



The EU-CHEM-REACT Program

www.ecr.iccss.eu

Enhancing national and regional capacity building, civil protection and cooperation in reducing chemical threats, and promoting and developing EU Civil Protection Mechanism (UCPM) through trainings and exercises

SUMMARY

A unique regional and international partnership of stakeholders, led by ICCSS, from governments, industry, civil society, voluntary fire services, and academia, from Belarus, Czech Republic, Latvia, Lithuania, Moldova, Poland, Slovakia and Ukraine, in cooperation with the international agencies, including EU, UN OCHA, OPCW, NATO, INTERPOL.

The EU-CHEM-REACT 2017-2018 Project (www.ecr.iccss.eu), financed from the EU grant, assisted – through a series of Table Top Exercises (TTX) and Full Scale Field Exercise (FsX) – to develop Ukraine civil protection system, enhance its capacity to interoperate with the neighboring and European institutions, and to test and develop EU Civil Protection Mechanism (UCPM).

The EU-CHEM-REACT 2 (www.ecr.iccss.eu) to be implemented in 2019-2020, addresses a need to improve prevention, preparedness and response to chemical disasters in **Belarus, Moldova and Ukraine**, through:

- Series of trainings and exercises in civil protection including: Table Top Exercises /TTX/, Command Post Exercises (CPX) and a Full Scale Field Exercise (FsX)
- Best practices exchanges and national and industry capacity building
- Development of volunteer fire service and its use within UCPM
- development of Civil Protection Exercises Public Information Strategy
- Establishment of a regional exercise network in civil protection.

The project further develops the vision for public security in the Central and Eastern Europe with an emphasis on cooperation in prevention, preparedness for and response to man made or natural chemical disasters.



Co-funded by
European Union
Civil Protection

International Centre for Chemical Safety and Security (ICCSS)

ul. Leszno 8/1, 01-192 Warsaw, Poland, Tel. +48 22 436 20 34

www.iccss.eu

info@iccss.eu

BACKGROUND:

The project is funded in the framework of the Union Civil Protection Mechanism Exercises outlined in Action 2.6 of the 2018 Work Programme (WP 2018).

The Union Civil Protection Mechanism, hereafter the Mechanism, was established by Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism.

The Mechanism was set up with the aim to provide support, upon request, in the event of major emergencies and to facilitate improved coordination of assistance intervention. The Mechanism does so by facilitating response to protect primarily people but also the environment and property, including cultural heritage, in the event of natural and man-made disasters, acts of terrorism and technological, radiological or environmental accidents, including accidental marine pollution, occurring inside or outside the European Union, taking into account the special needs of the isolated, outermost and other regions or islands of the European Union.

In order to strengthen and eventually ensure the level of response that is preferred within the Mechanism, various preparedness activities are conducted to complement the national preparedness endeavours of Participating States. The Commission is tasked to set up and manage an exercise programme.

EU-CHEM-REACT 2 is based on the successful, ongoing implementation of the **EU-CHEM-REACT** project which is implemented by the international consortium of Lithuania, Ukraine Poland with an active participation of OSCE, Latvia and Czech Republic, and led by the ICCSS. The EU-CHEM-REACT provided with development of Ukraine Civil Protection and preparation and conduct of Table Top Exercise (TTX) and Full Scale Field Exercise (FsX) in Lviv (Ukraine) on the response to a chemical disasters, accompanied by the activation of the EU Mechanism.

EU-CHEM-REACT 2 formed an international consortium composed of the partners from Belarus, Czech Republic, Latvia, Lithuania, Moldova, Ukraine, OSCE, and the coordination of the ICCSS. The EU-CHEM-REACT 2 will provide an opportunity, in controlled environment, to learn from and improve the response capability of Participating States of the Union Civil Protection Mechanism as well as to exchange knowledge and experience with third countries. The scenario will provide for a release of toxic chemicals and an environmental disaster, as a result of a terrorist attack. The main project activities include the preparation and conduct of Table Top Exercise (TTX), Command Post Exercise (CPX) in the countries outside the EU, and Full Scale Field Exercise (FsX) in Lviv (Ukraine).

DESCRIPTION

Belarus, Moldova and Ukraine, as the European Neighborhood Policy countries, actively improve and implement modern national civil protection, what includes the development of the national and international cooperation. That national civil protection in these countries includes disaster prevention and response. The state emergency services in these countries provide the state policy implementation in the sphere of:

- realization of state policy in sphere of civil protection;
- protection of population and territories from the emergencies;
- fire-prevention and fire-fighting;
- provision of industrial safety;
- hydro -meteorological activity
- marine safety.

Czech Republic, Latvia, Lithuania, Poland, have developed modern civil protection preparedness response to CBRN disasters including environmental and marine pollution. They actively participate in the civil protection services of the EU and the Members States. They are ready – through and active participation in EU-CHEM-REACT 2 – identify and share lessons learned, test and implement the EU Mechanism.

In order to underline the EU and the neighboring European Union countries commitment to the global obligations the completeness of planning and preparedness of CBRN man induced incidents will be analyzed towards requirements set forth by UNSC Resolution 1540, provisions of the Chemical Weapons Convention and the work of the OPCW, WHO International Health Regulations, criminal procedures and practices of INTERPOL, UN OCHA humanitarian action in partnership with national and international actors, procedures of NATO's principal civil emergency response mechanism.

The performance of the national civil protection in the European Neighborhood Policy countries, its efficiency and capacity to interoperate with the neighbouring European Union countries, European institutions and with European Union standards and procedures, need to be fully tested. The urgency of interoperability between EU countries and the neighbouring countries is further accentuated by the ongoing development of chemical activities in production, trade, transport, storage and use, and a need to meet the threats of environmental disasters, which could challenge civil protection in its disaster handling capacity.

The project concentrates on specific features of planning and preparedness to CBRN (Chemical, biological, radiological and nuclear) related disasters, with an emphasis on Toxic Industrial Chemicals (TICs) and chemical warfare agents, biological agents and toxins and radiological material. In the course of the project we would compare preparedness to CBR(N) incidents in a EU country and in the neighbouring European Union countries through conducted and jointly analysed Table Top Exercise /TTX/, Command post Exercise (CPX) and a Full Scale Field Exercise (FsX).

ERCC Mechanism will be used to test interoperability of the European Neighborhood Policy countries national and ERCP teams and testing ERCC and Members States procedures. This will be done through verification of planning and preparedness as well as deployment of ERCP team in response to a CBRN incident bearing trans-boundary consequences. The tested elements include alarm system, preparedness for detection, analysis and deployment of rescue operators, cooperation at a preparedness and planning stage between, radiological authorities, police, forensics, local and regional crisis management, environmental and sanitary authorities. We will test communication and effectiveness of ERCC mechanism use. The results of TTX and CPX exercises would be used to propose the improvements that would be further tested in a final. Full Scale Field exercise. The outcome would include indications of system flaws and discontinuities and proposals of corrective arrangements and procedural improvements.

PROPOSED SCENARIO:

Terrorist envoys decided to expand the area of their actions to Eastern Europe. They have done it with an intention to maintain terror pressure in Europe. In an attempt to achieve high impact they analysed an attack to a nuclear power plant, contaminate major river with post-military wastes but find those too complicated technically, they reduced their plans to an attack on a chemical plant and conduct of series of activities to misuse toxic chemicals. They decided to do so in a coordinated approach in other countries. In one country they attack a train transporting chlorine to another country. One country was further affected by unexpectedly high levels of Danube river and potential flooding. This coordinated approach hugely affects the response mechanism and capabilities to send rescue units from the EU Mechanism. The Mechanism was tested in Ukraine before, however the effectiveness of the EU Mechanism requires the knowledge, experience and practice, how to active and use it in a most efficient way.

Given the fact of multitude of actions required in various countries (and several interdependencies involved) this is a very opportunity for EU countries to test their procedures, including a perspective to coordinate the Mechanism in a complicated scenario, where several neighbouring European Union countries are affected by the man-made and natural chemical and environmental disasters.

The first attack planned to exploit extension of a number of victims combining the release with a heavy traffic of sport spectators heading to a nearby city for a European Cup football match. Early morning a group of

terrorists attacked a chemical plant in the city of Yavoriv on the Lviv oblast as a result of an attack a cloud of toxic substance is released.

The toxic cloud is moving towards border with Poland. The cloud threatens to cause huge uncontrolled release of toxic substances to nearby water reservoir. Due to international character of the consequences and neither known extent nor possible propagation of incidents Ukraine requested assistance from ERCC and involvement of the regionally available forces from Poland and Czech Republic.

Ukraine requests an international assistance in the shape of: international emergency response teams (especially teams with a capacity to detect, measure concentration of toxic substances in the air and foreseen movement of toxic cloud, medical teams and salvage operations specialists), coordination team to advise local emergency authorities and facilitate coordination of incoming assistance and in kind assistance. Because Belarus is also affected, additional forces from Lithuania will be involved.

Besides the main emergency caused by uncontrolled release of toxic substance some accompanying incidents occur as an effect of coincidence and unintended actions of people endangered by main incidents. As toxic cloud moves it causes serious concerns of safety for people living in close vicinity what imminently leads to mass evacuation and panic. Numerous collisions and road accident are noticed, increasing a need for interventions of rescue services that causes a huge demand on additional resources to be involved in rescue operations.

Depending on the specific objectives for each exercise, the scenario and different injects will be adjusted accordingly to target the aim and audiences. The participating teams will be challenged by different dilemmas brought in through the targeted injects. Some types of injects need the role-players who in person interact in a realistic way with the participants, delivering the necessary information to the team. A set of maps and baseline data are part of the basic information package that will be tailored to the specific exercise venues to ensure correct geographical locators and design of maps and country specific information material

OBJECTIVES:

The overall objective is to carry out major emergency simulation exercise, in the context of the European Union Civil Protection Mechanism, making it possible to respond to a man-made disaster and fight the consequences of it. Exercises will be organized as a combination of Table Top Exercises on early stage of the project and Full Scale Field Exercise, as a main event. The purposes of the project is to:

- verify current status of the neighbouring European Union countries preparedness for chemical and chemical related incidents of a CBRN nature and magnitude,
- verify interoperability of EU - the neighbouring European Union countries operations on a procedural level,
- verify ERCC mechanism pertaining to actions originating in the neighbouring European Union countries
- verify EUCP capacity to participate and add value to a emergency response action to trans-boundary incident originating in the neighbouring European Union countries ;
- the neighbouring European Union countries shall test effectiveness of CECIS in CBRN disaster response verify/ amend ERCC transport and logistics procedures in EU neighborhood country
- identify any areas requiring improvement, taking into consideration rapidly changing societal situation in the EU and Eastern Neighborhood.
- create, within the EU Civil Protection Mechanism and neighboring countries, a common basis of understanding concerning the tasks, procedures and co-operation during international civil protection assistance interventions,
- test procedures for receiving international assistance, establishing a RDC and OSCOCC (established by EUCPT) as tools for good coordination of them (i.e. existing procedures within EU Civil Protection Mechanism),

- check compatibility of different rescue and communication equipment (during the common work of international rescue teams),
- build up a capacity to work in a multinational environment, with competent national authorities and under extreme conditions,
- prepare for likely extraordinary situations, when quick international assistance will be necessary,
- checking different options of activation of EU Civil Protection Mechanism (egg. third country where main emergency occurs or participating state threatened by expected situation development (toxic cloud moving towards country border)),
- pre-alerting of EU Civil Protection Mechanism modules in case of possible risk of escalating emergency, relocation of emergency assets to shorten response time,
- checking of existing procedures and common practices regarding to emergency evacuation of EU citizens located in third country directly threatened by significant risk of potential terrorist attack.
- test existing procedures and international law regarding emergency response in case of terrorist attack on public objects during huge public events,
- verify in practice the agreements which are already in place, in case of CBRN accident during huge international public event involving huge number of victims and need for interdisciplinary cooperation (different services) as well as activation of Mechanism to support one of MS,
- check international intervention teams' capabilities when they are working together in common staff to deal with a crisis and also cooperation in the field to deal with single threat.

EXPECTED RESULTS:

- project is a good opportunity for several actors taking part in Union Civil Protection Mechanism (UCPM) to verify and improve (if necessary) their operational procedures in case of CBRN incidents.
- the neighbouring European Union countries will be better prepared for growing terrorism threats;
- The practical exercises rehearsing common response to a situation as in the scenario are good chance to:
 - test all existing procedures in case of emergency situations, especially in case of CBRN accidents,
 - develop standard operation procedures in the areas identified during table top and full scale exercises as requiring special attention
 - elaborate baseline solutions connected to such incident that might happen during the events related to man-made disasters,
 - verification of existing country to country agreements) and testing its practical implementation in case of major emergencies,
 - practice the process and its procedures of evaluation of full scale field exercises organised in the framework of EU Civil Protection Mechanism,
- share knowledge about EU Civil Protection Mechanism among the neighbouring European Union countries especially through dissemination of minimum required standards and procedures in the framework of civil protection valid for EU Participating States.
- Development, promotion and professional prowess of voluntary fire services in the the neighbouring European Union countries and their preparedness to support to meeting the CBRN related disasters;
- Development of training materials for preparation and conduct of TTX and FeX for the the neighbouring European Union countries, to be used in the Universities and professional education places.

PROJECT COMPLETED ACTIVITIES:

TABLE TOP EXERCISE (TTX) in Minsk, Belarus, 29-30 October 2019, was a first major activity within EU-CHEM-REACT 2 program (www.ecr.iccss.eu). TTX core aim was to develop capacities of Belarus, Moldova and Ukraine to test chemical safety and security actions under the EU Mechanism. The TTX was therefore a subset of measures to assess and enhance response capacity with regard to chemical safety and security threats, with the Command Post Exercise (CPX) to be held in Chisinau (Republic of Moldova) on 28.02.2020 and Full

Scale Field Exercise (FsX) to be held in Lviv (Ukraine), on 15-16 September, 2020, as the core event to evaluate progress made in responding to chemical safety and security incidents.

TTX was organized on the basis of EU guidance within Exercise Management Team (EMT), with a well-defined and implemented roles by Players, Response and work of EXCON. There was virtual OSOCC operating. There was an independent Evaluation Team functioning.

Over 100 partners and experts representing central and local authorities, industry, academia, civil society and media, from Belarus, Czech Republic, Moldova, Poland, Ukraine, EU, Organisation for the Prohibition of Chemical Weapons (OPCW), UN OCHA, gathered on 29 October, 2019 in Minsk, at Minsk University of Civil Protection, to verify preparedness to local, national and international response to man-made and natural chemical and ecological disasters. During two day activities the participants of EU-CHEM-REACT 2 Table Top Exercise (TTX) will test their interoperability, in training mood, with the European Union Civil Protection Mechanism (UCPM) and support of and cooperation with the international partners, including from EU, UN OCHA and OPCW. The TTX was continued on 30 October, at the International Rescuers Training Centre (<http://rescuetraining.ucp.by>), near Minsk, with field activities and 200 participants, who demonstrated capacities and preparedness of Belarus teams and their cooperation with international volunteers. The capacities of the Polish volunteer fire fighters will be presented and promoted within the EU Mechanism. The participants received certificates of attendance.

VIPs and Observer Program. The TTX was opened by gen. **Vladimir Vashchenko**, Belarus' Minister for Emergency Situations. There was a parallel VIPs/Observer program which included national and international guests, including **Mr. Albrecht Broemme**, President by German Federal Agency For Technical Relief, **gen. Mihail Harabagiu**, head of Moldova Fire Service, senior officials in civil protection and volunteer fire service from Lithuania and Poland, including **gen. Wieslaw Lesniakiewicz**, Vice-President of Polish Volunteer Fire Service Association, and members of Diplomatic Corps in Minsk.

The TTX preparation and conduct confirmed that EU-CHEM-REACT 2 is an important program which united multi-stakeholder communities to promote the EU and its values, and strengthen high level of response within the Union Civil Protection Mechanism (UCPM). The program is an example of regional cooperation to reduce chemical threats and to prevent, prepare for, and respond to chemical and environmental emergencies.

TTX Evaluation Team evaluated current knowledge, proficiency, and the adequacy of practices, procedures, emergency plans, communications and critical thinking and decision making processes in support of timely and responsive chemical safety and security actions. The evaluation of the TTX was a first step in the project evaluation as a whole. It established a baseline for assessing the progress made under the project with increasing chemical safety and security response capacity that will be further tested in the subsequent CPX and FsX. **TTX achieved the planned and agreed objectives, what was confirmed at the TTX conclusion by Head of the Evaluation Team.**

TTX Media Plan was actively implemented what enabled a broad promotion of EU and UCPM in Belarus and in the participating countries.

Command Post Exercise (CPX), 03-04 March, 2020

General Inspectorate for Emergency Situations of the Ministry of Internal Affairs of the Republic of Moldova (IGSU), Chisinau, Moldova, <http://dse.md>

Over 80 participants from governments, local authorities, industry, academia, civil society and media and civil protection experts and fire fighters from Belarus, Czech Republic, Lithuania, Latvia, Moldova, Poland, Romania, Ukraine, European Commission (DG ECHO), UN Office for the Coordination of Humanitarian Affairs

(UN OCHA), World Health Organisation (WHO), US Defence and Threat Reduction Agency (DTRA), joined Command Post Exercise (CPX) on March 03-04, in Chisinau, Moldova.

CPX successfully tested procedures to request and offer international assistance as a result of major man-made and natural disasters happening simultaneously in Belarus, Moldova and Ukraine, within European Union Civil Protection Mechanism (UCPM). The relevant procedures of UN OCHA, WHO International Health Regulations (IHR) and OPCW, on provision of assistance were also tested.

It further enhanced response and coordination capacities in requesting and providing cross border assistance and **Union Civil Protection Mechanism** activation in case of events involving environmental emergencies. The relevant institutions/agencies from Poland, Latvia, Lithuania, Czech Republic, Ukraine joint the launch of the UCPM mechanism in training mode.

CPX promoted EU, its values, with an emphasis on Union Civil Protection Mechanism (UCPM), and share national best practices and capacity building and positive stories about the EU and inform the public about our actions. CPX highlighted the cooperation between the neighboring countries to mitigate chemical and environmental disasters and use of UCPM. CPX demonstrated Moldova's high civil protection capacities and its inter-operability and readiness to cooperate with international partners.

CPX was conducted on the basis of ICCSS methodology of Comprehensive and Integrated Tabletop Exercises (CI-TTEx). The CI-TTEx comprehensive and integrated approach provides for an active involvement and cooperation of all relevant authorities who are engaged in crisis management and prevention, preparedness for and response to CBRN and natural emergencies. It is designed to test local, national and international procedures, including the Union Civil Protection Mechanism (UCPM) activation and active cooperation with international organisations.

CPX was dedicated to one of the parallel events – flooding in Moldova. This allowed to conduct exercise operations of command centres and practical activation of Union Civil Protection Mechanism. CI-TTEx ensures possibility of taking lessons learnt after each phase of the project and verify and implement them in the consecutive phases of the project.

CPX was accompanied by parallel VIPs and Observer Program and an active Media program.

PROJECT INCOMING ACTIVITIES AND IMPLEMENTATION SCHEDULE:

FULL SCALE EXERCISE (FsX) in Lviv, Ukraine, 15-16 September, 2020. FsX is a main event of the project. The scenario construction requires an extensive number of rescue services, agencies and other organizations to be involved in practical part of the exercises. Responders from **various countries including Czech Republic, Latvia, Moldova, Voluntary Fire Services** from participating countries, will be challenged with many injects creating necessity of extensive cooperation both on the operational and planning level. One of the exercise objectives is to assure that exercise participants will be involved in carrying on rescue activities constantly for 36 hours.

FINAL PROJECT CONFERENCE: 6 November, 2020, Lviv, Ukraine.

The partners agreed to include and develop the capacities of the volunteer fire fighters and volunteer medical rescue teams, to be further promoted within the EU Mechanism.

EU-CHEM-REACT 2 PARTNERSHIP

- **International Centre for Chemical Safety and Security (ICSS) in Warsaw, Poland, www.iccss.eu** - initiated and runs the international consortium EU-CHEM-REACT, which was awarded an EU grant for years

2017-2018. ICCSS possess major management experience in international projects and broad contacts in the region – **leader of the Consortium**

- **General Directorate of the Fire Rescue Service of the Czech Republic**, <https://www.hzscr.cz/> – possesses CBRN and natural disaster response and operational capacities and experience on use of UCPM and EU tools, EU-CHEM-REACT observer and provider of technical capacity. This will be done through State Fire Rescue Service of Latvia– technical and operational capacities and experience in use of UCPM and EU tools.
- **The General Inspectorate for Emergency Situations of the Ministry of Internal Affairs of the Republic of Moldova**, <http://www.dse.md> – possesses CBRN and natural disaster response capacities and experience in organization and conduct of exercises.
- **Lviv State University of Life Safety, Ukraine**, <https://ldubgd.edu.ua/> is a national leading education and training facility in fire service, with broad competence in substantive and support staff, and a modern technical base, to conduct exercises
- **The State Educational Establishment "University of Civil Protection of the Ministry for Emergency Situations of the Republic of Belarus**, beneficiary: <http://www.ucp.by> a national leading education and training facility in civil protection, and a centre to conduct national and international activities, including exercises, EU-CHEM-REACT observer.
- **Fire Safety Works and Services Association in Lithuania**, <http://www.pdpa.lt> – offers technical experience, technology capacities and contacts to conduct practical activities in crisis management.
- **State Fire and Rescue Service, Ministry of Interior of Latvia**, <http://www.vugd.gov.lv/> – **provision of** CBRN and disaster response and operational capacities and experience during the FsX and use of UCPM.

INTERNATIONAL ORGANISATIONS PARTICIPATION:

- **UN OCHA** – coordination of effective and principled humanitarian action;
- **OPCW** – verification of use of chemical weapons and international assistance in case of use of chemical weapons;
- **OSCE Project Coordinator in Ukraine** – provide an expertise on cooperation with the Ukraine relevant organizations and member of the evaluation process;
- **INTERPOL** – chemical security prevention and information exchange.



ICCSSL

International Centre for Chemical Safety and Security (ICCSSL)

www.iccsl.eu

The ICCSSL, established in October 2012 as an independent non-profit organization, based in Warsaw, Poland, supports the development of national and international networks in reducing chemical threats and enhancing chemical and environmental safety and security among national agencies, international organizations, industries, academia, civil society and media.

The ICCSSL is a multi-stakeholder forum for sharing knowledge and best practices, with an emphasis on industry, transportation of chemicals, academic studies, scientific research, laboratory work.

The ICCSSL concentrates on practical activities and cooperation, including training and exercises, with an emphasis on Table Top Exercises (based on the ICCSSL methodology), crisis management, and promoting chemical and environmental safety and security nationally, regionally and worldwide. A leading feature of the ICCSSL is a broad cooperation with the national and international agencies and industries based on five core principles: sustainability, continuity, public-private partnership, multi-stakeholder participation, and modern management.

Working together to ensure chemical safety and security