



This project is funded by the EUROPEAN UNION

Transition Facility

Twinning Project

Chemicals and hazardous substances monitoring improvement and integration of Seveso database into Croatian Environmental Information System (CEIS) as the unique Central Seveso Information System (CRO SEVESO)

HR 14 IB EN 02

Opening ceremony, 15th September 2017, House of Europe, Zagreb



Introduction

- **Objective**
- **Purpose**
- **Results**
- **Activities**
- **CAEN Departments**



Objective

The overall objective is to strengthen the capabilities and efficiency of the Republic of Croatia in the field of environmental protection and mitigation of climate changes by improving management, monitoring and more precise reporting on chemicals, emissions, dangerous substances and accidents as well as to upgrade and integrate the current Seveso databases with Geographic Information System (GIS) within Croatian Environmental Information System (CEIS).



Purpose

The purpose of the project is:

- Better monitoring of chemicals and reporting on chemicals and dangerous substances together with their quantities in the Republic of Croatia through improvement and upgrading of the current Seveso databases Register of Establishment in which Dangerous Substances are Present and the Register of Reported Major Accidents - REDS/RRMA.
- Improved capacities of all involved competent authorities and other stakeholders through workshops on this project in order to get better knowledge in related to collecting, maintaining and validating of data what will result in better quality of data in a whole.
- Upgraded and integrated existing Seveso database REDS/RRMA with the Geographic Information System (GIS) within the Croatian Environmental Information System with the aim to inform the public on the state of the environment in their neighbourhood, part of hazardous substances, major accidents, sudden accidents/near misses, domino effects.



Results

Result 1. Reporting towards the Republic of Croatia and European Union improved

Result 2. Software for validation tools for Safety Management System (SMS) and Major Accidents Prevention Policy (MAPP) integrated; Geographic Information System (GIS) integrated

Result 3. The Central Seveso Information System (CSIS) integrated into the Croatian Environmental Information System (CEIS), combined with implementation of Safety Management System (SMS) and Major Accidents Prevention Policy (MAPP) procedures and Geographic Information System (GIS)

Result 4. Institutional capacity of the Croatian Agency for the Environment and Nature (CAEN), competent authorities (CA) and other stakeholders strengthened



Component 1: Reporting towards the Republic of Croatia and European Union improved

Activity 1.1.:

Conducting gap analysis of the Croatian Seveso legislation in comparison with EU Seveso legislation and preparing corresponding report, including gap analysis with comparison of Seveso legislation (Annex I of the Seveso Directive (OG 44/14) and Croatian legislation in the field of chemicals); Analysis will also include relevant Regulation, Ordinance, especially Annex I of the Regulation in correspondence with Croatian and EU legislation from the field of REACH and CLP and from the field of National Inventory Report (NIR) as well as legislation on safety and rescue.

Activity 1.2.:

Conducting gap analysis of the current state of REDS/RRMA database regarding reporting, including harmonization with data from other CAEN databases, if needed (E-PRTR, IED) and UN databases and reports (CLRTAP, UNFCCC, PRTR) and preparing corresponding report.

Activity 1.3.:

Conducting gap analysis related to confidentiality of data (including maintaining and reporting of confidential data) and preparing corresponding report;



Component 1: Reporting towards the Republic of Croatia and European Union improved

Activity 1.4.:

Conducting gap analysis of databases or sets of data from other institutions which could be integrated and/or connected into CSIS and preparing corresponding report (report should also take into account outputs of Activity 1.2);

Activity 1.5.:

Integration of databases or sets of data of the Ministry of Health or other institutions which contain data about chemicals and accidents (e.g. NPRD) into CSIS, performing corresponding testing procedure and preparing report on testing results.



Component 2: Software for validation tools for SMS and MAPP integrated; GIS integrated

Activity 2.1.:

Defining technical functionality for the whole software component for validation tools for SMS and MAPP integration;

Activity 2.2.:

Defining change, risk and quality management for the whole process of software integration;

Activity 2.3.:

System implementation (application and database) needed to establish validation tools for SMS and MAPP, integration of the developed software tool for SMS and MAPP into REDS/RRMA and CSIS, performing corresponding testing procedure and preparing report on testing results;



Component 2: Software for validation tools for SMS and MAPP integrated; GIS integrated

Activity 2.4.:

System implementation (application and database) needed to establish GIS component, integration of REDS/RRMA into GIS, performing corresponding testing procedure and preparing report on testing results;

Activity 2.5.:

Defining specifications of data services for data sharing and reporting (Inspire Directive and other Directives) inside GIS, their establishment/integration, performing corresponding testing procedure and preparing report on testing results.



Component 3: The CSIS integrated into the CEIS, combined with implementation of SMS and MAPP procedures and GIS

Activity 3.1.:

Conducting gaps and needs analysis, analysis of business needs and processes, regulative analysis and analysis of the stakeholders' requirements in order to define the technical roles and responsibilities for preparation/processing of the existing and planned datasets/databases including connecting with other databases of the CAEN and preparing corresponding report;

Activity 3.2.:

Conducting technical analysis of the methodologies and procedures for data collection, procedures for recording and storing data and accessibility of the collected data and preparing corresponding report;

Activity 3.3.:

Defining conceptual design of the optimum characteristics of the Integrated Information System and preparing corresponding report;



Component 3: The CSIS integrated into the CEIS, combined with implementation of SMS and MAPP procedures and GIS

Activity 3.4.:

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

Activity 3.5.:

Developing Croatian Seveso Atlas that will cover the Croatian Seveso system in specific areas and will enable spatial analysis and appropriate visual interpretation of data (Croatian Seveso Atlas will form part of the CSIS);



Component 3: The CSIS integrated into the CEIS, combined with implementation of SMS and MAPP procedures and GIS

Activity 3.6.:

Defining requirements for inclusion of the existing and/or planned spatial data for all types of data sources defined and preparing corresponding report;

Activity 3.7.:

Preparing and harmonizing data for integration into central unique related database, followed by database documentation;

Activity 3.8.:

Establishing central (related) database with the defined table of content, followed by database documentation;

Activity 3.9.:

Developing the web based application, performing quality control in order to determine accuracy of data and implementing the developed application into the central unique related database, performing corresponding testing procedure and preparing report on testing results;



Component 3: The CSIS integrated into the CEIS, combined with implementation of SMS and MAPP procedures and GIS

Activity 3.10.:

Developing the web based GIS application, performing quality control in order to determine accuracy of data and implementing the developed GIS application into the central unique related database, including preparation of all necessary spatial datasets, performing corresponding testing procedure and preparing report on testing results;

Activity 3.11.:

Preparing and implementing technical workshops for at least 6 CAEN employees on the implemented IT solution with the purpose of dissemination of the technical materials and user documentation on the integration of the CSIS into the CEIS combined with implementation of SMS and MAPP procedures and GIS;

Activity 3.12.:

Integrating of REDS/RRMA, together with software for validation tools for SMS and MAPP and GIS into CSIS;

Activity 3.13.:

Preparing of relevant procedures and manuals for software and GIS.



Component 4: Institutional capacity of the Croatian Agency for the Environment and Nature (CAEN), competent authorities (CA) and other stakeholders strengthened

Activity 4.1.:

Conducting Training Needs Analysis (TNA) and preparing TNA report with training program for CAEN, CA and other stakeholders;

Activity 4.2.:


Preparing materials for trainings and workshops based on the TNA report;

Activity 4.3.:

Conducting training and workshops on SMS and MAPP (in line with the European best practice regarding SMS and MAPP validation tools and in line with the EU guidelines for quantitative risk assessment) for at least 10 CAEN employees and at least 40 representatives of stakeholders (competent authorities, other relevant institutions and industry);

Activity 4.4.:

Conducting at least 3 on-the-spot visits to industry establishments (chosen during the project implementation according to their activities, capacities or type of emissions) with the purpose of adoption of practical knowledge about the data collected in the REDS/RRMA;




Component 4: Institutional capacity of the Croatian Agency for the Environment and Nature (CAEN), competent authorities (CA) and other stakeholders strengthened

Activity 4.5.:

Conducting Trainings of Trainers (ToT) for at least 10 CAEN employees and at least 10 employees from the competent authorities (separately for CAEN and representatives of competent authorities) and producing trainings evaluation report with recommendations for further trainings of stakeholders;

Activity 4.6.:

Conducting at least 1 study visit in duration of 5 working days for at least 10 CAEN Croatian experts to an MS institution relevant for valuating and reporting toward Seveso (including introduction to MS Seveso database) and producing corresponding report;



Component 4: Institutional capacity of the Croatian Agency for the Environment and Nature (CAEN), competent authorities (CA) and other stakeholders strengthened

Activity 4.7.:

Conducting at least one 2-day conference that will include workshops by sector (activities) for representatives of stakeholders and industry. During the conference, at least one round table with competent authorities (MENP, NPRD, MCPP, all relevant inspections, Ministry of Health; Croatian Chamber of Economy (CCE); CAEN, industry representatives, others if needed)' will be organized;

Activity 4.8.:

Relevant procedures and manuals prepared (e.g. Seveso Manual, Manual for GIS, Manual for SMS and MAPP, Instructions for classifying of dangerous substances).



Experts involvement

approx. 10 CAEN staff involved

approx. 24 experts from cooperating institutions involved

approx. 20 experts involved through 460 working days

- **Sector Impact Department**
- **Plant and Pollutants Unit**
- **IT support department**
- **Croatian Environmental Information System Department**



This project is funded by the EUROPEAN UNION

Thank you!

The views expressed in this presentation do not necessarily reflect the views of the European Commission