

# STANDARD TWINNING PROJECT FICHE

## 1. Basic Information

- 1.1 Publication notice reference: EuropeAid/ 136-865/IH/ACT/HR
- 1.2 Programme: Transition Facility IPA/2013/24986 (Annex of C(2013) 8057 final)
- 1.3 Twinning Number: HR 14 IB EN 01
- 1.4 Title: Improvement of Croatian Environment Pollutant Register (Croatian EPR) and its Integration into Croatian Environmental Information System (CEIS) (CRO EPR)
- 1.5 Sector: Environmental protection and climate change/Environment
- 1.6 Beneficiary country: Croatia

## 2. Objectives

### 2.1 Overall objective:

Reporting capabilities of the Republic of Croatia in the field of environmental reporting towards both European Commission (EC) and United Nations (UN) improved by enhancement of Croatian Environment Agency (CEA) capacities.

### 2.2 Project purpose:

Croatian EPR system further developed, including improvement of collecting, validating and reporting process of Croatian EPR, and consistency with other reporting systems in the Republic of Croatia, especially Geographic Information System (GIS) and the Common Reporting Format for National Greenhouse Gas (GHG) inventory system, improved.

### 2.3 Contribution to Accession Treaty/ Relevant National Documents:

#### **Accession Treaty**

Following the signature of the Accession Treaty on 9 December 2011 by 27 Member States and the Republic of Croatia and its ratification procedure in the Member States, Croatia joined the European Union (EU) on 1 July 2013. As one of the EU Member States, Croatia is obliged to follow the EU reporting obligations in the field of environment protection.

#### **National Environmental Strategy**

The main goal of the Strategy is preserving the environment in Croatia by improving legal, financial and institutional frame for environment management on local and national level; by strengthening competencies; by integrating nature protection into other sectors (e.g. agriculture, forestry, tourism, etc.) in order to reduce nature pollution; by implementing comprehensive monitoring and unique IT system and by raising public's awareness on environmental issues.

#### **National Environmental Action Plan**

National Environmental Action Plan has been envisaged as a process of setting goals and efficient enforcement of environmental protection in Croatia. It sets guidelines for long-term environmental

management, taking into consideration overall economic, social and cultural development. Furthermore, it sets the basis for harmonization of economic, technical, scientific, educational, organizational and other measures, i.e. measures encompassing enforcement of international obligations aimed at nature protection. Some of the most important priorities are waste disposal, air quality, etc. It is also very important to establish comprehensive monitoring and unique information system, to improve management of natural resources and protected areas, as well as to strengthen the capacities of employees working in the field of nature protection.

According to the above stated documents the Republic Croatia has obligation to:

- Build the capacity for comprehensive and systematically monitoring of the state of the environment;
- Collect and process the environmental information and make them available to all stakeholders;
- Implement the use of modern communication technologies and standards in line with European requirements, providing access to information about the environment of Croatia, allowing them to communicate, exchange and allow the use of cartographic support;
- Develop routines for processing the collected environmental data and their evaluation (modelling, prediction and visualization);
- Associate with the European Environment Agency (EEA) and the European Environment Information and Observation Network (European Environment Information and Observation Network - EIONET);
- Collect and process information about the environment of Croatia used for preparation of European environmental reports.

This Twinning project will support CEA in relation to the above mentioned Strategy and Action Plan. It will provide assistance in implementing modern communication technologies and standards in line with EU requirements in allowing the use of cartographic support and in developing routines for processing of the collected environmental data and their evaluation (modelling, prediction and visualization). It will also enhance access to information about the environment of Croatia. With improvement of existing Croatian EPR, envisaged to be achieved through this project, and integration of improved EPR into CEIS, the goal of improving the quality of collected and reported data and their alignment with international requirements will be achieved. Thus, the project will contribute to fulfilment of the reporting requirements of environmental data in Croatia to the EU.

### **3. Description**

#### **3.1 Background and justification:**

Croatian Environment Agency (CEA) is the central national information authority for national and international reporting and reporting coordination to the European Commission, European Environment Agency (according to the requirements of EIONET) and reporting to other global organizations (i.e. UN and its bodies) on national environmental issues.

As the central national information authority in the field of environment, CEA is responsible for collection and integration of environmental data and information, monitoring and reporting of the environment and providing public access to environmental information.

Attainment of the above mentioned tasks depends on a unified information system which integrates all environmental data. Environmental Protection Act (in Article 148) prescribes that Environmental Protection Information System (EPIS) shall be established for the purpose of integrated environmental management and/or management of individual environmental components or burdens

and for the purpose of preparing and monitoring the implementation of sustainable development and environmental protection documents, as well as other documents that are considered as such pursuant to the provisions of this Act, while Article 149 prescribes that EPIS shall be managed as an information distribution system consisting of a considerable number of dislocated, independently developed, harmonized and interconnected information systems of thematic areas and/or sub-areas. CEA is responsible for establishment, development, management and coordination of the Croatian Environmental Protection Information System (CEIS) in line with the Environmental Protection Act.<sup>1</sup>

As stipulated in the Regulation on CEIS, CEIS system serves for collecting, verifying, integrating, analysing and sharing data and information, and as such represents one of the most important instruments for implementation of environmental policy. CEIS creates conditions for faster, easier and better management of data as well as transparent and continuous informing of the public in the field of environment.

Activities related to further development of CEIS, following its establishment, are specified in the key operational document - Croatian Environmental Information System Management Program for the Period 2014-2017.

### **CEA's specific reporting obligations**

Pursuant to the Regulation on Monitoring of Greenhouse Gas Emissions in the Republic of Croatia, CEA is obligated to organize the production of three important documents:

- National Inventory Report (NIR);
- Report on the Implementation of Policies and Measures to Reduce Greenhouse Gas Emissions;
- Report on Projections of Greenhouse Gas Emissions.

National Inventory Report (NIR) is prepared according to the United Nations Framework Convention in order to develop, supplement, improve and produce a national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases (not covered by the Montreal Protocol).

According to the Protocol on Pollutant Release and Transfer Registers (in accordance with EU Decision I/5), Croatia already prepared the first National Implementation Report (NIR) on Pollutant Release and Transfer Register (PRTR), which was sent to the Secretariat of the United Nations Economic Commission for Europe (UNECE) and entered into their database (PRTR NIR) in December 2013.<sup>2</sup> Calculations on greenhouse gases emission for Croatia were performed according to the guidelines of the Secretariat of the United Nations Framework Convention on Climate Change as well as the methodology of the Intergovernmental Panel on Climate Change (IPCC).

CEA is also required to submit to the European Commission data for the European Pollutant Release and Transfer Register (E-PRTR) in line with the Article 23 (3) of the Environmental Protection Act; all data should be consolidated and harmonized as much as possible. Croatian EPR has transposed all E-PRTR requirements, however, it encompasses a significantly wider range of 'operators' than E-PRTR and it encompasses larger operators, while smaller ones are just obligors of Croatian EPR).

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<sup>1</sup> Main technical information on CEIS are presented in Annex 5.

<sup>2</sup> [http://www.unece.org/prtr\\_nirs\\_2014.html](http://www.unece.org/prtr_nirs_2014.html)

Environmental Protection Act in Article 129 prescribes main procedures on PRTR reporting, while the Ordinance on EPR in Article 3 defines that EPR contains data on the party obliged to submit data, data on release of pollutants into the air, water and/or sea and soil, and other relevant data for PRTR. Article 12 (2) of the mentioned Ordinance specifies that in the process of collecting data the party obliged to submit data shall apply the best available information which may include monitoring release and transfer outside the place of generation, emission factors, balance of substances and estimates and other methods in line with internationally acknowledged methods, if such are available.

For calculating emissions both methodologies according to PRTR and according to IPCC can be used. CEA produced Manual for EPR in which those methodologies and examples for calculation can be found. It is important to highlight that data obtained according to methodology for PRTR and according to IPCC are different. CEIS contains different databases (currently 63 databases in 45 thematic systems) and due to different methodologies some data in different databases are overlapping and they are not always the same.

Since CEA is responsible for maintenance of different databases that contain data collected through different methodologies, through this Twinning project CEA aims to get analysis, clarification, comparison and differences of data based on methodology used for PRTR and other methodologies and requirements. It is also necessary for CEA experts to have specific trainings in order to implement EU best practices and apply the obtained knowledge to harmonize data as much as possible. Trainings are envisaged to be implemented in form of workshops, trainings of trainers (ToT), on-the-spot visits and study visit to an EU Member state that will enable Croatian EPR experts to gain practical experience relevant for valuating and reporting toward E-PRTR (including introducing of MS PRTR database).

EPR system is an important tool for continuous monitoring of trends and progress in reducing environmental pollution and for monitoring compliance with specific international agreements, identifying priorities and assessing the progress achieved through implementation of the Croatian environmental protection policy and programs. The system is indispensable to public, various state and county bodies, the industry, scientists, non-governmental organizations and other decision-makers as a unique system that ensures insight into the state of the environment and environmental trends and provides background for environmental decision-making. EPR system does not only provide for the national needs, but through establishment and implementation of the EPR system, Croatia's international obligations concerning pollutant release and transfer control are also fulfilled.

Data on emissions into air, water, and transfer of waste from EPR database must be harmonized and synchronized with data submitted by operators for obtaining IPPC permits in Croatia in line with Directive on industrial emissions 2010/75/EU (IPPC/IED). Improved quality of data is crucial for issuance of IPPC permits and for national and EU reporting on the above mentioned Directive. CEA database for IPPC/IED (inquest register with final relevant acts) is also part of the CEIS and with this project these two databases (for IPPC and EPR) will be connected, as well as others databases (e.g. LCP, Seveso, for waste, etc.).

Through the mentioned activities this Twinning project will improve data quality for EPR and harmonize data consistency with other reporting in Croatia such as National Inventory Report (NIR) or Long-Range Transboundary Air Pollution (LRTAP) and Large Combustion Plants (LCP). Special attention will be given to connections within databases of special interest for sharing data with EPR: EPR with ETS (IIPETS), EPR with IPPC (IED), EPR with database with LCP installations and EPR with Seveso database (registries which contain data on dangerous substances are: Registry of Installations with Dangerous Substances - RIDS and Inquest Registry of Reported Major Accidents –

RRMA). Therefore, this project will contribute to better connection of some of these databases and sets of data through CEIS and/or through improved sharing of data (such as predefined reports).

This project will strengthen capacities of all stakeholders who participate in PRTR. Trainings, workshops and on-the-spot visits are envisaged to provide extensive information and concrete examples on the relevant topics. Through the study visit to an MS with full implementation of EPR data collecting, processing and reporting system the improvement of knowledge will also be achieved, especially through the aspect of better definition and specification of improved EPR inside the CEIS, as it is very useful to exchange know-how regarding the certain system functions in the real environment (i.e. in Member State) in which the whole system is completely established and maintained. By introducing the specific PRTR IT system (conceptual design, specific data structure interfaces and procedures, hardware architecture, introduction to the SW tools for validation and improving of GIS with examples “on site”, inside the MS database, etc.), acquired knowledge will be successfully used in Croatian EPR.

Croatian EPR is also used as a data source for many other national and EC reporting requirements (details in Annex 4) and for enabling public access to information in line with Article 22 of Ordinance on EPR which states that public access to data on pollutants kept in the EPR shall be provided on the CEA’s web page. Therefore, improvement of EPR will result in better reporting capabilities in general and will facilitate public access to information.

### **Geographic Information System (GIS)**

Furthermore, within this project Geographic Information System (GIS) shall be upgraded to capture, manage, analyse, and display all forms/data of geographically referenced information.

One of the main benefits of GIS relevant to this project is a possibility to link data sets together by common locational data (such as addresses). By creating a shared database, one CEA department can benefit from the work of another; also data can be collected once and used many times. CEA staff will be allowed to view, understand, question, interpret and visualize all information in central database in ways that reveal relationships, patterns, and trends in the form of maps, globes reports and charts. Thus, CEA staff will be enabled to answer questions and solve problems by looking at data in a way that is quickly understood and easily shared - on a map.

GIS is also important to fulfil CEA obligations towards the general public. Through public access to all GIS environmental information the general public will have information on state of environment in their neighbourhood, quality of air, water and ground and waste.

Croatian EPR Atlas will be developed from the spatial GIS components. It will cover the Croatian EPR system in specific areas (general part, air, water, soil and waste) and provide predefined attribute with spatial analysis and appropriate visual interpretation. Croatian EPR Atlas will be included as part of the Croatian EPR web portal.

Following all the above, this project will improve and further developed the Croatian EPR and enhance consistency and harmonization of data between different CEA databases. In the future, all databases in CEA, together with databases from other Croatian institutions, will be connected through CEIS in one unified Environment Information System (EIS). This system will be subsequently integrated with similar systems of other Member States and shared within EU to form a wide environmental information system based on Shared Environmental System (SEIS) initiative with the main purpose of better environment protection and adequate response to climate change.

### 3.2 Linked activities:

#### **TAIEX Study Visit on IED (Industrial Emission Directive) ETT IND/STUD 56771,** (October 2014, Vienna, Austria)

TAIEX was organised in co-operation with the Environment Agency Austria. The aim was to support Croatia in fulfilling all reporting requirements under the Directive 2010/75/EU. Also, the important goal that should be achieved in the frame of this aspect is to improve existing knowledge of the Croatian Environment Agency (CEA) staff about the requirements under Directive 2010/75/EU so that Croatia could report on the same level as other.

#### **Transition Facility Twinning project “Chemical and hazardous substances monitoring improvement and integration of Seveso database into CEIS (Croatian Environmental Information System) as the unique Central SEVESO Information System”**

The overall objective is to strengthen the capabilities and efficiency of Republic of Croatia in the fields of environmental protection and mitigation of climate changes by improving management and more precise reporting on chemicals, hazardous substances and accidents, as well as to upgrade and integrate current Seveso databases with GIS system within CEIS. Overall Objective will be improving of chemicals monitoring and reporting on chemicals and emissions in Republic of Croatia in a whole. Through this Twinning project climate change mitigation capabilities and chemical pollution and hazardous substances monitoring of CEA are envisaged to be improved and harmonized. The project is in preparation phase.

#### **IPA 2011 Multi-beneficiary statistical cooperation programme - DCP14 Waste Statistics**

(September 2012 – March 2014; Croatian Bureau of Statistics was the Beneficiary, while CEA was the partner responsible for the project component DCP 14 Waste Statistics).

The objective of the Waste Statistics project component was to establish reliable statistics on waste generation and treatment compliant to the requirements of the Regulation 2015/2022/EC on waste statistics, to produce statistics on municipal waste generation and management for the calculation of the Sustainable Development Indicator. The results were as follows:

1. New database module developed, reports, queries and data services for data exchange together with link to other CEA databases prepared.
2. Analyses report in Croatian with recommendations on improvement of data flow and data quality in order to achieve alignment with the WSR prepared.
3. Manual for reporting on the WSR, Guidance on data quality control and assurance, Guidance on estimations and calculations performed for specific waste and waste streams and Fact sheet for the preparation of report/indicator on municipal waste management prepared (in Croatian),
4. Skills and professional knowledge of the staff in CEA and other national authorities improved, by on-the-job trainings with external expert. Analysis on available data performed, data quality assessed and described, assumptions and recommendations for estimations for certain NACE developed.
5. Participation at workshops conducted. Professional knowledge of the CEA staff improved. Ability to understand EU concepts, definitions and challenges of European and international waste statistics improved.
6. Annual national report on municipal waste generation and management in 2012 prepared, printed and published, selected data on waste statistics for 2011 prepared by CEA and published in annual Statistical Yearbook 2013 and Reports, Guidelines, Manual and selected data published at CEA website.

#### **IPA 2009 Twinning light project “Improvement of Waste Reporting in Croatia” (Contract No.: 2009-0404-011801; Twinning project No.: HR/2009/IB/EN/02TL)**

(May 2013 – December 2013; MS Twinning partner: Austria)

The overall objective of the project was support to environmental protection in Croatia through strengthening capacities of the CEA, while the project purpose was development of integrated waste management system through improvement of waste reporting and strengthening the CEA capacities. The following results were achieved through the project:

1. Recommendations for improvement of existing data flow and data formats used by the CEA prepared in purpose of alignment of the CEA activities with the EU standards in the field of waste reporting
2. CEA and other competent state authorities (Ministry of Environmental and Nature Protection, Environment Protection and Energy Efficiency Fund) trained in the field of waste management according to the relevant EU legislation
3. Existing waste information dissemination model used by the CEA analyzed and recommendations for its improvement prepared
4. Recommendations for improvement of the CEA website covering waste topic prepared and brochures in electronic form with purpose of providing information regarding waste reporting drafted

**IPA 2007 Twinning light project “Improving Environmental Reporting in Croatia” (Contract No.: 2007-0404-011801; Twinning project No.: HR/2007/IB/EN/01/TL)**

(January 2011 – September 2011; MS Twinning partner: Austria)

The objective of the project in the field of Sector Impact department and EPR database was to review current national Ordinance on EPR, Annex 1, checking for consistency and compatibility with the E-PRTR 166/2006 Regulation Annex 1 in preparation for Croatia’s accession to the European Union. The project aimed at improvement of monitoring and reporting cycle and data flow between CEA and relevant institutions, strengthened capacity for national monitoring and reporting cycle as regards the European Commission and EEA priority data flows, analysed functionalities and current state of development of Croatian Environment Information System (CEIS) and its compatibility with Shared Environment Information System (SEIS) and provided recommendations for raising CEA profile among relevant institutions. Moreover, the project resulted in the following main recommendations:

1. To maintain the advances of the national register; Croatia should publish all facilities in the national register following the Ordinance on EPR and deliver only the facilities with an activity recognized by the E-PRTR Annex 1 and above the Annex 2 thresholds into the EU Register;
2. Croatia should consider to fully adopt the E-PRTR Annex 1 activities and maintain where appropriate lower national capacity and emission thresholds to maintain the goal of capturing 90% of the relevant emissions. It should be checked in a future mission if the national environment fund and taxing system could be directly linked to the E-PRTR Annex 1 activities as well;
3. An interdisciplinary working group on emissions reporting should be established to bring all national stakeholders together and agree on the necessary steps to achieve the E-PRTR goal to capture 90% of the relevant emissions. This interdisciplinary working group should also address a national operator and facility permit database with permit and capacity threshold information in preparation of the green-house-gas emissions trading and the successor of the current IPPC / IED Directive (Industrial Emissions Directive, 2010/75/EU).

Recommendations 1-3 have been partly implemented. Regarding improving of monitoring, validation and reporting cycle, CEA has been constantly upgrading national EPR database (currently 4<sup>th</sup> upgrading in different parts is in working phase). In other parts of Croatian PRTR as a whole, constant efforts have been made, i.e. workshops have been held, help desk and FAQ are constantly being improved and upgraded, national yearly report is published with more indicators every year, public browser for EPR has been made, etc. Part of recommendations are still in progress due to the

fact that, regarding the national strategy, main legal document in this field, Ordinance on EPR, has not been changed since 2008. As recommended in Recommendation no. 3, working group for improvement of the Ordinance has been established in 2013 and draft of the Ordinance is in working progress at the moment. Some of these recommendations have been included as prepositions in CEA working material for the new Ordinance. Also, main legal documents in the field of waste, which is part of EPR (therefore, it also affects EPR), has also been changed during 2013 and 2014 and this must be harmonised with current changes of the Ordinance for EPR.

#### **TAIEX Expert Mission (INFRA IND/EXP: 43167)**

(November 2010, Zagreb, Croatia)

Main benefit of this Expert Mission was the transfer of knowledge of German experts in the field of PRTRs, particularly concerning the use of the open source and GIS software. Experts from Federal Environment Agency from Germany (UBA) gave recommendations for improvement of EPR database to CEA:

1. It should be considered that reporting data of diffuse sources should be maintained, since same data are collecting through other databases;
2. Harmonization activities of the Ordinance on EPR (Annex 1) should be implemented;
3. Transposition of definitions in the field of waste should be implemented;
4. In the field of staff to define informatics experts for EPR; define cooperation between CEA informatics experts and EU expert that works on the same filed; employ informatics expert for EPR database only;
5. GIS data are important and necessary; informatics expert in the field of GIS should be trained; Germany is using open source s and recommended them;
6. In developing public portal it is necessary to consult public and use best EU practices.

#### **Bilateral cooperation with the Kingdom of the Netherlands - Government to Government (G2G) (April 2007 – April 2008)**

The purpose of this project was to provide support to the CEA in the implementation of EU Regulation 166/06 as well as to transfer the experience and knowledge in the field of PRTRs. Main beneficiary were CEA and Ministry of former Environmental Protection and Physical Planning (MoEPPP), now Ministry of Environmental and Nature Protection (MENP). Main objectives were to support CEA in setting up efficient implementation of the Ordinance and to transfer Dutch knowledge and experience in relation to the PRTR implementation to the CEA. Results were:

1. Review of implementation of the draft of the Croatian Ordinance on EPR;
2. Identification and assessment, specific areas, that needed to be strengthened;
3. Developing of the Croatian EPR Guidelines;
4. CEA staff training (target group - experts from Sector Impact Monitoring Department).

### 3.3 Results:

**Result 1: Croatian EPR system improved in order to fulfil reporting requirements primarily towards EU (E-PRTR, IED, ETS Directive, GHG Monitoring Mechanism Decision) and UN (LRTAP, UNFCCC, PRTR).**

Indicators of achievement:

- Analysis covering accuracy, relevancy, integrity and quality of diffuse emission data (into the air, water and land/waste) in the existing national systems conducted and report with recommendations for improvements produced.



- Analysis and comparison between data used for E-PRTR report (and national PRTR report) with data used for air emission inventory according to LRTAP and LCP requirements conducted and report with corresponding recommendations produced.
- Analysis and comparison between data collected according to IED (including the latest EC recommendations that the data should be harmonized as much as possible) and E-PRTR, including analysis of the related national legislation conducted, and report with corresponding recommendations produced (including recommendations on legislative changes if determined as needed).
- Analysis of Croatian EPR data in order to produce report with recommendations for other reporting purposes according to requirements of EU and international legislation, primarily for NIR, ICPDR and WISE-SOE conducted and corresponding report produced.
- Analysis of Croatian EPR system in order to improve checking (quality assurance/quality control) of the entered data (at operator level) and data verification by competent authorities and CEA conducted and report with recommendations for automatic control of the entered data based on the procedures for quality assurance and quality control, included within Manual, produced.
- Functional and technical specifications for establishment of web based application for air emission calculation for 2 target groups of users prepared.
- Web based IT application for air emission calculation based on functional and technical specifications developed and fully functional.<sup>3</sup>

**Result 2: Croatian National Portal of Environmental Pollution Register (CNPEPR) improved, including GIS component, through development of the web portal for Croatian EPR system in order to meet the requirements of PRTR in the field of data quality and availability of data to the public.**

Indicators of achievement:

- Analysis of technical specifications for CEIS<sup>4</sup> conducted and analysis report with definition of type of functionality and type of data processing, definition of data status, definition of technical procedures, type of data presentation and type of integration of data from a number of data sources, including definition of necessary spatial and alphanumeric analysis, produced.
- EPR data prepared and harmonized for integration in unique central related database (data warehouse). Complete technical database documentation on the EPR data preparation and harmonization according to CEA ISO standards prepared.
- Analysis of Croatian EPR data security system (primarily concerning web-based online applications) with special attention on data which are used for payment on emission to air

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<sup>3</sup> Production of the IT application may be implemented through private sector input in case the MS does not have at disposal public sector expert(s) with required expertise for implementing this activity.

<sup>4</sup> Main technical information on CEIS are presented in Annex 5.

and waste quantities conducted and report with analysis results, measures and recommendations for improvement and suggestions for raising CEA awareness on security issues produced and CEA staff provided with some practical means for IT security advantages according to best IT Security standards.

- Functional and technical specifications for design and establishment of web portal for Croatian EPR system (EPR databases, CNPEPR and EPR Browser) that will be a single central point of access to Croatian EPR system, to corresponding WebGIS and alphanumeric browsers and helpdesk system with the ability of editing of content using Content Management System (CMS) technology prepared in order to meet the requirements of PRTR on data accessibility.
- A separate web portal for Croatian EPR system on CEA web site based on functional and technical specifications designed/developed and fully functional.<sup>5</sup>
- Croatian EPR indicators for EPR data (general data and air/water/waste data) developed, taking into account the features of Croatian EPR Browser.
- Functional and technical specifications for development of specialized Croatian EPR Atlas (web application) to be developed from spatial GIS components prepared.
- Atlas designed/developed and fully functional.<sup>6</sup>

### **Result 3: Manual for air emissions calculation for the national E-PRTR operators prepared.**

Indicator of achievement:

- Manual with instructions for air emissions calculation including recommended methodology and procedures for quality assurance/quality control, according to activities listed in Annex I, and to pollutants listed in Annex II of E-PRTR Regulation developed.

### **Result 4: Recommendations on E-PRTR reporting produced based on results of the pilot testing of data.**

Indicator of achievement:

- Analysis of national dataset for E-PRTR data reporting with emphasis on data coverage and data quality, and confidential data in the Croatian EPR, including analysis of possible EC comments and suggestions conducted and report with recommendations for improvement of national E-PRTR reporting produced.

### **Result 5:**

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<sup>5</sup> Production of the web portal may be implemented through private sector input in case the MS does not have at disposal public sector expert(s) with required expertise for implementing this activity.

<sup>6</sup> Production of the IT application may be implemented through private sector input in case the MS does not have at disposal public sector expert(s) with required expertise for implementing this activity.

## **Capacities of CEA experts and other national authorities strengthened with the purpose of improvement of collecting, validating and reporting Croatian EPR data.**

Indicators of achievement:

- Training Needs Analysis (TNA) conducted and TNA report with training program for CEA and other stakeholders produced.
- Training materials for trainings and workshops prepared.
- Workshops for at least 10 CEA employees and 40 representatives of stakeholders conducted.
- At least 3 on-the-spot visits to industry installations conducted.
- Trainings of Trainers (ToT) for at least 8 CEA employees and at least 21 employees from the competent authorities and other stakeholders conducted and trainings evaluation report with recommendations for further trainings produced.
- 1 study visit in duration of 5 working days for 8 CEA Croatian EPR experts to an MS institution relevant for valuating and reporting toward E-PRTR (including introduction to MS E-PRTR and database) conducted and corresponding report produced.

### 3.4 Activities:

The activities listed below represent the minimum activities to be implemented in the course of the Twinning project. Member State(s) may propose additional activities in line with the methodology elaborated in its proposal.

#### Activity 1.1:

Conducting analysis covering accuracy, relevancy, integrity and quality of diffuse emission data (in to the air, water and land/waste) in the existing national systems and producing report with recommendations for improvements.

Analysis will take into account the existing collecting and evaluating system for calculation of diffuse emissions into air (LRTAP and NIR/GHG) and water (River Basin Management Plan-RBMP) and other relevant sources of diffuse emission data.

#### Activity 1.2:

Conducting analysis and comparison between data used for E-PRTR report (and national PRTR report) with data used for air emission inventory according to LRTAP and LCP requirements and producing report with corresponding recommendations.

#### Activity 1.3:

Conducting analysis and comparison between data collected according to IED (including the latest EC recommendations that the data should be harmonized as much as possible) and E-PRTR, including analysis of the related national legislation, and producing report with corresponding recommendations (including recommendations on legislative changes if determined as needed).

#### Activity 1.4:

Conducting analysis of Croatian EPR data in order to produce report with recommendations for other reporting purposes according to requirements of EU and international legislation, primarily for

NIR, ICPDR and WISE-SOE and producing corresponding report. Recommendations should include information which data should be exported for the mentioned predefined reporting obligations.

#### Activity 1.5.

Conducting analysis of Croatian EPR system in order to improve checking (quality assurance/quality control) of the entered data (at operator level) and data verification by competent authorities and CEA and producing report with recommendations for automatic control of the entered data based on the procedures for quality assurance and quality control included within Manual.

#### Activity 1.6:

Preparing functional and technical specifications for establishment of web based application for air emission calculation for 2 target groups of users:

- E-PRTR operators per specific sectors;
- Medium and small enterprises.

#### Activity 1.7:

Developing web based IT application for air emission calculation based on functional and technical specifications. The developed application will be tested, adjusted to be fully functional and integrated within Croatian EPR system and published on CEA web portal (<http://www.azo.hr>).<sup>7</sup>

#### Activity 2.1:

Conducting analysis of technical specifications for CEIS<sup>8</sup> and producing analysis report with definition of type of functionality and type of data processing, definition of data status, definition of technical procedures, type of data presentation and type of integration of data from a number of data sources including definition of necessary spatial and alphanumeric analysis.

#### Activity 2.2:

Preparing and harmonizing EPR data for integration in unique central related database (data warehouse). Preparing complete technical database documentation on the EPR data preparation and harmonization according to CEA ISO standards.

#### Activity 2.3:

Conducting analysis of Croatian EPR data security system (primarily concerning web-based online applications) with special attention on data which are used for payment on emission to air and waste quantities and producing report with analysis results, measures and recommendations for improvement and suggestions for raising CEA awareness on security issues and providing CEA staff with some practical means for IT security advantages according to best IT Security standards.

#### Activity 2.4:

Preparing functional and technical specifications for design and establishment of web portal for Croatian EPR system (EPR databases, CNPEPR and EPR Browser) that will be a single central point of access to Croatian EPR system, to corresponding WebGIS and alphanumeric browsers and helpdesk system with the ability of editing of content using Content Management System (CMS) technology in order to meet the requirements of PRTR on data accessibility.

#### Activity 2.5:

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<sup>7</sup> Production of the IT application may be implemented through private sector input in case the MS does not have at disposal public sector expert(s) with required expertise for implementing this activity.

<sup>8</sup> Main technical information on CEIS are presented in Annex 5.

Designing and developing a separate web portal for Croatian EPR system on CEA web site based on functional and technical specifications.<sup>9</sup> The developed separate web portal will be fully functional.

#### Activity 2.6:

Developing Croatian EPR indicators for EPR data (general data and air/water/waste data) taking into account the features of Croatian EPR Browser. Developed indicators will be included in the Croatian EPR Atlas with the purpose to ensure public presentation of data. Preparing materials to be published within Atlas (e.g. for schools, universities, targeted expert public groups).

#### Activity 2.7:

Preparing functional and technical specifications for development of specialized Croatian EPR Atlas to be developed from spatial GIS components.

Croatian EPR Atlas will cover the Croatian EPR system in specific areas (general data and air, water, soil and waste data) and enable spatial analysis and appropriate visual interpretation of data. Croatian EPR Atlas will form the part of CNPEPR.

Croatian EPR Atlas will improve public information for multiple target groups (schools, professionals stakeholders and other interested public groups) in educational, visually advanced and interactive - user friendly way.

#### Activity 2.8:

Designing and developing Atlas.<sup>10</sup> The developed Atlas will be fully functional.

#### Activity 3.1:

Development of Manual with instructions for air emissions calculation including recommended methodology and procedures for quality assurance/quality control, according to activities listed in Annex I, and to pollutants listed in Annex II of E-PRTR Regulation.

Manual is intended to be used by national E-PRTR operators, ETS and IED operators as well as relevant staff from county offices, inspectorates and CEA. Manual will be prepared in English and translated to Croatian.

#### Activity 4.1:

Conducting analysis of national dataset for E-PRTR data reporting with emphasis on data coverage and data quality, and confidential data in the Croatian EPR, including analysis of possible EC comments and suggestions and producing report with recommendations for improvement of national E-PRTR reporting.

#### Activity 5.1:

Conducting Training Needs Analysis (TNA) and preparing TNA report with training program for CEA and other stakeholders. The target groups are as follows:

- Target group 1 - CEA experts from different units (Croatian EPR, IT, Climate changes; water, air, waste, etc.)
- Target group 2 - main participants i.e. stakeholders in data collecting, processing and reporting procedures from other involved institutions (competent authorities from the City of Zagreb and other counties, Ministry of Environment and Nature Protection/ environment protection inspectors, water inspectors, etc.)

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<sup>9</sup> Production of the web portal may be implemented through private sector input in case the MS does not have at disposal public sector expert(s) with required expertise for implementing this activity.

<sup>10</sup> Production of the IT application may be implemented through private sector input in case the MS does not have at disposal public sector expert(s) with required expertise for implementing this activity.

- Target group 3 - representatives from industry and counties, Environmental Protection and Energy Efficiency Fund, Croatian Chamber of Economy and other relevant stakeholders involved in data collecting and reporting process activities, e.g. E-PRTR, IED, ETS and LCP operators and verifiers.

#### Activity 5.2:

Preparing training materials for trainings and workshops. Training materials will be based on TNA report.

#### Activity 5.3:

Conducting workshops for at least 10 CEA employees and 40 representatives of stakeholders (Environmental Protection and Energy Efficiency Fund, Ministry of Environmental and Nature Protection, Croatian Chamber of Commerce, etc.).

Workshops will be organised for counties, inspection, CEA and other relevant institutions on topics of quality assurance and quality control improvement of Croatian EPR data and other topics related to Croatian EPR:

- Croatian EPR/E-PRTR/PRTR Protocol activities with emphasis on improving of the quality assurance/quality control implementation for data submitted and reported to Croatian EPR and through E-PRTR reporting system to EC, with references to the requirements specific for E-PRTR, IED, ETS and LCP operators.
- Croatian EPR/E-PRTR/PRTR Protocol activities with emphasis on the topic for improving of the quality of data.

#### Activity 5.4:

Conducting at least 3 on-the-spot visits to industry installations (chosen according to their activities, capacities or type of emissions by Twinning partners during the project implementation) with the purpose of adoption of practical knowledge about the data collected in the EPR.

#### Activity 5.5:

Conducting Trainings of Trainers (ToT) for at least 8 CEA employees and at least 21 employees from the competent authorities (separately for CEA and representatives of competent authorities). Producing trainings evaluation report with recommendations for further trainings.

#### Activity 5.6:

Conducting 1 study visit in duration of 5 working days for 8 CEA Croatian EPR experts to an MS institution relevant for valuating and reporting toward E-PRTR (including introduction to MS E-PRTR and database) and producing corresponding report.

Two visibility events will be organized in the course of the implementation of the project; Kick-off meeting at the start of the implementation and the Final meeting at the end of the implementation of the project activities.

### 3.5 Means/ Input from the MS Partner Administration:

#### 3.5.1 Profile and tasks of the Project Leader

MS Project Leader may participate in the project also as the short-term expert (STE) and in this case the MS Project Leader should satisfy requirements stipulated in the fiche for both the Project Leader and the relevant STE profile.

## Profile of the Project Leader

### Requirements:

- University level education or equivalent professional experience of 10 years in the environmental sector
- Minimum 5 years of experience in the environmental sector
- Experience in environmental reporting
- Working level of English language
- Computer literacy
- Experience in project management
- Proven contractual relation to public administration or mandated body, as defined under Twinning manual 5.4.5

### Assets:

- Experience in EU funded projects
- Experience in practical application of legislation on PRTR
- Experience in institution building for implementation of the EU acquis in the environmental sector

### Tasks of the Project Leader:

- Overall responsibility and coordination of the MS Twinning partner inputs
- Providing guidance in introducing the EU best practice and assuring compatibility with EU requirements
- Ensuring sound implementation of envisaged activities and time managing
- Networking with relevant institutions in Croatia and in MS
- Coordination and managing of MS experts` work and availability
- Executing administrative issues
- Organizing, supervising and coordinating implementation of the project in cooperation with the BC Project Leader
- Ensuring backstopping and financial management of the project in MS
- Project reporting
- Participating in Steering Committee meetings
- Organization of study visit

## 3.5.2 Profile and tasks of the RTA

### Requirements:

- University level education or equivalent professional experience of 10 years in the environmental sector
- Minimum 5 years of experience in the environmental sector
- Minimum 3 years of experience in environmental reporting
- Working level of English language
- Computer literacy
- Experience in project management
- Proven contractual relation to public administration or mandated body, as defined under Twinning manual 5.4.5

Assets:

- Experience in practical application of legislation on PRTR
- Experience in organizing trainings on environmental reporting
- Experience in preparation of legislation on PRTR

Tasks of the Resident Twinning Adviser:

- Supervising and managing project implementation on a day-to-day basis and proposing corrective actions if necessary
- Coordination and assistance to the short term experts
- Support and coordination of all activities in the BC
- Organization of visibility events (kick-off and final event)
- Executing administration tasks and assisting in reporting
- Advising on related EU policies and best practices, legislation and regulations
- Networking with institutions relevant to this project in Croatia and in MS
- Responsible for organization of PIU and Steering Committee meetings
- Providing support to the national management staff to ensure training is delivered efficiently and effectively

The duration of the RTA secondment is 18 months.

### 3.5.3 Profile and tasks of the short-term experts

**For each of the proposed experts in the submitted proposal the Member State(s) is kindly requested to indicate the expert's profile.**

#### Profile of the Short-term expert 1 (STE 1) – Expert on PRTR

Requirements:

- University level education or equivalent professional experience of 8 years in the environmental sector
- Minimum 3 years of experience in practical application of legislation on PRTR
- Working level of English language
- Computer literacy
- Proven contractual relation to public administration or mandated body, as defined under Twinning manual 5.4.5

Assets:

- Experience in design and development of web portal
- Experience in analysis or preparation of legislation on PRTR
- Experience in public relations and dissemination of information on PRTR
- Experience in conducting trainings

Tasks of the Short-term expert 1:

- Close cooperation with the Croatian experts in undertaking all activities
- Participating in all relevant project activities in cooperation with other short-term experts with particular emphasis on the following activities:



- Conducting analysis of diffuse emission data and producing report with recommendations for improvements
- Conducting analysis and comparison between data used for E-PRTR and data used according to other requirements and producing report with recommendations
- Conducting analysis and comparison between data collected according to IED and E-PRTR, including analysis of legislation
- Conducting analysis of Croatian EPR data in order to produce report with recommendations for other reporting requirements of EU and international legislation
- Conducting analysis of Croatian EPR system in order to improve checking of the entered data and data verification and preparing report with recommendations
- Developing Manual with instructions for air emissions calculation including recommended methodology and procedures for quality assurance/quality control
- Conducting TNA and preparing TNA report
- Producing training materials for trainings and workshops
- Conducting workshops and on-the-spot visits to industry installations
- Conducting ToT and producing trainings evaluation reports

#### Profile of the Short-term expert 2 (STE 2) – IT Expert on GIS

##### Requirements:

- University level education or equivalent professional experience of 8 years in the field of information technology (IT)
- Minimum 3 years of experience in development or implementation of GIS relational database system
- Working level of English language
- Computer literacy
- Proven contractual relation to public administration or mandated body, as defined under Twinning manual 5.4.5

##### Asset:

- Experience in design and development of web portal

##### Tasks of the Short-term expert 2:

- Close cooperation with the Croatian experts in undertaking all activities
- Participating in all relevant project activities in cooperation with other short-term experts with particular emphasis on the following activities:
  - Developing Croatian EPR indicators for EPR data
  - Preparing functional and technical specifications for development of specialized Croatian EPR Atlas to be developed from spatial GIS components
  - Designing and developing Atlas

#### Profile of the Short-term expert 3 (STE 3) – IT Expert on PRTR

##### Requirements:

- University level education or equivalent professional experience of 8 years in the field of information technology (IT)
- Minimum 3 years of experience in development or implementation of PRTR database
- Working level of English language
- Computer literacy

- Proven contractual relation to public administration or mandated body, as defined under Twinning manual 5.4.5

Asset:

- Experience in design and development of web portal

Tasks of the Short-term expert 3:

- Close cooperation with the Croatian experts in undertaking all activities
- Participating in all relevant project activities in cooperation with other short-term experts with particular emphasis on the following activities:
  - Preparing functional and technical specifications for establishment of web based application for air emission calculation
  - Developing web based IT application for air emission calculation
  - Conducting analysis of technical specifications for CEIS and preparing analysis report
  - Preparing and harmonizing EPR data for integration in unique central related database and preparing complete technical database documentation
  - Conducting analysis of Croatian EPR data security system and producing report with analysis results, measures and recommendations
  - Preparing functional and technical specifications for design and establishment of web portal for Croatian EPR system
  - Designing and developing a separate web portal for Croatian EPR system
  - Conducting analysis of national dataset for E-PRTR data reporting and preparing corresponding recommendations

**Note 1:**

- The pool of experts should include at least one short-term expert who in addition to the respective profile requirements has experience in conducting trainings.

**Note 2:**

- Production of the web based IT application for air emission calculation (Activity 1.7), production of the web portal for Croatian EPR system (Activity 2.5) and production of Atlas (Activity 2.8) may be implemented through private sector input in case the Member State(s) does not have at disposal public sector expert(s) with the required expertise for implementing these activities.

#### **4. Institutional Framework**

The beneficiary institution of this project is Croatian Environment Agency (CEA) respectively, Sector Impact Monitoring Department (SIMD) – Plant and Pollutant Unit which currently has 9 experts employed. Other CEA organizational units that will also participate in this project are as follows: Climate Changes (4 employees), Air Quality (4 employees), IT (6 employees), Water (4 employees) and Waste (8 employees).

According to the Environmental Protection Act (Article 38), activities of collecting and integrating collected environmental data and information for the purpose of ensuring and monitoring the implementation of the environmental protection and sustainable development policy shall be

performed by the CEA. Main activities of the Agency also include establishment, development, maintenance and coordination of CEIS in Croatia, collection and integration of environmental data and/or information. CEA is the central national information authority for national and international reporting and reporting coordination to the European Commission, EEA (according to the requirements of EIONET) and reporting to other global organization (i.e. UN and its bodies) on national environmental issues. CEA also ensures conditions for public access to environmental information, held by it and under its supervision.

Other stakeholders are: counties of the Republic of Croatia (e.g. their representatives who are working as competent authorities - validation experts on EPR database and inspectors); industry representatives, Ministry of Environment and Nature Protection (e.g. environment protection inspectors, water inspectors, etc.), Environmental Protection and Energy Efficiency Fund and other stakeholders as determined by the partners during the project implementation.

According to the Ordinance on the Environmental Pollution Register (Article 21), competent authorities i.e. administrative bodies in the counties or the City of Zagreb will also participate in activities concerning the public access to the data contained in the EPR system. They cooperate closely with the CEA and perform (in cooperation with the competent inspectorates) the assessment of the completeness, consistency and credibility of the reported data and subsequent verification of the same in accordance with the mentioned Ordinance, thus playing an important role in informing the public within their respective counties.

CEA, as the main project beneficiary, will coordinate all project activities involving competent authorities and other stakeholders (i.e. all participants in EPR data collecting, validating, coordinating and reporting procedure).

The results of this project will not lead to a change of the institutional framework as described.

The beneficiary institution will dedicate all necessary human and financial resources in order to guarantee an effective implementation of the respective project. In particular, the beneficiary institution will insure the availability of the following provisions:

- Adequately equipped office space for the RTA and the RTA assistant for the entire duration of their secondment (in particular a desk, a telephone line, PC with e-mail account and internet access, possibility to use fax & copy services);
- Adequate conditions for the STEs to perform their work while on mission to the BC.
- Training and conference venues as well as presentation and interpretation equipment.
- Costs for travel by BC participants from their capitals to a MS or between MS (study visits).
- Its active involvement in preparation of the PIU and Steering Committee meetings and participation of its members on the same.
- The availability of the BC human resources (BC experts) during the implementation of the activities.

## 5. Budget

Improvement of Croatian Environment Pollutant Register (Croatian EPR) and its Integration	Transition Facility Program Contribution	National Co-financing	<b>TOTAL</b>
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into Croatian Environmental Information System (CEIS) (CRO EPR)			
Twinning Contract	95% 855.000 EUR	5% 45.000 EUR	<b>900.000,00 EUR</b>

*The total amounts of the Transition Facility Programme Contribution and National Co-financing stipulated in the above table represent the total maximum amounts and therefore, they may be reduced at the level of the Twinning contract, while the relevant ratio (percentages) should be maintained as fixed.*

*The co-financing requirement foreseen under Transition Facility will be considered fulfilled according to the provision of the relevant Financing Agreement.*

Interpretation costs will be reimbursed from the budget only for the purpose of workshops and seminars, up to 7% of the Contract amount can be used for translation and interpretation purposes.

## 6. Implementation Arrangements

### 6.1 Implementing Agency responsible for tendering, contracting and accounting:

Central Finance and Contracting Agency (CFCA)  
Ulica grada Vukovara 284  
10000 Zagreb, Croatia  
Ms Nataša Mikuš Žigman, Director  
Phone: +385 1 4591 245  
Fax: +385 1 4591 075  
E-mail: procurement@safu.hr

Twinning Administrative Office  
Central Finance and Contracting Agency  
Ulica grada Vukovara 284  
10000 Zagreb, Croatia  
Ms Nirvana Sokolovski, Twinning NCP  
Phone: +385 1 4591 245  
Fax: + 385 1 4591 075  
E-mail: twinning@safu.hr

### 6.2 Main counterpart in the BC:

Senior Programme Officer (SPO):  
Ph.D. Neven Voća, Director  
Croatian Environment Agency (CEA)  
Trg maršala Tita 8  
10000 Zagreb  
Phone: + 385 1 4886 856  
Fax: + 385 1 4886 850  
E-mail: neven.voca@azo.hr

BC Project Leader:

Hana Mesić, B. Sc., Head of Environment Monitoring Sector  
Croatian Environment Agency (CEA)  
Trg maršala Tita 8  
10000 Zagreb  
Phone: +385 1 4886 854  
Fax: +385 1 4886 850  
E-mail: hana.mesic@azo.hr

RTA Counterpart:

Dejana Ribar Pope, B.Sc., Head of the Sector Impact Monitoring Department  
Croatian Environment Agency (CEA)  
Trg maršala Tita 8  
10000 Zagreb  
Phone: +385 1 4886 852  
Fax: +385 1 4886 850  
E-mail: dejana.ribar-pope@azo.hr

6.3 Contracts:

It is envisaged that the Project will be implemented through one Twinning Contract with the maximum amount of 900.000,00 EUR.

**7. Implementation Schedule (indicative)**

- 7.1 Launching of the call for proposals: 1Q 2015<sup>11</sup>
- 7.2 Start of project activities: 4Q 2015
- 7.3 Project completion: Q2 2017
- 7.4 Duration of the execution period (number of months): 21 months; the execution period will end 3 months after the implementation period of the Action (work plan) which will take 18 months.

**8. Sustainability**

Administrative capacities related to reporting in the environment field will be strengthened through this project, especially capacities necessary for reporting on PRTR. The project results will be used on a regular day to day basis and will have a direct impact on quality of EPR database and all reporting using data from EPR.

EPR database contains data on the party obliged to submit data, the release of pollutants into the air, water and/or sea and soil referred to in Annex 2 of the Ordinance on EPR, as a result of performing activities referred to in Annex 1, generation and transfer outside the place of waste generation, transfer of pollutants referred to Annex 2 outside their place of generation, in waste water as a result

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<sup>11</sup> Member States submitting proposals for Twinning projects implemented in Croatia, as well as the beneficiary institutions, will be requested to finalise drafting of the contracts in maximum four months regardless of the period of the year during which the drafting will take place.

of activities referred to in Annex 1. Project activities and results will improve quality of EPR database and submitted data according to EU standards and best available techniques.

According to international obligations CEA has to prepare yearly report on E-PRTR data by 15th December of the current year for the previous calendar year and provide public access to EPR data on CEA's web page. As after Croatia's accession to the EU, CEA must regularly submit to the EC data required for the E-PRTR (CNPEPR by the Protocol requirements has already been launched). Improvements achieved through this Twinning project will have direct and wide permanent impact on CEA and PRTR and NIR reporting of the Republic of Croatia.

Database modelling, data harmonization location and creation of required data services will also be established and improved together with established metadata and data flow, user trainings, maintenance, etc.

Through workshops, trainings, on-the-spot visits for CEA's employees and other stakeholders (competent authorities and other participants in EPR data collecting, validating, coordinating and reporting procedure), CEA anticipates raising data quantity and quality and experts' capacities, which will directly have positive impact on Croatian national reports and those to EC, especially for E-PRTR. Conducted workshops and trainings for trainers will form the base for further trainings, as trained employees will further disseminate the obtained knowledge. Thus, knowledge and project results will indeed have long lasting benefits and shall remain as a permanent asset to the Beneficiary.

## **9. Crosscutting issues**

Equal access regardless of sex, nationality, racial or ethnic origin, religion or belief, disability, age or sexual orientation will be guaranteed for participation in the project. Equal opportunities will be ensured by the Steering committee during the project implementation.

This project will not have any negative impact on environment. Moreover, it will have a positive effect on the improvement of environmental protection by enhancing Croatian environment reporting capacities.

## **10. Conditionality and sequencing**

N/A

## **ANNEXES TO PROJECT FICHE**

Annex 1. Logical framework matrix in standard format

Annex 2. Detailed implementation chart

Annex 3. Contracting and disbursement schedule by quarter for full duration of programme (including disbursement period)

Annex 4. List of reporting obligations according to relevant legislation

Annex 5. Main technical information on CEIS

Annex 6. List of abbreviations

## Annex 1. Logical framework matrix in standard format

Improvement of Croatian Environment Pollutant Register (Croatian EPR) and its Integration into Croatian Environmental Information System (CEIS) (CRO EPR)		Programme name and number: Transition Facility	
Croatian Environment Agency (CEA)		Contracting period expires: 3 years from the day on which the Commission notifies the Republic of Croatia that all of its internal procedures necessary for the adoption of this Decision have been fulfilled	Disbursement period expires: 4 years following the expiration of the contracting deadline
		Total budget: 900.000,00 EUR	IPA financing: 855.000 EUR (95%)  National co-financing: 45.000 EUR (5%) <sup>12</sup>
<b>Overall objective</b>	<b>Objectively Verifiable Indicators</b>	<b>Sources of Verification</b>	
Reporting capabilities of the Republic of Croatia in the field of environmental reporting towards both European Commission (EC) and United Nations (UN) improved by enhancement of Croatian Environment Agency (CEA) capacities.	<ul style="list-style-type: none"> <li>• Data flow established</li> <li>• Data quality improved</li> <li>• Reporting obligations fulfilled</li> <li>• Increased number and quality of NIR documents</li> <li>• Increased quality of GHG data</li> </ul>	<ul style="list-style-type: none"> <li>• EC annual reports on Croatian National Report on Environment</li> <li>• CEA reports</li> </ul>	
<b>Project purpose</b>	<b>Objectively Verifiable Indicators</b>	<b>Sources of Verification</b>	<b>Assumptions</b>
Croatian EPR system further developed, including improvement of collecting, validating and reporting process of Croatian EPR, and consistency with other reporting systems in the Republic of Croatia, especially Geographic Information System (GIS) and the Common Reporting Format for National Greenhouse Gas (GHG) inventory system, improved.	<p>Croatian EPR system improved in order to fulfil reporting requirements primarily towards EU and UN.</p> <p>Croatian National Portal of Environmental Pollution Register (CNPEPR) improved through development of the web portal for Croatian EPR system.</p> <p>Manual for air emissions calculation for the</p>	<ul style="list-style-type: none"> <li>• Interim Quarterly Reports</li> <li>• Final Twinning Report</li> <li>• Documentation produced under project (analysis reports, recommendations, manual, training programme, training materials, etc.)</li> <li>• Web based IT application</li> <li>• Web portal for Croatian EPR</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous Government support to development of environmental information system</li> <li>• Capability of relevant stakeholders to implement/enforce project results into practice</li> <li>• Adequate commitment of all relevant stakeholders involved in project implementation</li> <li>• Availability of data and/or its</li> </ul>

<sup>12</sup> The total amounts of the Transition Facility Programme Contribution and National Co-financing stipulated in the above table represent the total maximum amounts and therefore, they may be reduced at the level of the Twinning contract, while the relevant ratio (percentages) should be maintained as fixed. The co-financing requirement foreseen under Transition Facility will be considered fulfilled according to the provision of the relevant Financing Agreement.



	<p>national E-PRTR operators prepared.</p> <p>Recommendations on E-PRTR reporting produced</p> <p>Capacities of CEA experts and other national authorities strengthened with the purpose of improvement of collecting, validating and reporting Croatian EPR data.</p>	<p>on CEA web site</p> <ul style="list-style-type: none"> <li>• Atlas application</li> <li>• Lists of participants on workshops, trainings, on-the-spot visits</li> <li>• Trainings evaluation reports</li> <li>• List of participants on study visit and study visit report</li> </ul>	<p>compatibility in form or quality.</p> <ul style="list-style-type: none"> <li>• All related national legislation reviewed in order to overcome situations which are arising from differences between national legislation and EU requirements.</li> <li>• Adequate IT resources</li> <li>• Adequate infrastructure, databases and documents</li> <li>• Sufficient quality of submitted data in database</li> <li>• Adequate changes in relevant Government policies</li> </ul>
<b>Results</b>	<b>Objectively Verifiable Indicators</b>	<b>Sources of Verification</b>	<b>Assumptions</b>
<p><b>Result 1: Croatian EPR system improved in order to fulfil reporting requirements primarily towards EU (E-PRTR, IED, ETS Directive, GHG Monitoring Mechanism Decision) and UN (LRTAP, UNFCCC, PRTR).</b></p>	<ul style="list-style-type: none"> <li>• Analysis covering accuracy, relevancy, integrity and quality of diffuse emission data (into the air, water and land/waste) in the existing national systems conducted and report with recommendations for improvements produced.</li> <li>• Analysis and comparison between data used for E-PRTR report (and national PRTR report) with data used for air emission inventory according to LRTAP and LCP requirements conducted and report with corresponding recommendations produced.</li> <li>• Analysis and comparison between data collected according to IED (including the latest EC recommendations that the data should be harmonized as much as possible) and E-PRTR, including analysis of the related national legislation conducted, and report with corresponding recommendations produced (including recommendations on legislative changes if determined as needed).</li> <li>• Analysis of Croatian EPR data in order to produce report with recommendations for other reporting purposes according to</li> </ul>	<ul style="list-style-type: none"> <li>• Interim Quarterly Reports</li> <li>• Final Twinning Report</li> <li>• Documentation produced under project (analysis reports, recommendations, specifications, manual, training programme, training materials, etc.)</li> <li>• Web based IT application</li> <li>• Web portal for Croatian EPR on CEA web site</li> <li>• Atlas application</li> <li>• Lists of participants on workshops, trainings, on-the-spot visits</li> <li>• Trainings evaluation reports</li> <li>• List of participants on study visit and study visit report</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous Government support to development of environmental information system</li> <li>• Capability of relevant stakeholders to implement/enforce project results into practice</li> <li>• Adequate commitment of all relevant stakeholders involved in project implementation</li> <li>• Availability of data and/or its compatibility in form or quality.</li> <li>• All related national legislation reviewed in order to overcome situations which are arising from differences between national legislation and EU requirements.</li> <li>• Adequate IT resources</li> <li>• Adequate infrastructure, databases and documents</li> <li>• Sufficient quality of submitted data in database</li> <li>• Adequate changes in relevant Government policies</li> </ul>

<p><b>Result 2: Croatian National Portal of Environmental Pollution Register (CNPEPR) improved, including GIS component, through development of the web portal for Croatian EPR system in order to meet the requirements of PRTR in the field of data quality and availability of data to the public.</b></p>	<p>requirements of EU and international legislation, primarily for NIR, ICPDR and WISE-SOE conducted and corresponding report produced.</p> <ul style="list-style-type: none"> <li>•Analysis of Croatian EPR system in order to improve checking (quality assurance/quality control) of the entered data (at operator level) and data verification by competent authorities and CEA conducted and report with recommendations for automatic control of the entered data based on the procedures for quality assurance and quality control, included within Manual, produced.</li> <li>•Functional and technical specifications for establishment of web based application for air emission calculation for 2 target groups of users prepared.</li> <li>•Web based IT application for air emission calculation based on functional and technical specifications developed and fully functional.</li> <li>•Analysis of technical specifications for CEIS conducted and analysis report with definition of type of functionality and type of data processing, definition of data status, definition of technical procedures, type of data presentation and type of integration of data from a number of data sources, including definition of necessary spatial and alphanumeric analysis, produced.</li> <li>•EPR data prepared and harmonized for integration in unique central related database (data warehouse). Complete technical database documentation on the EPR data</li> </ul>	
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preparation and harmonization according to CEA ISO standards prepared.

- Analysis of Croatian EPR data security system (primarily concerning web-based online applications) with special attention on data which are used for payment on emission to air and waste quantities conducted and report with analysis results, measures and recommendations for improvement and suggestions for raising CEA awareness on security issues produced and CEA staff provided with some practical means for IT security advantages according to best IT Security standards.

- Functional and technical specifications for design and establishment of web portal for Croatian EPR system (EPR databases, CNPEPR and EPR Browser) that will be a single central point of access to Croatian EPR system, to corresponding WebGIS and alphanumeric browsers and helpdesk system with the ability of editing of content using Content Management System (CMS) technology prepared in order to meet the requirements of PRTR on data accessibility.

- A separate web portal for Croatian EPR system on CEA web site based on functional and technical specifications designed/developed and fully functional.

- Croatian EPR indicators for EPR data (general data and air/water/waste data) developed, taking into account the features of Croatian EPR Browser.

- Functional and technical specifications for development of specialized Croatian EPR Atlas (web application) to be developed from

<p><b>Result 3: Manual for air emissions calculation for the national E-PRTR operators prepared.</b></p> <p><b>Result 4: Recommendations on E-PRTR reporting produced based on results of the pilot testing of data.</b></p> <p><b>Result 5: Capacities of CEA experts and other national authorities strengthened with the purpose of improvement of collecting, validating and reporting Croatian EPR data.</b></p>	<p>spatial GIS components prepared.</p> <ul style="list-style-type: none"> <li>•Atlas designed/developed and fully functional.</li>   <li>•Manual with instructions for air emissions calculation including recommended methodology and procedures for quality assurance/quality control, according to activities listed in Annex I, and to pollutants listed in Annex II of E-PRTR Regulation developed.</li>   <li>•Analysis of national dataset for E-PRTR data reporting with emphasis on data coverage and data quality, and confidential data in the Croatian EPR, including analysis of possible EC comments and suggestions conducted and report with recommendations for improvement of national E-PRTR reporting produced.</li>   <li>•Training Needs Analysis (TNA) conducted and TNA report with training program for CEA and other stakeholders produced.</li>   <li>•Training materials for trainings and workshops prepared.</li>   <li>•Workshops for at least 10 CEA employees and 40 representatives of stakeholders conducted.</li>   <li>•At least 3 on-the-spot visits to industry</li> </ul>		
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	<p>installations conducted.</p> <ul style="list-style-type: none"> <li>•Trainings of Trainers (ToT) for at least 8 CEA employees and at least 21 employees from the competent authorities and other stakeholders conducted and trainings evaluation report with recommendations for further trainings produced.</li> <li>•1 study visit in duration of 5 working days for 8 CEA Croatian EPR experts to an MS institution relevant for valuating and reporting toward E-PRTR (including introduction to MS E-PRTR and database) conducted and corresponding report produced.</li> </ul>		
<b>Activities</b>	<b>Means</b>	<b>Specification of costs</b>	<b>Assumptions</b>
<p><b>The activities listed below represent the minimum activities to be implemented in the course of the Twinning project. Member State(s) may propose additional activities in line with the methodology elaborated in its proposal</b></p> <p>Activity 1.1: Conducting analysis covering accuracy, relevancy, integrity and quality of diffuse emission data (in to the air, water and land/waste) in the existing national systems and producing report with recommendations for improvements. Analysis will take into account the existing collecting and evaluating system for calculation of diffuse emissions into air (LRTAP and NIR/GHG) and water (River Basin Management Plan-RBMP) and other relevant sources of diffuse emission data.</p> <p>Activity 1.2: Conducting analysis and comparison between data used for E-PRTR report (and national PRTR report) with data used for air emission inventory according to</p>	<p>Analyses, consultations, discussions, preparation of documentation (reports, recommendations, materials), preparation of IT specifications, programming and developing IT applications, developing web portal, conducting trainings, workshops, on-the-spot visits, training of trainers, study visit.</p>	<p>Twinning Contract: <b>900.000,00 EUR</b></p>	<p>In line with the assumptions specified for results.</p>

<p>LRTAP and LCP requirements and producing report with corresponding recommendations.</p> <p>Activity 1.3:  Conducting analysis and comparison between data collected according to IED (including the latest EC recommendations that the data should be harmonized as much as possible) and E-PRTR, including analysis of the related national legislation, and producing report with corresponding recommendations (including recommendations on legislative changes if determined as needed).</p> <p>Activity 1.4:  Conducting analysis of Croatian EPR data in order to produce report with recommendations for other reporting purposes according to requirements of EU and international legislation, primarily for NIR, ICPDR and WISE-SOE and producing corresponding report. Recommendations should include information which data should be exported for the mentioned predefined reporting obligations.</p> <p>Activity 1.5.  Conducting analysis of Croatian EPR system in order to improve checking (quality assurance/quality control) of the entered data (at operator level) and data verification by competent authorities and CEA and producing report with recommendations for automatic control of the entered data based on the procedures for quality assurance and quality control included within Manual.</p> <p>Activity 1.6:  Preparing functional and technical specifications for establishment of web</p>			
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<p>based application for air emission calculation for 2 target groups of users:  -E-PRTR operators per specific sectors;  -Medium and small enterprises.</p> <p>Activity 1.7:  Developing web based IT application for air emission calculation based on functional and technical specifications. The developed application will be tested, adjusted to be fully functional and integrated within Croatian EPR system and published on CEA web portal (<a href="http://www.azo.hr">http://www.azo.hr</a>).</p> <p>Activity 2.1:  Conducting analysis of technical specifications for CEIS and producing analysis report with definition of type of functionality and type of data processing, definition of data status, definition of technical procedures, type of data presentation and type of integration of data from a number of data sources including definition of necessary spatial and alphanumeric analysis.</p> <p>Activity 2.2:  Preparing and harmonizing EPR data for integration in unique central related database (data warehouse). Preparing complete technical database documentation on the EPR data preparation and harmonization according to CEA ISO standards.</p> <p>Activity 2.3:  Conducting analysis of Croatian EPR data security system (primarily concerning web-based online applications) with special attention on data which are used for payment on emission to air and waste quantities and producing report with analysis results, measures and</p>			
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<p>recommendations for improvement and suggestions for raising CEA awareness on security issues and providing CEA staff with some practical means for IT security advantages according to best IT Security standards.</p> <p>Activity 2.4: Preparing functional and technical specifications for design and establishment of web portal for Croatian EPR system (EPR databases, CNPEPR and EPR Browser) that will be a single central point of access to Croatian EPR system, to corresponding WebGIS and alphanumeric browsers and helpdesk system with the ability of editing of content using Content Management System (CMS) technology in order to meet the requirements of PRTR on data accessibility.</p> <p>Activity 2.5: Designing and developing a separate web portal for Croatian EPR system on CEA web site based on functional and technical specifications. The developed separate web portal will be fully functional.</p> <p>Activity 2.6: Developing Croatian EPR indicators for EPR data (general data and air/water/waste data) taking into account the features of Croatian EPR Browser. Developed indicators will be included in the Croatian EPR Atlas with the purpose to ensure public presentation of data. Preparing materials to be published within Atlas (e.g. for schools, universities, targeted expert public groups).</p> <p>Activity 2.7: Preparing functional and technical specifications for development of specialized Croatian EPR Atlas to be developed from spatial GIS components.</p>			
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<p>Croatian EPR Atlas will cover the Croatian EPR system in specific areas (general data and air, water, soil and waste data) and enable spatial analysis and appropriate visual interpretation of data. Croatian EPR Atlas will form the part of CNPEPR.</p> <p>Croatian EPR Atlas will improve public information for multiple target groups (schools, professionals stakeholders and other interested public groups) in educational, visually advanced and interactive - user friendly way.</p> <p>Activity 2.8: Designing and developing Atlas. The developed Atlas will be fully functional.</p> <p>Activity 3.1: Development of Manual with instructions for air emissions calculation including recommended methodology and procedures for quality assurance/quality control, according to activities listed in Annex I, and to pollutants listed in Annex II of E-PRTR Regulation.</p> <p>Manual is intended to be used by national E-PRTR operators, ETS and IED operators as well as relevant staff from county offices, inspectorates and CEA. Manual will be prepared in English and translated to Croatian.</p> <p>Activity 4.1: Conducting analysis of national dataset for E-PRTR data reporting with emphasis on data coverage and data quality, and confidential data in the Croatian EPR, including analysis of possible EC comments and suggestions and producing report with recommendations for improvement of national E-PRTR reporting.</p>			
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<p>Activity 5.1:  Conducting Training Needs Analysis (TNA) and preparing TNA report with training program for CEA and other stakeholders. The target groups are as follows:</p> <ul style="list-style-type: none"> <li>•Target group 1 - CEA experts from different units (Croatian EPR, IT, Climate changes; water, air, waste, etc.)</li> <li>•Target group 2 - main participants i.e. stakeholders in data collecting, processing and reporting procedures from other involved institutions (competent authorities from the City of Zagreb and other counties, Ministry of Environment and Nature Protection/ environment protection inspectors, water inspectors, etc.)</li> <li>•Target group 3 - representatives from industry and counties, Environmental Protection and Energy Efficiency Fund, Croatian Chamber of Economy and other relevant stakeholders involved in data collecting and reporting process activities, e.g. E-PRTR, IED, ETS and LCP operators and verifiers.</li> </ul> <p>Activity 5.2:  Preparing training materials for trainings and workshops. Training materials will be based on TNA report.</p> <p>Activity 5.3:  Conducting workshops for at least 10 CEA employees and 40 representatives of stakeholders (Environmental Protection and Energy Efficiency Fund, Ministry of Environmental and Nature Protection, Croatian Chamber of Commerce, etc.).  Workshops will be organised for counties, inspection, CEA and other relevant institutions on topics of quality assurance and quality control improvement of Croatian EPR data and other topics related</p>			
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<p>to Croatian EPR:</p> <ul style="list-style-type: none"> <li>•Croatian EPR/E-PRTR/PRTR Protocol activities with emphasis on improving of the quality assurance/quality control implementation for data submitted and reported to Croatian EPR and through E-PRTR reporting system to EC, with references to the requirements specific for E-PRTR, IED, ETS and LCP operators.</li> <li>•Croatian EPR/E-PRTR/PRTR Protocol activities with emphasis on the topic for improving of the quality of data.</li> </ul> <p>Activity 5.4: Conducting at least 3 on-the-spot visits to industry installations (chosen according to their activities, capacities or type of emissions by Twinning partners during the project implementation) with the purpose of adoption of practical knowledge about the data collected in the EPR.</p> <p>Activity 5.5: Conducting Trainings of Trainers (ToT) for at least 8 CEA employees and at least 21 employees from the competent authorities (separately for CEA and representatives of competent authorities). Producing trainings evaluation report with recommendations for further trainings.</p> <p>Activity 5.6: Conducting 1 study visit in duration of 5 working days for 8 CEA Croatian EPR experts to an MS institution relevant for valuating and reporting toward E-PRTR (including introduction to MS E-PRTR and database) and producing corresponding report.</p>			
			<p>Preconditions:</p> <p>N/A</p>

## Annex 2. Detailed implementation chart

Improvement of Croatian Environment Pollutant Register (Croatian EPR) and its Integration into Croatian Environmental Information System (CEIS) (CRO EPR)	2015										2016										2017								
	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
Month																													
Twinning	T	T	T	T	C	C	C	C	A/I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	R	R	R

T – Call for proposals and evaluation

C – Contracting

A/I – Arrival of the RTA/ Start of the implementation of activities

I – Implementation of activities

R – Report

**Annex 3. Contracting and disbursement schedule by quarter for full duration of programme (including disbursement period)**

Improvement of Croatian Environment Pollutant Register (Croatian EPR) and its Integration into Croatian Environmental Information System (CEIS) (CRO EPR)	<b>Cumulative contracting schedule by quarters in EUR (provisional)</b>							
	<b>2016</b>				<b>2017</b>			
	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>
	Twining	585.366			224.634			90.000
<b>TOTAL (EUR):</b>	<b>585.366</b>			<b>810.000</b>			<b>900.000</b>	

#### Annex 4. List of reporting obligations according to relevant legislation

No.	Reporting obligation	Legislative instrument	Report to
1.	<b>E-PRTR data reporting</b> (Member states shall provide all the data referred to in Article 5(1) and (2) to the Commission by electronic transfer in the format set out in Annex III.	Regulation (EC) No 166/2006 of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC (Text with EEA relevance)	Report shall be submitted to the European Parliament and the Council, together with assessment of operation to the European PRTR. (Article 17) DG ENV (EC)
2.	Yearly Report on data from EPR	Ordinance on the Environmental Pollution Register (OG 35/08)	National
3.	In accordance with Protocol, each Party shall <b>establish and maintain a</b> publicly accessible national pollutant release and transfer <b>register</b>	Protocol on Pollutant Release and Transfer Register to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Kijev, 2003)	UN Secretariat
4.	Protocol on Pollutant Release and Transfer Registers Implementation <b>Report</b>	In accordance with Decision I/5 (ECE/MP.PRTR/2010/2/Add.1)	UN Secretariat
5.	E-PRTR report on practice and measures	Regulation (EC) No 166/2006 of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC (Text with EEA relevance) Questionnaire Decision 2010/205/EU	DG ENV (EC)

\*Additional secondary reporting obligations from EPR are (for which EPR data are used): IPPC (IE Directive), LCP (the LCP Directive ), NIR (National Inventory Report), LRTAP (LRTAP Convention), Basel report (Basel Convention), ICPDR obligations etc.

## **Annex 5. Main technical information on CEIS**

In accordance with the Environmental Protection Act (OG 80/13) and the Regulation on Environmental Information System (OG 68/08) one of the main tasks and objectives of the Environmental Protection Agency is the establishment of administration, development, coordination and maintenance of the Environmental Information System.

The Environmental Protection Agency has developed a Croatian Environmental Information System Management Program for the Period 2014<sup>th</sup> - 2017<sup>th</sup> as one of the basic documents necessary for the operationalization of the Regulation on Environmental Information System and its implementation.

Pursuant to the Regulation, Environmental Information System of the Republic of Croatia is a series of interconnected electronic databases and sources of information on the state and loads of individual components of the environment, physical characteristics and other information important for environmental monitoring at the national level.

Environmental Information System is built upon 50+ databases and applications developed mostly in MS SQL Server 2008 R2 and .Net technology.

Activities on the establishment and maintenance of the Environmental Information System of the Republic of Croatia will ensure efficient collection, management, exchange and use of data relating to the state of the environment in the Republic of Croatia and the exchange of data and information at the international level, especially within the European Environment Information and Observation Network (EIONET) and other information networks of the European Union.

## **Annex 6. List of abbreviations**

CEA - Croatian Environment Agency  
CEIS - Croatian Environmental Information System  
CMS - Content Management System  
CNPEPR - Croatian National Portal of Environmental Pollution Register  
EC - European Commission  
EEA - European Environment Agency  
EIONET - European Environment Information and Observation Network  
EIS - (Croatian) Environment Information System  
EPEEF - Environmental Protection and Energy Efficiency Fund  
EPIS – Environmental Protection Information System  
EPR - Environment Pollutant Register (Croatian)  
E-PRTR – European Pollutant Release and Transfer Register: <http://prtr.ec.europa.eu/>  
ETS Directive - Emission Trading System Directive  
EU – European Union  
GHG - Greenhouse gases  
GIS – Geographic Information System  
ICPDR - International Commission for the Protection of the Danube River  
IED – Industrial Emission (Directive the Directive on industrial emissions 2010/75/EU (IPPC/IED))  
IIPETS - Integrated Information Platform for Emission Trading System  
IPCC - Intergovernmental Panel on Climate Change  
IPPC - Integrated Pollution Prevention and Control  
IPPC/IED – Integrated Pollution Prevention and Control/Industrial Emissions Directive  
IT - InformationTechnology  
LCP Directive – Large Combustion Plants Directive  
LRTAP Convention - Convention on Long-Range Transboundary Air Pollution (LCP)  
MENP - Ministry of Environmental and Nature Protection  
MS – Member State  
NIR – National Inventory Report  
Ordinance on EPR - Ordinance on the Environmental Pollution Register (OG 35/08)  
PRTR – global Pollutant Release and Transfer Register: <http://www.prtr.net/> A PRTR is an environmental database or inventory of pollutants released to air, water and soil and transferred off-site for treatment or disposal.  
RIDS/RRMA (Seveso) - Registry of installations in which dangerous substances are present/Inquest Registry of reported major accidents  
RBMP - River Basin Management Plan  
SEIS - Shared Environmental Information System  
SEVESO Directive –EU industrial safety regulations are known as the Seveso Dorective  
SIMD - Sector Impact Monitoring Department  
TAIEX - Technical Assistance and Information Exchange  
TNA - Training Needs Analysis  
ToT - Trainings of Trainers  
UBA - Environment Agency from Germany  
UN - United Nations  
UNECE - United Nations Economic Commission for Europe  
UNECE/Aarhus Convention - United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters  
UNFCCC - United Nations Framework Convention on Climate Change  
WISE-SOE - Water Information System for Europe - State of Environment