into the web application (optionally can claim for confidentiality)
- submits annual report when it is ready

The competent authority administrator

- verifies submitted annual report
- considers claimed confidentiality of data and decides whether to withhold the data
- approves the annual report when it is correct
- rejects the report when it is incorrect or incomplete (with email notification for the facility operator)
- the facility operator must correct rejected annual report and resubmit it

Workflow management in the system - continued

The system administrator (MoEU)

- will have the ability to independently verify data entered onto the system at Provincial level

- generates and validates the whole Member State report when all the annuals reports from the facilities for the current reference year are approved

- sends the Member State report to the European Commission (data classified as confidential will not be transmitted)

After submitting the Member State report to the European Commission all reports for the current reference year will be available for the public.
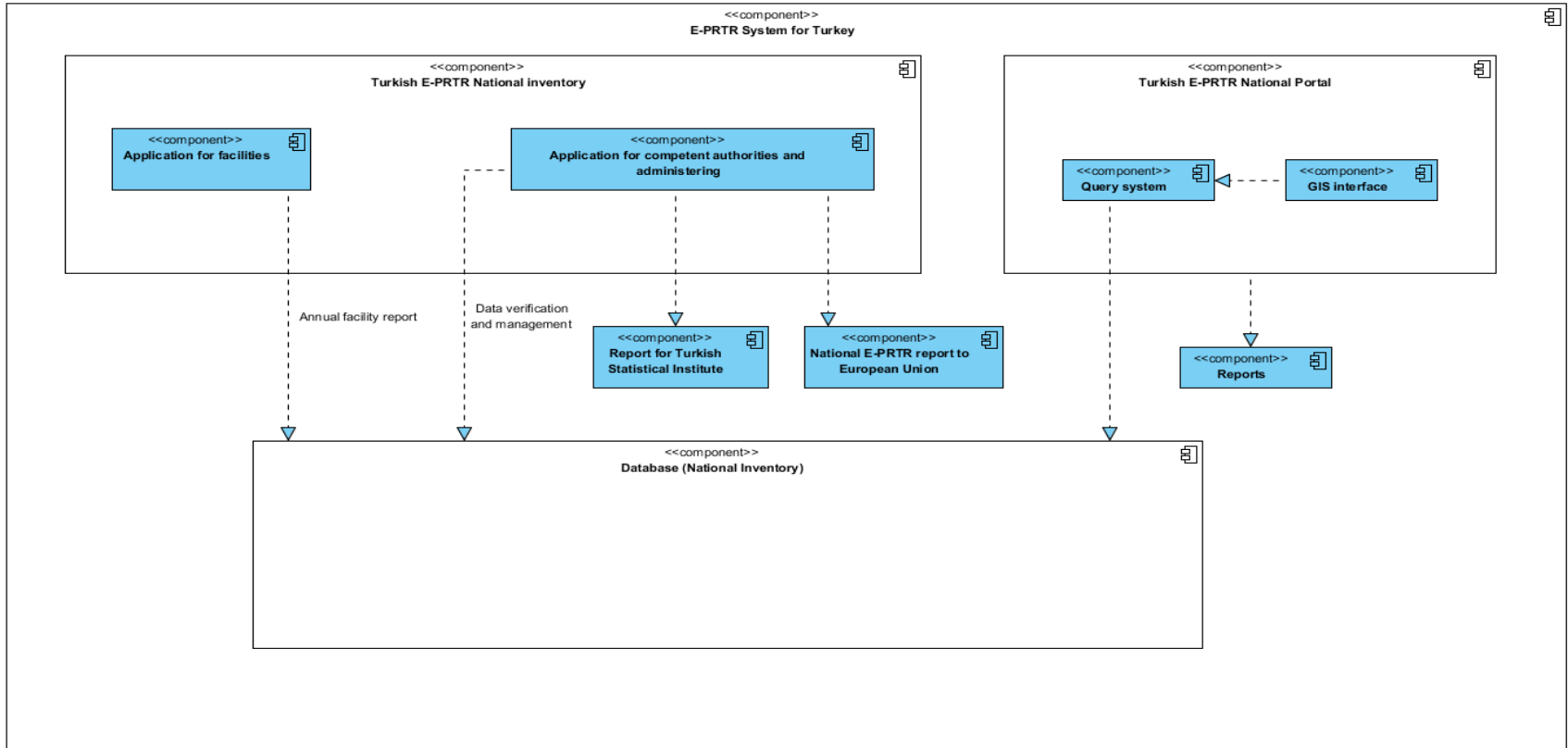
Component layout of E-PRTR system for Turkey

Domain model

Data concerning facilities and their releases of pollutants and off-site transfer of pollutants and waste is built in annual layout in accordance to annual facility reporting.

For off-site transfers of hazardous waste to other countries catalogue of waste receivers with sites receiving the transfer will be used. This catalogue will be created by the facility operators.

The domain contains catalogues according to Regulation (EC) No. 166/2006 on European Pollutant Release and Transfer Register:

- E-PRTR Activities,
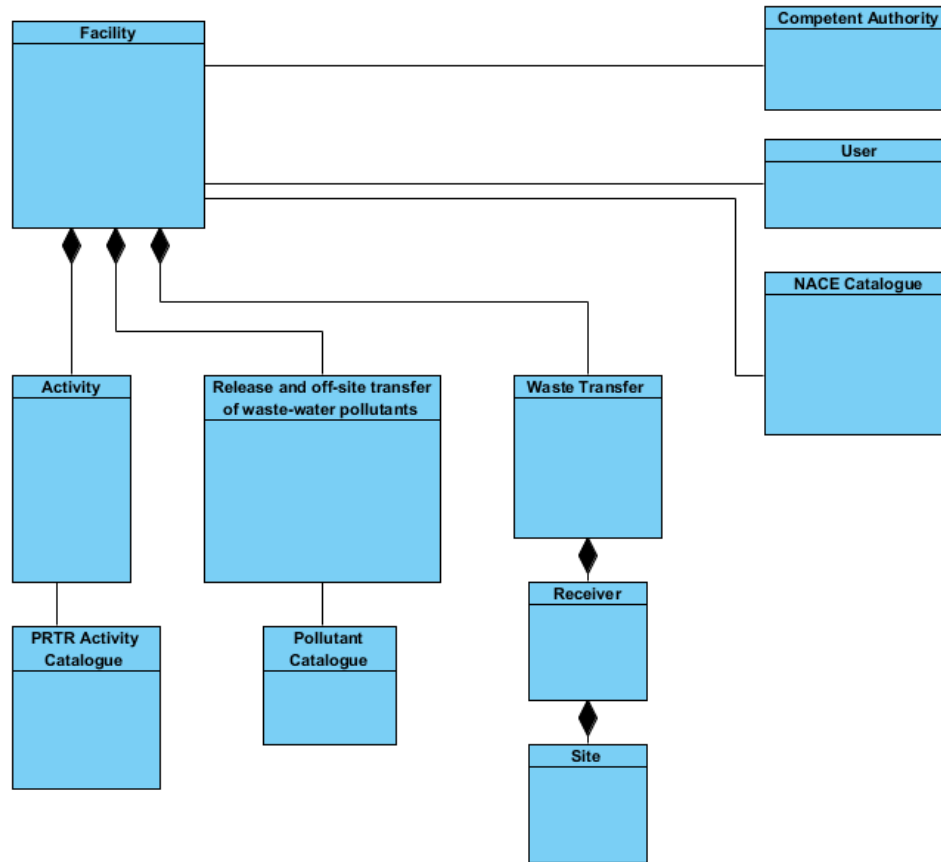- IPPC Activities,
- NACE Activities,
- Pollutants.

Diagram of domain

Application for facilities

Manual and automatic of annual report data entry mode
• Manual – directly by operator
• Automatic – by XML file uploading.

The annual E-PRTR facility report consists of:
• Identification of the facility
• All PRTR activities of the facility (with IPPC code where available)
• Release data to air
• Release data to water
• Release data to land
• Off-site transfer of each pollutant destined for waste-water treatment
• Off-site transfers of hazardous waste
    • Within the country
    • To other countries
• Off-site transfer of non-hazardous waste

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Application for facilities

Actions of the facility operator:

- Claiming confidentiality in the report – he can indicate the information that he wants to withhold providing the **reason** according to Article 4(2) of Directive 2003/4/EC.

- Report validation – entered annual report will be validated for accuracy and consistency.

- Generating a printed report based on entered annual data.

- Saving report in PDF format.

- Submitting the annual report for further verification by competent authority.

- Correcting of annual reports rejected by competent authority.

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Application for competent authorities and system administration

Features and functions:

- Signing in to the system by login and password based on individual level of access rights.

- Accepting or rejecting of report for facility in reference year with email notification to an operator of the facility – marking report status "accepted" or "rejected" with description what is incorrect

- Generating of the Member State report for the European Commission based on accepted reports

- Data generating for Turkish Statistical Institute (could be the same scope as for the European Commission)

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The statuses of the facility annual report

The annual report may have one of the following statuses:

- „**in preparation**" – when the facility operator enters data to the annual report and has not finished the edition of the whole report
- „**submitted**" – when the facility operator marks that he submitted the whole annual report (the annual report will be read-only for the facility operator; only in this state the facility operator can change the status again to „in preparation" and continue the report edition)
- „**in progress**" – when the competent authority administrator starts the verification process of the annual report
- „**rejected**" – when the administrator rejects the annual report (the facility operator can edit and correct the report)
- „**approved**" - the annual report is correct.

Assumptions to the E-PRTR IT system

- The target application should be an open source.

- Programming language: Java with frameworks – mainly: Apache Wicket, JPA, Hibernate (open source)

- Web application server: Tomcat (open source)

- Database engine: MS SQL latest version (licence needed)

- Server operation system: MS Windows Server 2012 or later (licence needed)

- Target system installed on the Beneficiary's server

- Communication with Web server will be provided by SSL protocol (valid SSL certificate needed)

Thank you