



# **EU-CHEM-REACT-2**FULL SCALE FIELD EXERCISE (FX)

# **Exercise Handbook**Facilitator's Situation Manual

### Lviv, Ukraine 27-29 September 2021



#### EU-Chem-React-2 FX Handbook

#### FX Handbook

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#### 1. General Information

The Full Scale Field Exercise (FX) is a foreseen activity of EU-CHEM-REACT-2 project No. 828788 (<a href="https://www.ecr2.iccss.eu">www.ecr2.iccss.eu</a>); short description of the project – see Attachment 1. The project is funded by the EU and implemented in years 2019-2020 to addresses a need to improve prevention, preparedness and response to chemical disasters in Belarus, Moldova and Ukraine through:

- Comprehensive Table Top Exercise (TTX), Command Post Exercise (CPX) and Full Scale Field Exercise (FX),
- 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.

Project promotes joint training and exercises to further dissemination of the knowledge about the Union Civil Protection Mechanism (UCPM). The project will test national and international procedures for trans-border movement of civil protection capacities between EU and EU neighbouring countries.

The Field Exercise as the main event of the project is to be organized close to the city of Lviv on 28-29 September 2021. In order to underline national and international commitments, the project supports the implementation of international obligations, including UN Security Council Resolution 1540 and Chemical Weapons Convention (CWC). Among the participants there will be the voluntary fire service units with the aim to test their interoperability with the national and international fire services.

This document presents goals, objectives and all details necessary to carry on the EU-CHEM-REACT-2 FX. Amb. Krzysztof Paturej is the Project Leader.

#### 1.1. Union Civil Protection Mechanism - introduction

In year 2001 the EU Civil Protection Mechanism (UCPM) was established, fostering cooperation among national civil protection authorities across Europe. The Mechanism currently includes all 27 EU Member States and, additionally, Iceland, Montenegro, Norway, Serbia, North Macedonia and Turkey.

The Mechanism was set up to enable coordinated assistance from the participating states to victims of natural and man-made disasters in Europe and elsewhere.

In response to the high number of recent emergencies (UCPM has been activated more than 400 times since 2001), in November 2017 the EU Commission announced new plans to strengthen the EU's civil protection response to support Member States to better respond and prepare for natural and man-made disasters.

The operational hub of the Mechanism is the Emergency Response Coordination Centre (ERCC), which continuously 24/7 monitors emergencies around the globe and coordinates the response of the participating countries in case of a crisis. Thanks to the participating states' pre-positioned and self-sufficient civil protection modules, civil protection teams are ready to intervene at short notice both within and outside the EU. They undertake specialized tasks such as search and rescue, aerial forest fire fighting, advanced medical posts, etc.

Any country in the world can call on the EU Civil Protection Mechanism for help. Since its launch in 2001, the EU Civil Protection Mechanism has received close to 300 requests for assistance. It intervened in some of the most devastating disasters the world has faced in recent years, such as the earthquake in Haiti in 2010, the tsunami in Japan in 2011, typhoon Haiyan that hit the Philippines in 2013, the Ebola outbreak in Africa in 2014, the conflict in Ukraine in 2014) the earthquake in Nepal in 2015 or the refugee crisis and floods and forest fires in Europe. Basic facts on UCPM can be found in Attachment 2 to this Manual.

The European Civil Protection Pool (ECPP) – former European Emergency Response Capacity (EERC) – consists of a voluntary pool of resources for emergency response, which are precommitted by the countries participating in the Mechanism. The voluntary pool allows for a more predictable, faster and reliable EU response to disasters. It is also intended to facilitate better planning and coordination at European and national levels. The European Medical Corps is part of the ECPP (see <a href="https://ec.europa.eu/echo/what/civil-protection/mechanism\_en">https://ec.europa.eu/echo/what/civil-protection/mechanism\_en</a>).

The Mechanism helps in marine pollution emergencies, where it works closely with the European Maritime Safety Agency (EMSA). When a crisis occurs in developing countries, civil protection assistance typically goes hand in hand with EU humanitarian aid.

The Mechanism also provides participating countries with the opportunity to their civil protection teams. By exchanging best practices, teams increase their ability and effectiveness in responding to disasters. Additionally, the Mechanism provides emergency communications and monitoring tools, overseen by the ERCC through the Common Emergency Communication and Information System (CECIS), a web-based alert and notification application enabling real time exchange of information between participating states and the ERCC.

UCPM activation process is presented below in Fig. 1.

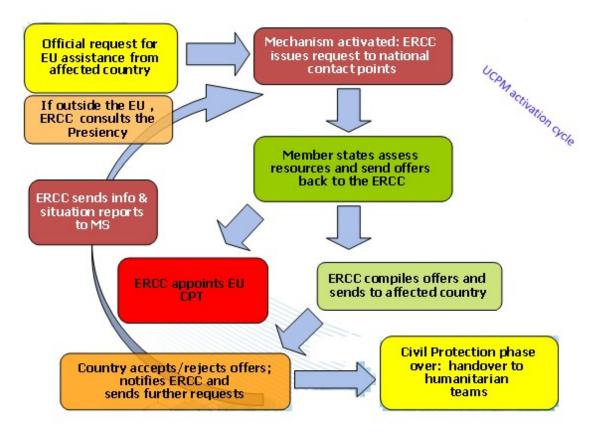


Fig.1. The UCPM activation cycle

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An analysis of the outcomes of disaster risk assessments undertaken at national levels across Europe, supported with of policy processes and scientific data, has identified the most common risks across the EU. The Overview of Risks draws up a landscape of the main disaster risks Europe faces today.

Finally, the European Commission supports and complements the prevention and preparedness efforts of participating states, focusing on areas where a joint European approach is more effective than separate national actions. These include improving the quality of and accessibility to disaster information, encouraging research to promote disaster resilience, and reinforcing early warning tools.

#### 1.2. Coordination Mechanisms

First and main coordination Mechanism, as a response to the overwhelming and complex situation in the country, would be a Union Civil Protection Mechanism (UCPM). The Mechanism was activated by the Ukrainian Government (during TTX) and as a result of it ERCC distributed the request for assistance among the Member States and collected the response.

The Government of Ukraine received the offers of assistance from the Members States of Mechanism and accepted those which met the requirements (CBRN, medical and fire fighting capabilities from Poland and Latvia).

ERCC will deploy a EUCPTeam to establish a coordination mechanism and facilitate an effective use of international teams.

Due to the fact that Ukraine is a non UE member and the CECIS platform is used by the EU Member countries only, there is a need for introduction of some UN Coordination Mechanism. For this purpose Virtual On Site Operations Coordination Centre, called vOSOCC, would be used for operational coordination of response. UN Disaster Assessment and Coordination Team (UNDAC Team) maybe/probably not be deployed; EU Civil Protection Team (EUCPTeam) would be responsible for the overall coordination and Reception/Departure Centre and Coordination Cell set up.

Coordination Cell would be created in close proximity to Local Emergency Management Authority staff (LEMA) location. The tent would be set up by Ukraine as HNS support, while operations carried out by EUCPTeam and International Teams liaison officers.

Overall responsibility for the response of national and international responders would lay on the Ukraine local emergency response authority. LEMA would make an initial assessment of the emergencies and deploy national capacity at first. If the situation requires and national capacity is not sufficient LEMA would deploy international assets (by tasking through vOSOCC.

#### 2. Full Scale Field Exercise

#### 2.1. Purpose and Scope of the Exercise

The scope of the exercise is the crisis management and emergency response action by district authorities from the point of receiving information about damages occurred due to the extreme weather conditions and consequent man-made emission (terrorist attack) of toxic substances, until the completion accident response and crisis mitigation. The actions include all routinely implemented response, notification of neighbouring country, receiving material support from

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that country, facilitating cross-border procedures and accommodation of the incoming response resources, notifying of central government, issuing request for assistance from Union Civil Protection Mechanism and receiving assistance from UCPM<sup>1</sup>. The exercise entails ex-post assessment of approximation of Ukrainian and EU response and crisis management procedures.

#### 2.2. Exercise Goals and Objectives

#### Goals

- The practical verification of the current status of Ukraine preparedness for chemical and biological related incidents of a CBRN nature and mass impact magnitude;
- The practical verification of the activation of Union Civil Protection Mechanisms through National Point of Contact;
- The practical verification of the interoperability between EU countries and Ukraine on a tactical and intervention level;
- The practical verification of the mechanisms employed by ERCC and pertaining to actions originating in Ukraine;
- The practical verification of the European Emergency Response capacity to participate and add value to emergency response action to trans-boundary incident originating in Ukraine and expanding to the neighbouring countries.

#### **Objectives**

- To verify the field coordination between EUCPTeam and international and national intervention teams;
- To verify and improve the existing operational procedures;
- To verify deployment of international teams;
- To check the possibilities of cooperation between international relief teams deployed on site through ERCC in the specific conditions;
- To test the capability of EU assessment and coordination team in set up of Coordination Cell and leading of operations conducting on site;
- To test the interaction between POC of the participating countries and EU in case of CBRN and massive scale natural accidents/threats;
- To verify the standard operational procedures for activation of cross border assistance in case of CBRN event;
- To test existing procedures, response time and real utility of EU deployed experts;
- To verify the decision making process on international and national level;
- To test the communication with residents of areas in close vicinity of emergency, informing large amount of people at the same time, using existing alerting systems with special focus on disabled people;

<sup>&</sup>lt;sup>1</sup>The Union Civil Protection Mechanism (UCPM) Fact Sheet is presented in Attachment 2.

 To verify the cooperation with voluntary based capacities (e.g. voluntary fire service and red cross intervention teams) and the capacities to operate in multinational environment. Practical test to be incorporated in the process of building capacities of intervention teams to be registered and certified as international teams.

#### 2.3. Exercise Management Team

Personnel preparing exercise is organized in Exercise Management Team (EMT), also called Exercise Control Team (EXCON). Exercise Management Team represents a team of experts with expertise in disaster management and they have an extensive international experience. The EMT should be staffed by individuals with relevant subject matter expertise and familiar with full scale field exercise (FX) preparation and execution. As required or desired the other specialists from the subject institutions, organizations, and/or enterprises may be involved in an exercise management. Representatives of all major institutions/agencies taking part in the exercise should be invited and designated as members of the EMT/EXCON.

The Exercise Control Team is headed by an EMT Leader – Exercise Manager, responsible for the exercise preparation, conduct and evaluation, assignment of the EMT members' roles and tasks, and in overseeing all efforts related to the FX. The EMT portrays the higher headquarters of the participants (ERCC and national contact points as well as LEMA) and inserts injects according to the event list. Any appointments to the EMT are at the discretion of the Exercise Team Leader/Exercise Manager.

Typical structure of Exercise Management (Exercise Control) Team is presented in Fig. 2 below:

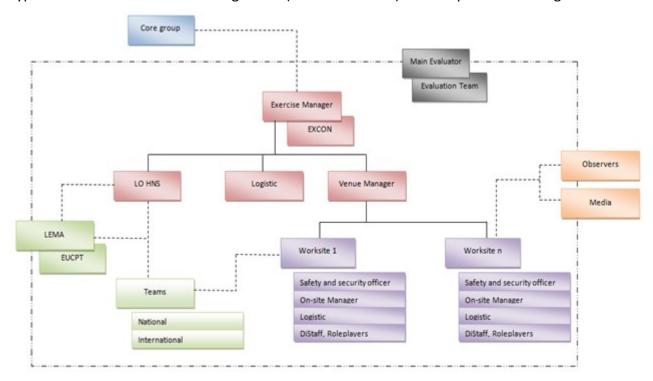


Fig. 2. Typical structure of Exercise Management/Control Team (EMT/EXCON)

The EMT is responsible for the exercise preparation and its execution, evaluation and follow up. EMT is also responsible for the administration and logistics necessary to support the exercise. Trainer teams report to and coordinate their activities with exercise control. It works with exercise manning tables, linked to the events lists and injects.

When the preparation phase of the exercise begins a small core staff is convened to initiate early planning. When the exercise plan is completed, composition of the EMT can be slightly modified to better respond to the demands and requirements of execution and follow up phases of the FX, but all core EMT members, including EMT Leader, remain in the team.

Exercise control steers the exercise – as such it is also the higher command for the exercise and simulated Community Mechanism Interventions. This is a vital function for the exercise for the duration of the exercise. The function is vital as the ERCC action determines the framework of the Mechanism intervention and guides the EUCPTeam; ERCC is also the recipient of reporting.

#### EMT is composed by:

- EMT Team Leader/Exercise Manager;
- Deputy EMT Leader;
- Facilitator(s);
- Exercise Evaluators;
- Subject Matter Experts;
- Venue manager (and his replacement);
- Logistic officer;
- Admin officer;
- Data Collectors;
- Financial officer;
- Role player's coordinator.

Composition of the EMT for this FX is presented in Attachment 3.

#### 2.4. Exercise Structure

#### 2.4.1. Exercise format

The fundamental document of the exercise is The EU-CHEM-REACT-2 FX Handbook – Situation Manual.

The exercise will be preceded by a general explanation of its nature, scope, limitations and goals, followed by a description of the scenario. That description will be presented orally at the beginning of the exercise.

The exercise will be moderated. The Facilitator(s) will oversee the course, control the flow of events and facilitate the discussions.

The exercise is a multiple workspace exercise. Teams composed according to the real-life functions are separated physically.

Communication is provided by available technical means. Communication content is assessed, communication protocol are assessed with regard to their efficiency.

The exercise may employ CECIS, vOSOCC, Copernicus information communication tools.

The exercise is events driven.

Each new activity is initiated by presenting the players a problem in a form of trigger. A trigger is directed to institutions and/or first responder unit(s). It is however decision of each addressed

group of players to find it's staked, the problem solving and join the situation management body. An example of a trigger is presented on a Fig. 3.

Trigger #	Trigger time:	0	Trigger to:	XX, YY
			Issued by:	Facilitator
	Simulated time:	Day No.	Issue method:	Paper and screen
Input	Loret ipsum			
Additional information	Supplemental information			
Questions	What to do etc.			

Fig. 3. Example of the trigger for introduction of exercise sequential events.

It is the Facilitator who decides when to inject a new set of facts and actions to be taken (a trigger), thus opening the subsequent phase of the exercise.

Triggers are released on paper and/or screen.

A trigger contains the following information:

- Nature of event, piece of information,
- Originator, addressees, and form of release,
- Location of an event in time, both real and exercise,
- Continuation of narrative usually at one or few planes,
- Questions pertaining to the crucial elements of the action; at the scenario stage, questions are invitation to completion of the scenario;
- Each player represents her/his organisation and acts within the scope and objectives set in this manual,
- Player is expected to respond to the trigger activity presenting applying routine procedures of a represented institution. The presentation may include:
  - o description of a preparedness status of the organisation,
  - o actions undertaken, means, resources, description,
  - o communication, how, with whom.

The exercise is recorded. A dedicated exercise data collector will keep a log of ideas and outcomes in relation to the objectives, to support the evaluation and help with the drawing of conclusions (lessons learnt) and the preparation of the final documents.

#### 2.4.2. Exercise briefing

The exercise begins with a briefing. The purpose of the briefing is to inform the players and observers about the objectives, format and conduct of the exercise and any other information enabling players to participate fully and actively.

The briefing is led by the EMT Leader, Dr. Lech Starostin.

#### The briefing covers:

- background, goals and objectives,
- format and conduct, including presentation of:
  - o players, teams' composition, location of each team,
  - o facilitator's team,
  - o data collectors, evaluators, their duties and identifying badges,
  - o communication means and format, technical equipment made available,
  - communication format from/to the Facilitator,
- timeframe, order of proceeding,
- explanation of the exercise documents / triggers,
- · forms of communication and presentation of decisions and actions taken,
- description of construction of the scenario,
- · components neglected, mock, assumed,
- initial narrative.

#### 2.4.3. Exercise conduct

The exercise is led by the Facilitator. Facilitator's assistants are nominated by the EMT Leader from the Exercise Management Team.

Basic exercise principles are as follows:

- The scenario contains several time sequences,
- Each action is initiated as practical answer to an inject,
- The particular topics are played in near-real time within a time sequence they belong to,
- Facilitator controls the action using (i) paper notes or (ii) network communication,
- Facilitator declares termination of a time-sequence and passing to another activity,
- Information exchange is passed from one team to another using available means (radio communication, paper, electronic mail, etc.),
- Teams communicate using radio, paper, electronic mail, or other(s) communication means,
- Every issued message contains header information: from to and real clock time. If information is on paper, a copy is delivered to Facilitator,
- Evaluators collect information from any place and event being part of the FX.

#### 2.4.4. Exercise debriefing

Debriefing consists of:

- Short report by the Facilitator,
- Short report by the data collector,

- Short reports by the representatives of the players,
- Hot-wash of ideas and discussion of lessons-learnt,
- Information on subsequent steps including the preparation of the exercise report.

#### 2.4.5. Pre-exercise Final Arrangements – Assumptions and Artificialities

- The language of exercise documents is: English
- The official language of the exercise is English. However participants may use other languages and in particular Moldovan, Belarusian, Ukrainian and Russian in order to smoothen communication and as far as that doesn't hamper one's situation comprehension;
- The exercise is a near real time exercise;
- The exercise will not be used to evaluate institutions, neither to appraise individuals;
- The geographical locations where the events take place exist in reality while the employed infrastructure is fictitious and does not exist in reality. The geographical location serves only exercise purposes and its non-essential features should not play role in the exercise;
- The exercise is part of testing operability and capacity of European Civil Protection Mechanism. For that reason Euro-Atlantic mechanism, in particular EADCC and EADRU are not part of this exercise and have no roles assigned.

#### 2.5. Exercise venues

All exercise venues are located in Lviv Region in a western part of Ukraine close to the city of Yavoriv – Novoyavoriv State Enterprise – and were chosen based on the previous exercises experience. International Teams will cross the border in Korczowa border crossing point and travel to Reception and Departure Centre (RDC). The Base of Operation (BoO is located centrally to all worksites and not far away from EMT venue. Maximum distance between BoO and the farthest worksite is approx. 5min drive. EMT members and consortium partners as well as Venue management staff and evaluators will be accommodated in Orion Hotel, Kozhychi, approx. 35 km from the BoO. UCPTeam members and observers will be accommodated in Mirage Hotel, Sudova Vyshnya, approx. 27 km from the BoO. Social event for all participants will be organised at the BoO after the official closing ceremony.

#### 2.5.1. Base of Operations

Base of Operations (BoO) is an area where the exercise participants would have their headquarters or main activities. There should be a clear separation between the area where the exercise participants will "operate" and all other groups that will be present during the exercise. The BoO acts as an assembly point for different actors, teams, VIPs and Observers, and a place where briefings can be given and Role Players will be prepared. A parking and place for bus or trucks is to be considered.

#### 2.5.2. Worksites

There are three main worksites, where the different episodes will be played. Number of worksites has been prepared to simulate the events described in scenario. To provide a safe and

challenging environment conscientiously chosen places has been organized and equipped with different simulation agents, machines and role players. Each site is prepared to involve the large number of rescue capacities in non-conventional and demanding operations. Worksites are located in close proximity to BoO to minimize travelling time and allow exercise participants and observers to move in between each scenario.

#### 2.5.3. List of exercise venues

The majority of exercise venues are located on the territory of Novoyavoriv State Enterprise. The Base of Operations and the EMT venues are in close proximity to each other. The worksites are located in the same complex.

Venue	Location	Date	Team	Main Activities	Location
#1	Border crossing	27.09.2021	International teams	Border crossing, Reception by Host Nation Support team	Korczowa/Krakovets
#2	Base of Operations	27.09.2021 - 30.09.2021	EMT + Venue staff	EMT staff, Venue management staff, Project management	Novoyavoriv State Enterprise "Ekotransenergo"
#3	Reception Centre, Base of Operations	27.09.2021	Participating teams	Accommodation and meals for the teams	Novoyavoriv State Enterprise "Ekotransenergo"
#4	Coordination Cell/LEMA	27.09.2021 - 30.09.2021	Ukrainian staff, UCPT members,	Assessment, meetings, decision making process	Novoyavoriv State Enterprise "Ekotransenergo"
#5	Worksites*	28.09.2021 – 29.09.2021	All intervention teams	Assessment, CBRN	Novoyavoriv State Enterprise "Ekotransenergo"
#6	LSULS, Lviv	30.09.2021	EMT + LEMA + Venue staff	FX Lessons Learned Meeting	LSULS, Lviv

<sup>\*)</sup>Detailed description of places of practical FX activities are presented in Attachment 4.

#### 2.6. Exercise Agenda - schedule of the exercise events

#### *Day 1 – 27<sup>th</sup> September 2021*

- 11:30 Meeting of the international rescue units in Poland near Polish/Ukrainian border
- 13:15 joint travel to the border crossing checkpoint Korchova (Polish side)
- 14:00 Meeting of all international rescue teams at checkpoint Korchova
- 14:00 17:00 Border crossing procedures
- 17.00 Meeting all international rescue teams in Krakovets checkpoint (Ukrainian side)

18:00 – Arrival of teams, modules and EU CPT experts to the RDC, reception procedures and subsequent Transfer to the place of the exercise – BoO Javoriv

#### *Day 2 – 28<sup>th</sup> September 2021*

- 09:00 Start of the exercise, UCPM activities
- 10:30 Start of joined field rescue activities according to EMT and LEMA with UCPTeam experts interaction
- 12:30 Lunch break
- 17:00 End of day two activities

#### *Day 3 – 29<sup>th</sup> September 2021*

- 08:00 Exercise continues
- 12:00 End of the exercise
- 12:00 Demobilization
  - Debriefing, Hot wash up provided by evaluation team
  - Lunch
- 13:00 Closing ceremony
- 15:00 17:00 FX Lessons Learned Meeting

Full Scale Field Exercise detailed Agenda is presented in Attachment 5.

#### 2.7. Exercise Logistics

#### 2.7.1. General description

The EMT members responsible for logistics should make reconnaissance of the exercise scene. A general reconnaissance is a first step of setting a stage with the aim to confirm all initial observations and agreements. The further steps cover planning logistics, checking available services against the needs arising from exercise documentation, verifying information about a location and access distributed to the participants, checking access requirements and availability of necessary equipment, should any not initially considered requests or remarks arise during a preparation stage they have to be accommodated during setting a stage. Setting a stage also should include verification of feasibility of any planned arrangements. A simple fault-tree analysis of core organizational elements of a plan should be performed during site organization phase and remediation measures or alternative plans made ready.

Logistic is a background activity, and the better organized and performed, the less visible. Moreover the larger exercise is, the more important and challenging logistics. Proper logistical arrangement is essential for the exercise success. Logistical challenges are especially high in the day(s) of the exercise conduct, when many people gathered in one place have to execute multidimensional activity in limited time of several hours.

The most important logistic concerns include organization of the EMT work and its administrative support, facility arrangement and exercise room setup (and re-setup if necessary), registration process, administrative service on spot, conference services, as well as support for post-exercise activities. To make logistic and administrative support more effective, it is advisable to include leaders of logistic group and admin staff to the EMT. That makes any

discussion within the EMT on logistic and administrative issues much more effective and transmission of decision take will be straight.

#### 2.7.2. Documents and materials for EMT

#### **Documents**

#### A. On the wall

- 1. The exercise timeline,
- 2. The exercise objective,
- 3. The Main Inject List,
- 4. The script,
- 5. The communication plan,
- 6. The in/out control,
- 7. The site status (open for operations, prepared and ready, closed),
- 8. Position of the team in the field / sites,
- 9. The logbook (on the screen),
- 10. Daily program,
- 11. Maps:
  - a. General maps with all sites scale preferably at 1:50.000;
  - b. Maps of each site (Google map or satellite earth);
  - c. Detailed map when needed.

#### B. Documents in hard copies

- 1. Exercise handbook,
- 2. Communication book (contacts for all participants)
- 3. International teams factsheets,
- 4. Exercise timeline with injects,
- 5. Received documents file,
- 6. Sent documents file.

#### **Materials and Equipment**

#### A. Communication

- 1. Mobile radio station (according to the network organization),
- 2. Land line phones if it is necessary,
- 3. Mobile phones (according to the communication organization,)
- 4. Fax machine if the case.

#### **B.** Computers

- 1. Computer for logbook,
- 2. Computer for printing and working,
- 3. Printer A3/A4 colour / wireless,
- 4. Projector & screen.

#### C. Materials

- 1. Pencils, paper (different sizes A3, A4 and for flipcharts), rulers,
- 2. Glue, scissors and cutters,
- 3. Scotch tape and other kind of stickers,
- 4. Flipcharts (usually 2),
- 5. Clock.

#### 2.7.3. Arrival and departure

All participants from outside Lviv Raion are arriving not later than on 27<sup>th</sup> September 2021, and departing not earlier than late evening on 29<sup>th</sup> September 2021.

#### 2.7.4. Transport

Transport provided and maintained by host country.

#### 2.7.5. Meals

Meals provided by host country.

#### 2.7.6. Accommodation

- 1. Orion Hotel, 1 Schevchenka St., Kozhychi, Lviv Oblast (<a href="http://orion-hotel.ua">http://orion-hotel.ua</a>)
- 2. Mirage Hotel, 205B Zahorody St., Sudova Vyshnya, Lviv Oblast (<a href="http://hotel-mirage.com.ua">http://hotel-mirage.com.ua</a>)

#### 3. Exercise Participants

#### 3.1. Participants profile

The exercise will be open to participants from relevant national agencies from Ukraine, representatives of chemical industry, EU institutions.

The exercise is intended for players from Ukraine with the incremental participation of neighbouring countries (Poland, Latvia, Czech Republic and Lithuania) and UCPM components:

- The State Emergency Service (SES) of Ukraine,
- Heads of emergency governing body, local administrators,
- Industry operator (playing a role of manager of affected chlorine tank farm),
- Emergency rescue services: fire fighters and medical emergency,
- District (raion) crisis management institutions,

- Police:
  - traffic police, and
  - general prevention and order police,
- Special Commission on elimination of Consequences of emergencies,
- National Point of Contact for international teams,
- EUCPTeam.

The presence of following institutions is non-essential, however requested:

- Border guards Ukraine,
- Border guards Poland,
- Environmental Protection Service Ukraine, Lviv Oblast,
- Poland Voluntary Fire Service,
- Latvia rescue team,
- Moldova rescue teams.

#### 3.2. Participants roles and responsibilities

- Players exercise roles within their capacity and competences
- Facilitators assist the exercising teams in interpreting the scenario:
  - The group facilitator for each group of players is responsible for reviewing the provisions of the exercise with the exercised audience prior to the start of the exercise. It is of great importance that the exercise participants are familiar with: the conditions of the exercise, the background scenario, the 'simulation with role play' exercise method and safety regulations;
  - The group facilitator for each group is responsible for feedback with the exercised audience after every day of the exercise. Any viewpoints from local evaluators should be considered during the review;
  - The group facilitator for each group and the main evaluator are responsible for a final review and synthesis with the exercised audience on the last day of the exercise. The group facilitators will then put together a written synthesis that will be submitted in connection with the aggregate feedback ("hot wash-up") with designated representatives from the exercised actors.

#### **Evaluators:**

- evaluate exercise conduct,
- after the exercise the evaluators assess the exercise bases on their observations and data collected by the collectors,
- the evaluation is done against the objectives, and
- objectives are assessed against the exercise goals,
- Observers take passive role of watching the exercise process. They are free to take notes and participate actively in the debriefing,
- Data Collectors collect data about exercise conduct,

The EMT provides communication and logistical support.

#### 3.3. International teams

Three countries declared participation in the field exercise: Poland, Latvia and Moldova. The capacity of the intervention teams is the following:

- Poland
  - 3 Rescue and Fire-fighters teams and triage medical support unit, based on Voluntary Fire Service;
- Latvia
  - o Chemical team with specialized truck,
  - o Fire-fighters team,
  - o Logistic team,
  - The management component within the intervention teams;
- Moldova
  - Search & Rescue team,
  - o CBRN team,
  - o Fire-fighters team,
  - Rescuers with the MAN ACI 50 specialized vehicle,
  - o SMURD team of paramedics, providing qualified first aid and release, and
  - The management component within the intervention teams;

#### 3.4. Observers and VIPs

The exercise will be open for observers from EU Member States, European Neighbourhood Instrument and other interested parties scientific communities, NGOs, media, and relevant international organizations

#### **Roles of Observers**

- A. As a group, observers have no role to play in the conduct of the FX. They are instead witnessing events and observing the conduct of the FX as well as being informed of the preparatory and ongoing activities of the EU-CHE-REACT project.
- B. During the course of the FX they will be provided with the information regarding activities conducted by the FX participants and the specifics of the response they are engaged with.
- C. Since the EU-CHEM-REACT project and FX itself have an objective to promote EU Mechanism it is envisaged to organize presentations/lectures on EU Mechanism, including cooperation with the international partners.
- D. Since it is presumed that VIPs will be briefed in detail and they are envisaged to "play" themselves in the FX while visiting the emergency sites.
- E. It is expected that the Desk Officer from ECHO often provides a short presentation on the UCPM and impression on the EU-CHEM-REACT exercise project. The ICCSS President as the Project Director will present the exercise project.

#### **Timelines**

The Observers program will last up to 3 days (27 - 29 September 2021), composed of:

Two main days participation in the FX on 28 - 29 September 2021. Observers will have an opportunity to observe the response of the exercise participants, how EMT and Exercise Conduct Organisation is structured as well as insight into the planning and preparation for the exercise. The EU Observers should also be used to provide feedback to the organizers. Observers arriving on 27 September 2021 can have opportunity to observe UCPM actions executed on 27.09.2021.

#### 4. Scenario for Full Scale Field Exercise

# 4.1. Scenario background information, prior history and major incident description

Scenario of the Full Scale Field Exercise (FX) is a follow up on the actions conducted by the participants of the Table Top Exercises (TTX) and Command Post Exercise (CPX).

#### 4.1.1. FX Scenario background information

The scenario responds to the increasing complexity of real-life chemical disaster situations and natural disasters and a growing threat of chemical terrorism. The scenario requires action of emergency response services of Ukraine and Moldova, leaves space for activation of the Union Civil Protection Mechanism (UCPM).

Full Scale Field Exercise (FX) baseline scenario assumes simultaneous big scale emergency in two neighbouring countries: Ukraine and Moldova.

#### **General background information**

In the morning of 22.09.2021 an extended traffic is observed on a national road M10 crossing Lviv, Ukraine. The traffic consist mainly of coaches carrying sport fans heading to Lviv, a capital of province, where European Championship qualifying football match Ukraine - Lithuania is going to take place on Arena Lviv stadium this day in the evening. International and state media inform about serious terrorist threats for planning mass event and speculate on possible attack on chemical plants or chemical goods transportation. In Lviv is partially cloudy night with near isothermal conditions. Temperature is 12°C; a high pressure centre about 500 km N to Lviv provides reasonably warm humid weather all over the country. Locally relative humidity reaches 76% and a gentle breeze of 2 m/s blows from NE. Town is asleep with no night activities taking place.

In the same time severe weather conditions caused massive rains in Carpathian Mountains and Moldova. As a result water levels in Dniester River basin are rising. In Moldova the national state of emergency has been announced.

#### 4.1.2. Prior history narration

#### Ukraine

 As a result of the plane crash (AN-12) 22.09.2021 at 06:05 a.m. on chemical factory LVIVCHEM there was a destruction of the ammonia tank (200 t). Reasons of air crash are unknown.

- In the morning of 28.09.2021 day, as a result of terrorist attack on an Arena Lviv stadium, explosion takes place with massive spread of unknown chemical substance.
- As a result of massive chlorine release in train crash near Pinsk, Belarus, chemically dangerous rains are expected in Ukrainian cities of Rovno region: Komory, Morochne, Prykladnyky, Nevel, Omyt, Nenkovichi, Mutvytsya.
- Additionally, Ukrainian intelligence dispatched secret report to high officials and emergency response services of the state on possible biological or radiological malicious attacks on civilian population, following terrorist act during sport event at Arena Lviv stadium. Who can stand behind such action of CBRN nature is actually not clear.
- Emergency services of Ukraine from local/town level, through province level, and up to national level have been fully involved in mitigation of the crisis situation. Due to massive scale of emergency, some local, next province and finally national response recourses were reaching their limits and finally Ukraine Government Crisis Management Centre decided seek assistance within EU Civil Protection Mechanism and have prepared Request for Assistance, which was sent to European Response Coordination Centre in Brussels on 25 September 2021.

#### Moldova:

- On 22.09.2021 at 6.30 a.m. inhabitants of Rezina town in Soroca region of Moldova are alarming that due to heavy and prolonged rains in the Carpathian region, the level of the Dniester and Reut Rivers is rapidly rising to a critical level of water level in Dniester River at an industrial chemical dump site left after former Potassium Works Factory may be flushed into Dniester.
- Water flooded part of Forty and Rezina (78 houses were flooded), the lands of Soroksky and Rezinsky districts adjacent to the Dniester River. More than 500 houses turned out to be in water in Soroki, including institutions, organizations and shops, of which 67 were destroyed. 563 houses, a creamery and hotel were flooded in Kamenka, 149 houses were under water in Rybnitsa, and half of them were destroyed. 250 houses were flooded in Dubossary, 31 in Criuleni.
- Near town Văratic in Orhei district 237 houses and 440 ha of crops were flooded. Due to
  the breakthrough of the dam near the village, Galashany of the Ryshkansky district, the
  level of the Kamenka River rose to four meters and destroyed 45 houses in the village of
  the same name in the Glodyansky district.
- In town Balti Reuta River suddenly flooded the lower part of the city; 486 houses were flooded, of which 355 were destroyed. Significant damage was caused to a number of municipal and industrial enterprises of the city.
- Emergency services of Moldova from local/town level, through province level, and up to national level have been fully involved in mitigation of the crisis situation. Due to massive scale of emergency, some local, next province and finally national response recourses were reaching their limits and finally Moldova Government Crisis Management Centre decided seek assistance within EU Civil Protection Mechanism and have prepared Request for Assistance, which was sent to European Response Coordination Centre in Brussels on 25 September 2021.

#### 4.1.3. Initial Event(s)

Scenario in Ukraine will be play in detail. Events in Moldova are going to be played as simulation.

#### Initial Event for Ukraine FX detailed scenario

Official Request for Assistance from Ukraine Government is sent to ERCC in Brussels. Ukraine is asking for the following international support:

- Flood containment:
  - General purpose module 1 unit,
  - High capacity pumping module 1 unit,
  - Water purification 3 stations.
- · CBRN containment:
  - Detection and sampling 2 units,
  - Decontamination team 1 unit
- Medical Emergency temporary camp 1 unit,
- Technical Assistance Support Team (TAST) 1 unit,
- Environmental emergency response capacities.

#### Moldova simulated initial event:

Official Request for Assistance from Moldova Government is sent to ERCC in Brussels. Moldova is asking for the following international support:

- Mass decontamination stations with personnel 2 stations,
- Heavy CBRN team 1 unit,
- Mobile hospital for min. 150 people 1 unit,
- Equipment and materials:
  - Medical equipment for first aid for at least for 1000 people,
  - Light chemical suits 500 pieces,
  - Oxygen cylinders 100 pieces,
  - Water 100 tonnes.

#### 4.2. Scenario Sequence of Events list (SSE) for Ukraine

Executive part of FX scenario for Ukraine basically contains two groups of events: (i) activities allied to any action related to UCPM and (ii) practical execution of rescue actions performed by different units of first responders. Both groups of activities are going to be closely connected and executed simultaneously, according to the logic driven by the exercise development.

#### 4.2.1. Sequence of events related to UCPM

#### T1. European Union Civil Protection Team (EUCPTeam) arrives to Ukraine

- EUCPTeam is coming from Brussels by a cruise plane to Warsaw and subsequently by road to Polish/Ukrainian border. No any special heavy equipment;
- EUCPTeam is arriving to Polish/Ukrainian border checkpoint in Korczowa/Krakivets on 27.09.2021 in the morning and going through all border crossing procedures;

- EUCPTeam Leader is trying to establish contact with national authorities (phone / e-mail / other contact);
- EUCPTeam reception: any special procedures, in-country transport and accommodation, establishing of meeting with national authorities.

#### T2. Preparation of meeting of EUCPTeam with host country authorities

- Exchange of information and needs, expectations, offers;
- Initial plan of action for international cooperation;
- Preparation of meeting schedule and selection of meeting participants;
- Preparation of proposals for cooperation with UCPTeam and international teams: general idea of cooperation, liaison officers, place for work;
- Arrangement for further cooperation during the crisis;
- Tasks: assessment and coordination.

#### T3. Meeting of EUCPTeam with host country authorities

- Exchange of information and needs;
- Clarifying mandate of EUCPTeam, presentation of mutual expectations and offers;
- Initial plan of action for international cooperation;
- Preparation of meeting schedule and selection of meeting participants;
- Preparation of proposals for cooperation with EUCPTeam and international teams: general idea of cooperation, liaison officers, place for work;
- Initial arrangement for expected incoming teams and reliefs, where and how to use them;
- Tentative time & place of next meeting.

#### T4. EUCPTeam division:

- After the meeting there is a decision about re-composition of EUCPTeam:
  - One (1) person from EUCPTeam goes to establish the Reception Departure Centre (RDC) with one or two Liaison Office (LO) from Ukraine) at the designated road border crossing point Korczowa/Krakivets;
  - All the other UCPTeam members are going together to affected area, State Capital or other agreed place(s);
- Preparation for establishing RDC by LOs;
- Designated personnel under command of EUCPTeam Member;
- Info by e-mail and vOSOCC; other ways of communication?

## T5. Establishment of the RDC at the designated border crossing point, reinforced by an UCPTeam member

- RDC in the road border crossing point / other agreed place is establishing;
- Real establishing of RDC by LOs;
- When RDC is prepared info by e-mail and vOSOCC;

#### T6. Establishment of OSOCC

- According to situation and expected international assistance is important to decide if it is necessary to establish On Site Operations Coordination Centre (OSOCC);
- OSOCC should be established by international coordination team if national authorities are overwhelmed by situation;

- OSOCC should support affected country with coordination of international teams in close cooperation with national/ local authorities;
- Local Authority reports of established OSOCC via e-mail and vOSOCC information sent to state authority via province authority and to POC for UCPTeam.
- OSOCC works permanently till the end of the exercise, incl. coordination and reporting (see next triggers and Attachment 4 Field Exercise Main Episodes).
- vOSOCC update.

#### T7. Crossing the border by international teams

- international teams start arriving to Ukraine;
- There is information from Lviv airport and from some border crossing points about incoming international teams. Some of them are self-sufficient;
- Host Nation assistance and UE teams documents to be presented at border crossing point;
- Hazardous or forbidden materials which should be stopped on the border;
- Host Nation assistance for international teams in their in-country travel;
- Designation of Liaison Officers (LO).

#### T8. Meeting of international teams in RDC

- Real meeting with Team Leader (role-player) of one of incoming teams (international teams);
- RDC should collect information about the team and support team with important details about situation / safety / tasks / coordination / reporting / etc.;
- vOSOCC update.

# T9. Organization of international teams transport through the host country to the destination area (convoy, refuelling of vehicles, rest, etc.)

- International teams are crossing the border and ready to go to the scene;
- To make it fast, effective and safe, some type of convoy could be organised;
- Convoys' logistic issues and assistance;
- Arrangements for international teams coming by plane.

#### T10. Preparation of general information for international teams by OSOCC or LEMA

- According to plan of action it is necessary to prepare some information for incoming briefing for international teams;
- Way to prepare short briefing with all necessary information (the most important, simple and accurate) to make it as useful as possible:
  - o overall situation,
  - forecasts,
  - terms of assistance,
  - reporting & communication lines,
  - safety & security,
  - medical issues, etc.;
- Additional information to be given to international teams which transferred to their countries can provide long-term assistance;

• Information that shouldn't be given to international teams (due to security reasons or others).

#### T11. Contact of international teams with OSOCC or LEMA

- First meeting of international teams TLs in Coordination Centre;
- Meeting agenda: situation, cooperation rules, tasks;
- Details for the Base of Operation (BoO)
- Host Nation Support (HNS) for international teams logistics support, safety and security issues, overall plan for next days;

#### T12. Arriving to Base of Operation

- Incoming international teams are arriving to prepared for them Base of Operation (BoO);
- Establishing BoO for every team by themselves;
- Requirements for place selected for BoO;
- Safety and security at BoO, incl. COVID-19 precautions;

# T13. Assignments for international teams by OSOCC or LEMA (according to predicted rescue activities – see Attachment 4):

- Based on results of meeting with international teams leaders and situation progress, international teams should be prepared for tasking for next days, according to module type, interoperability and rescue possibilities;
- Assignments can be handed out and coordinated by OSOCC or LEMA;
- Assignments can go parallel for different international teams;
- Providing rescue operations in accordance with type of team
- After completing one task, international teams report to OSOCC or LEMA for another assignment.

#### T14. The demobilization of the international teams:

- Based on situation decision about demobilization for international rescue teams is taken;
- Modules are preparing for demobilisation:
  - o implementation of modules internal procedures,
  - o preparation of documentation incl. custom and emigration procedures;
- Preparation for BoO removal.

#### 4.2.2. Practically performed the exercise main episodes

Field exercise main episodes are grouped in 14 (9 + 5) scenarios:

- I. Scenarios for conducting the practical phase of training in terms of responding to events with hazardous chemical, biological and radiation substances include 9 actions:
  - 1. Transport accident with a leak of an unknown chemical substances;
  - 2. Carrying out special treatment of injured peoples;
  - 3. Transportation of unknown substances across the state border;
  - 4. Detection of hazardous materials;
  - 5. Storage of hazardous chemicals;

- 6. Suspicion of a virus;
- 7. Determination of the degree of environmental pollution;
- 8. Sources of ionizing radiation in illicit trafficking;
- 9. The spread of human disease as a result of biological infection.
- II. Scenarios for conducting the practical phase of exercises in the part: extinguishing fires, rescuing people, conducting rescue operations include 5 actions:
  - Rescue by a combined method using hand fire ladders and air cushion with sequential fire extinguishing;
  - 2. Rescue of injured peoples from the upper floors of the building with the help of a car ladder, articulated car lift and special climbing equipment;
  - 3. Extinguishing a fire in an industrial building with elements of rescuing peoples;
  - 4. Rescue peoples from the rubble of the building;
  - 5. Rescue action during a transport accident.

More detailed description of the exercise main episodes, including scenarios description and location as well as tasks and actions to be taken and site preparation for each scenario is presented in Attachment 4 to this Handbook.

#### 5. Field Exercise Safety and Security

Safety and security are essential elements in organizing missions and field exercises. Each individual be responsible for his own safety including: participants, EMT, Role Players, Observers, Evaluators The Consortium with all its Partners is responsible for creating a safe and secure exercise environment.

The detailed Safety and Security Briefing document is presented in Attachment 6 to this Handbook. Operational safety of each module is in the responsibility of the safety & security officer of the teams involved in activities of such module; each team member should be familiar with the internal safety & security procedures of the module.

The scene safety officers can trigger an emergency procedure in cases when human life or goods or environment are threatened.

The safety and security measures are compulsory. The responsibility for complying with those measures by the participants falls upon both themselves and their respective team leaders. The basis of the safety organization is a risk assessment of the exercise.

Additional information about safety and security information will be provided before the exercises start.

#### 5.1. Pandemic Safety and Security

Pandemic Safety Team (PST) and its Team Leader takes leading role to ensure that FX exercise participants will follow specific safety rules in regards to Covid-19 pandemic.

The safety of personnel during the exercise is of paramount importance in conjunction with COVID 19 impact. Each participating organisation/rescue teams may need its own safety officer.

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They have liaison with the EMT Pandemic Safety Team during exercise conduct. All safety officers should be briefed prior to the exercise.

Before an exercise a safety audit should be completed to ensure that structures are safe and no unseen dangers are present on the site to ensure that personal requirements and protective clothing/equipment required for COVID 19 insurance is in place for all participants, including volunteers.

First aid/ambulance cover should be provided to deal with any health problems or injuries sustained during the exercise.

For safety reasons, exercise manager should adopt an agreed procedure for intervention into the exercise, including cessation where necessary. Dedicated code words for this purpose are advised. Especially the following code words should be established for:

- Hold suspend exercise for a period;
- Resume start again after a hold;
- Abort early termination;
- End ex end of exercise.

Detailed information about all those regulations can be found in Covid-19 Pandemic Safety Manual for FX participants. To download FX Safety Manual see link below:

http://ecr.iccss.eu/FX Covid-19 Safety Manual Final.pdf

#### 6. Evaluation and Lessons Learnt

The Field Exercise evaluation is an overlapping process of collected data analysis, gaps analysis, development of reports, identification of lessons learned and preparation of an Improvement Plan. The Assessment and Lessoned Learned process starts during last phase of exercise conduct, at the exercise debrief session (EDS), which starts immediately after completion of all practical tasks of the FX. It is important to reemphasize, that the EDS is open for all participants of the exercise, including players, evaluators and observers, with the goal to allow everybody involved in the exercise to share his/her observations, remarks, opinions and suggestions, and to stimulate future improvements and an accurate FX Final Report.

Composition of the exercise evaluation team and its allocation in the structure of EMT is presented in Fig. 4.

The FX evaluation is performed according to exercise's evaluation plan, following evaluation methodology rules (see Attachment 7). Each EMT member should be involved, to some extent, in process of the exercise evaluation, but due to decisive role of evaluation process in successful completion of the FX, core evaluation team is formed within EMT structure. Such team and personally its leader is responsible for detailed preparation of exercise evaluation and following adequate execution of evaluation activities during FX and post-exercise activities.

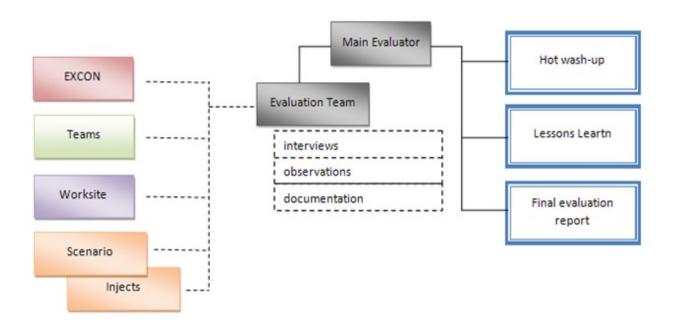


Fig. 4.Exercise evaluation team in the structure of EMT

The exercise objectives are the most obvious reference point for an exercise evaluation so main body of evaluation is dedicated to assess how an exercise fulfilled the objectives. This approach, however, doesn't take into consideration that the success criterion is external to objectives. To make the evaluation complete the evaluation should describe how the objectives serve an attainment of a goal. An exercise execution may not always produce information necessary to carry on such evaluation. Evaluation has to describe a material and technical part of the exercise process and pertains to all of its stages, not only an execution itself. Evaluation has to be based on observations but can also include opinions. It has to be clear which parts of evaluation are based on observations and which rely on the opinions. Evaluation should be formulated in a way allowing conclusions and follow-up. An evaluation team formulates conclusions by itself but different conclusions may be formulated by the others involved in review of the exercise results and in total contribute to the Final Report as the remainder of this section presents.

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#### 7. Glossary of Terms

BoO Base of Operation

CBRN Chemical, Biological, Radiological and Nuclear (materials)

CECIS Common Emergency Communication and Information System

CoOL Consular Online website

CPX Command Post Table-top Exercise

CSS Chemical Safety & Security

DG ECHO Directorate-General for European Civil Protection and Humanitarian Aid

Operations

EADRCC Euro-Atlantic Disaster Response Coordination Centre

EADRU` Euro-Atlantic Disaster Response Unit

ECPP European Civil Protection Pool (former EERC)

ECPPT European Civil Protection Pool Team

EEAS The European External Action Service

EERC European Emergency Response Capacity

EERCT European Emergency Response Capacity Team

EET East European Time Zone

EMT Exercise Management Team

EMSA European Maritime Safety Agency

EPRG Emergency Response Planning Guidelines

ERCC Emergency Response Coordination Centre

ETA Electronic Travel Authorization

EU European Union

EUCPT European Union Civil Protection Team (also EUCPTeam)

EUCPTeam European Union Civil Protection Team (also EUCPT)

EXCON Exercise Control Team

FX Full Scale Field Exercises

HNS Host Nation Support

ICCSS International Centre for Chemical Safety and Security

LEMA Local Emergency Management Authority

LO Liaison Officer

MOFA Ministry of Foreign Affairs

MOI Ministry of Interior

MOT Ministry of Transportation

N North

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NATO North Atlantic Treaty Organization

NE North-East

NGO Non-Governmental Organization

OCHA The UN Office for the Coordination of Humanitarian Affairs

OECD The Organisation for Economic Co-operation and Development

OPCW Organization for the Prohibition of Chemical Weapons

OSCE Organization For Security and Cooperation in Europe

OSOCC On-site Operation Coordination Centre

POC Point of Contact

Q & A Questions and Answers

PST Covid-19 Pandemic Safety Team

RDC Reception and Departure Centre

SSE Scenario Sequence of Events

SSES State Service for Emergency Situations in Ukraine

TL Team Leader

TTX Table Top Exercises

TAST Technical Assistance Support Team

UCPM Union Civil Protection Mechanism

UN United Nations

UNDAC United Nations Disaster Assessment and Coordination

VIP Very Important Person

vOSOCC Virtual On-Site Operation Coordination Centre

W West

#### **Attachments**

Attachment 1. Short description of EU-CHEM REACT-2 program

Attachment 2. EU Civil Protection Mechanism Fact Sheet

Attachment 3. Composition of Exercise Management Team

Attachment 4. Field Exercise Main Episodes

Attachment 5. EU-CHEM-REACT-2 FX Agenda

Attachment 6. Safety and security rules during FX

Attachment 7. FX Evaluation Methodology

#### Attachment 1.

#### Short description of EU-CHEM-REACT-2 program

EU-CHEM-REACT 2 program (<a href="www.ecr2.iccss.eu">www.ecr2.iccss.eu</a>) financed by the European Union DG ECHO, is based on the successful, ongoing implementation of the EU-CHEM-REACT project which was implemented in Ukraine by the international consortium of Lithuania, Ukraine, Poland with an active participation of OSCE, Latvia, Lithuania and Czech Republic, and led by the International Centre for Chemical Safety and Security (ICCSS), <a href="www.iccss.eu">www.iccss.eu</a>. Program provides for a series of exercises and various preparedness activities to complement the national prevention, preparedness and response endeavours in Belarus, Moldova and Ukraine to chemical and environmental man-made or natural emergencies. EU-CHEM-REACT 2 will strengthen and promote high level of response within the Union Civil Protection Mechanism (UCPM).

EU-CHEM-REACT 2 will improve prevention, preparedness and response of central and local authorities in Belarus, Moldova and Ukraine, through EU modelled exercises in civil protection including: Table Top Exercise (TTX) in Belarus on 29-30 October 2019, Command Post Exercise (CPX) in Moldova on 03-04 March 2020, and a Full Scale Field Exercise (FX) in Ukraine on 28-29 September 2021. The program provides for best practices exchanges and national and industry capacity building to prevent and respond to man-made and/or natural or chemical disasters. EU-CHEM-REACT 2 will promote development of volunteer fire services and medical rescue and their use within Union Civil Protection Mechanism (UCPM). It develops Civil Protection Exercises Public Information Strategy, and supports exercise network in civil protection.

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.

EU-CHEM-REACT 2 is formed by an international consortium composed of the government and academic partners from Belarus, Czech Republic, Latvia, Lithuania, Moldova, Ukraine, and the participation of European Union (EU), United Nations, OSCE, Organization for the Prohibition of Chemical Weapons (OPCW), NATO, and INTERPOL.

During the First Planning Meeting for a EU-CHEM-REACT 2, in May, in Lviv, Ukraine, and study tours by the international coordinator, the partners confirmed their commitment to the program implementation, presented their capacities and capabilities, shared the relevant information, agreed on a working plan for the project implementation including a thorough evaluation program and a broad media program, and received training on legal and practical aspects of EU Civil Protection. The partners agreed to invite the participants and observers from international organizations and interested countries.

Among the first project activities there were training of the international team to assist in the preparation and conduct of the project Exercises, with an emphasis on UCPM operation and activation, and training of the Evaluation Team.

#### Attachment 2.

#### Union Civil Protection Mechanism Fact Sheet

#### What is it?

The overall objective of the Union Civil Protection Mechanism (UCPM) is to strengthen cooperation between the EU Member States and 6 Participating States (Iceland, Norway, Serbia, North Macedonia, Montenegro and Turkey) in the field of civil protection, with a view to improving prevention, preparedness and response to disasters. When the scale of an emergency overwhelms the response capabilities of a country, it can request assistance via the Mechanism. Through the Mechanism, the European Commission plays a key role in coordinating the response to disasters in Europe and beyond and contributes to at least 75% of the transport and/or operational costs of deployments.

#### How does it work?

Following a request for assistance through the Mechanism, the Emergency Response Coordination Centre (ERCC) mobilizes assistance or expertise. The ERCC monitors events around the globe 24/7 and ensures rapid deployment of emergency support through a direct link with national civil protection authorities. Specialized teams and equipment, such as forest fire fighting planes, search and rescue, and medical teams can be mobilized at short notice for deployments inside and outside Europe. Satellite maps produced by the Copernicus Emergency Management Service also support civil protection operations. Copernicus provides timely and precise geospatial information that is useful to delineate affected areas and plan disaster relief operations. Following the September 2018 earthquake and tsunami in Sulawesi, Indonesia, 18 separate maps helped the Indonesian authorities to assess inaccessible areas devastated by the tsunami. In developing countries, civil protection assistance typically goes hand in hand with EU humanitarian aid. Experts in both fields work closely together to ensure the most coherent analysis and response, particularly in response to complex emergencies. The Mechanism also intervenes in marine pollution emergencies: the ERCC can quickly mobilize oil recovery capacity and expertise from the Participating States and European Maritime Safety Agency (EMSA).

#### **Modules**

Self-sufficient and autonomous specialized teams (combination of human and technical means), task and needs driven, which may be used within UCPM:

- High Capacity Pumping
- Water Purification
- Medium and Heavy Urban Search and Rescue
- Aerial Forest Fire Fighting (helicopters + planes)
- Advanced Medical Post / with Surgery
- Field Hospital
- Medical Aerial Evacuation of disaster victims
- Emergency Temporary Shelter
- CBRN Detection and Sampling
- Search and Rescue in CBRN conditions
- Ground Forest Fire Fighting
- Ground Forest Fire Fighting using vehicles

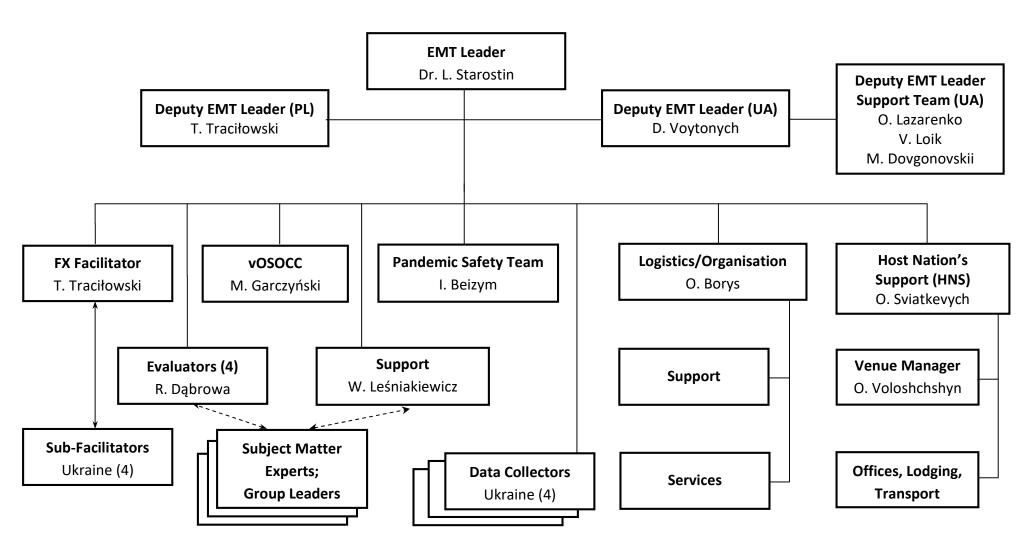
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- Flood Containment
- Flood Rescue using boats
- Technical Assistance Support Teams (TAST)

#### **Sources:**

- https://ec.europa.eu/echo/what/civil-protection/mechanism\_en
- COMMISSION DECISION of 29 July 2010 amending Decision 2004/277/EC, Euratom as regards rules for the implementation of Council Decision 2007/779/EC, Euratom establishing a Community civil protection mechanism

Attachment 3.
Composition of EU-Chem-React-2 Field Exercise Management Team



# Attachment 4. Field Exercise Main Episodes

I. Scenarios for conducting the practical phase of training in terms of responding to events with hazardous chemical, biological and radiation substances

Scenario name	Description	Location; GPS coordinates	Key actions
Scenario 1 Transport accident with a leak of an unknown chemical substance.	As a result of a traffic accident involving a bus and a tanker, the tanker was damaged, which in turn led to an uncontrolled leakage of the substance. Local emergency services have requested the assistance of the Oblast Civil Defence Forces (LEMA). LEMA sends the appropriate forces and means to the scene, sends a request for assistance to the EU (OSOCC).	Intersection of highways (the area around the base camp and the enterprise of SE "Ekotransenergo"; 49°56'13.4"N 23°27'22.9"E	Planning of necessary actions, reconnaissance, marking danger zone, determination of threat, zoning of the scene, organization of the place of emergency rescue works, sampling, establishment of a special treatment point, establishment of a monitoring point, precipitation of hazardous substances (HS), liquidation of HS leakage, pumping of dangerous substances, decontamination of civil defence forces.
Scenario 2 Carrying out special treatment of injured peoples.	As a result of the leakage of the dangerous substance and its evaporation, a large number of people who were travelling by bus and were involved in the accident were injured. LEMA has sent assistance request to the EU. OSOCC sends to the site means for mass decontamination of victims.	Intersection of highways (territory of the entrance №1);  49°56'13.4"N  23°27'22.9"E	Planning of necessary actions, zoning of the scene, triage of the victims, evacuation of victims, decontamination of victims
Scenario 3 Transportation of unknown substances across the state border.	During the border crossing a group of people tried to transport unknown substances to carry out a terrorist attack. Representatives of the border service found an unknown object in the bus, there is a suspicion of illegal movement of dangerous substances. Border guards contacted LEMA to confirm the suspicion and identify the unknown object. LEMA and OSOCC send appropriate forces and equipment to the scene.	Territory around the base camp and the enterprise of SE "Ekotransenergo"; 49°56'36.6"N 23°27'06.3"E	Identification of hazards, organization of the place of emergency rescue operations, reconnaissance, threat identification, zoning of the scene, establishment of a special treatment point, establishment of a monitoring point, deposition of unknown hazardous substances vapours, taking samples, special treatment of victims, cooperation between countries.
Scenario 4 Detection of hazardous materials.	Local authorities receive phone calls from residents of the area with complaints of headaches, eye and throat irritation. During the rescue operation in the building in order to identify the source of hazardous materials, rescuers found containers with unknown substances and unknown markings. The rescue team	9-Store building of the enterprise SE "Ekotransenergo"; 49°56'23.9"N 23°26'51.7"E	Planning of necessary actions, organization of the working site, identification of threats, marking danger zone, establishment of the decontamination point.

Scenario name	Description	Location; GPS coordinates	Key actions
	contacted LEMA for help in inspecting the integrity of containers with unknown markings. LEMA and OSOCC send appropriate forces and equipment to the scene.		
Scenario 5 Storage of hazardous chemicals.	Identification of premises where unknown substances are produced and stored. Some substances had unknown labelling. Local emergency services have requested assistance from LEMA.  LEMA and OSOCC send appropriate forces and equipment to the scene.	9-Store building of the enterprise SE "Ekotransenergo"; 49°56'23.9"N 23°26'51.7"E	Planning of necessary actions, identification of the danger zone, organization of the place of emergency rescue operations, reconnaissance, threat identification, zoning of the scene, establishment of the decontamination point, establishment of the monitoring point, elimination of the dangerous substance leak, taking samples, substance identification, special treatment, o/s
Scenario 6 Suspicion of a virus.	After returning from Italy, a local resident experienced symptoms typical of COVID-19 (fever, cough, difficulty breathing). The hospital asked the LEMA to allocate a CBRN group to take biological samples from the patient's home and the relatives with whom he had been in contact, with a perspective to further implementing more restrictive measures.	3-Store building of the enterprise SE "Ekotransenergo"; 49°56'23.0"N 23°26'52.4"E	Planning of necessary actions, organization of the working site, determination of the threat, determination of the danger zone, establishment of the decontamination point, taking samples, coordination of actions with medical experts, special treatment of the village.
Scenario 7 Determination of the degree of environmental pollution.	After heavy rains in the Yavoriv district, one of the enterprises storing chemicals for agriculture was flooded. As a result, the local lake and the surrounding area were polluted. To verify the information and establish the level of water pollution in the lake and the adjacent territories, LEMA and OSOCC send appropriate forces and means to the scene.	Reservoir (coast of the Yavoriv Sea, near the enterprise SE "Ekotransenergo"); 49°56'48.6"N 23°26'57.8"E	Planning of necessary actions, organization of the working sites, identification of the threat, determination of the danger zone, establishment of the point of special processing, taking samples, transportation of samples, conducting laboratory tests, decontamination, o/s
Scenario 8 Sources of ionizing radiation in illicit trafficking.	The concerned citizen noticed strange activity in the next building - unusual objects, excessive amount of garbage (including containers), constantly closed windows, a large number of frequent visitors at unusual times, strange security measures. Local law enforcement agencies inspecting the premises believe that it may be a secret laboratory using radioactive material. Lack of personal protective equipment	1-Store building of the enterprise SE "Ekotransenergo"; 49°56'24.2"N 23°26'54.5"E	Planning of necessary actions, organization of the working sites, detection an identification of radioactive substances, removal and preparation for transportation of these substances, carrying out special processing

Scenario name	Description	Location; GPS coordinates	Key actions
	does not allow safe inspection of the premises. Law enforcement agencies appealed to LEMA for assistance in inspecting the suspicious house and conducting intelligence. LEMA and OSOCC send appropriate forces and equipment to the scene.		
Scenario 9 The spread of human disease as a result of biological infection.	In one of the resorts of Lviv region, the management concealed the poor condition and well-being of vacationers. People showed signs of bitterness in the mouth, abdominal and headache, and occasional vomiting of blood. The situation is critical because the number of visitors is very large. One of the visitors contacted the police to find out the situation. The police are asking LEMA to allocate a CBRN group for biological sampling in the resort, with a perspective to decide on implementation of further restrictive and other measures.	9-Store building of the enterprise SE "Ekotransenergo"; 49°56'23.9"N 23°26'51.7"E	Planning of necessary actions, organization of the working sites, reconnaissance, threat identification, taking samples, marking of the danger zone, establishment of a decontamination point.

II. Scenarios for conducting the practical phase of exercises in the part: extinguishing fires, rescuing people, conducting rescue operations

Scenario name	Description	Location (GPS coordinates)	Key actions
Scenario 1 Rescue by a combined method using hand fire ladders and air cushion with sequential fire extinguishing.	A fire broke out on the 2nd floor of the administrative building. After conducting a visual reconnaissance from the outside of the building, rescuers noticed 2 people in a window on the 2nd floor of the building, who were in a zone of intense heat and direct contact with flames and could not leave the danger zone on their own. Thick smoke comes out of the window on the 2nd floor. According to the administration, not all people left the building during the announced evacuation of staff.	2 <sup>nd</sup> and 3 <sup>rd</sup> floors of the administrative building of the enterprise SE "Ekotransenergo", the area around the administrative building;  49°56'23.9"N 23°26'51.7"E	Rescuers install an air cushion and rescue people from the window on the 2 <sup>nd</sup> floor of the building. Branches from AC-4-60 (5309) 505M as a part of GDZS on a stairwell are directed for carrying out fire extinguishing on the 2 <sup>nd</sup> floor of the building. Department on AC-40 (433371) 63B-02 by means of the combined way (with an assault ladder on a sliding ladder) from a window of the 3rd floor of the building carry out rescue of 2 victims. After rescuing the victims, fire fighters from a ladder feed the barrel to extinguish the fire on the 2nd floor.

Scenario name	Description	Location (GPS coordinates)	Key actions
Scenario 2 Rescue of injured peoples from the upper floors of the building with the help of a car ladder, articulated car lift and special climbing equipment.	As a result of the fire, the stairwell of the administrative building collapsed. People are cut off from the main evacuation routes and cannot leave the building on their own. Rescuers notice people in the windows of the 5th and 7th floors of the building. On the 7th floor there are 3 people, on the 5th floor there are 3 people, among whom one person with spinal injuries cannot move on their own.	5 <sup>th</sup> and 7 <sup>th</sup> floors of the administrative building of the enterprise SE "Ekotransenergo", the area below the administrative building; 49°56'23.9"N 23°26'51.7"E	Rescue of victims from the 7 <sup>th</sup> floor of the building is carried out through a window with use of a ladder and of rope insurance.  Rescue of people from the 5th floor is carried out by an articulated car lift, as well as on a double oblique rope (a person with spinal injuries - in a rescue stretcher and 2 victims in a rescue triangle).  Rescuers, having carried out a rescue operation, carry out self-rescue from the windows of the 7 <sup>th</sup> and 5 <sup>th</sup> floors of the building on ropes.
Scenario 3 Extinguishing a fire in an industrial building with elements of rescuing peoples.	As a result of violation of fire safety rules in the industrial building there was a fire, the premises were full of smoke, the main way to save the employees of the enterprise was cut off by fire and combustion products. According to the event schedule, State Emergency Service vehicles and ambulances arrive at the scene	Industrial building (enterprise of SE "Ekotransenergo" 49°56'24.2"N 23°26'54.5"E	Conducting fire reconnaissance, determining the decisive direction of operational actions, rescuing people, organizing fire fighting, concentrating forces and means to protect premises and technological equipment, organizing the work of security posts and checkpoints, creating a reserve of forces and means, creating a fire fighting headquarters, etc.
Scenario 4 Rescue peoples from the rubble of the building.	As a result of the destruction of the structures of the industrial building, people found themselves under the rubble. According to the departure schedule and the plan of involvement of forces and means, special emergency rescue vehicles of the State Emergency Service of Ukraine in Lviv region and an ambulance arrive at the scene.	Industrial building (enterprise of SE "Ekotransenergo"; 49°56'22.6"N 23°26'51.6"E	Strengthening and stabilization of destroyed structures with the use of hydraulic rescue tools and pneumatic equipment for lifting loads under which the victims are trapped. If necessary, drill holes to facilitate the rescue of victims from the rubble. Establish: visually the condition of the victims and the need for first aid.
Scenario 5 Rescue action during a transport accident.	As a result of the collision of two vehicles, people were trapped in damaged vehicles. According to the departure schedule and the plan of involvement of forces and means, special emergency rescue vehicles of the State Emergency Service of Ukraine in Lviv region and an ambulance, a car of the National Police arrive at the scene.	highway on the territory of the enterprise SE "Ekotransenergo"; 49°56'22.4"N 23°26'49.3"E	Release of victims from the destroyed cars involved in a traffic accident by stabilizing vehicles with wedges, support and step blocks, cutting and releasing the body parts of the vehicle debris with use of special hydraulic rescue equipment, providing first aid to victims.

# Attachment 5. EU-CHEM-REACT-2 FX Agenda







# EU-CHEM-REACT 2 Field Exercise (FX) Framework Program 27-29 September, 2021 Lviv, Ukraine

#### 26<sup>th</sup> September, 2021

Lviv State University of Life Safety (35 Kleparivska St., Lviv)

- Working sites and exercise facility end of preparation
- Arrival of EMT internal briefing

#### 27<sup>th</sup> September, 2021

- 11:30 Meeting of the international units from Poland and Latvia in Poland: 2 Morawska St., Jarosław
- 13:15 Joint travel to the border crossing checkpoint Korchova (Polish side)
- 14:00 Meeting at checkpoint Korchova
- 17.00 Meeting in Krakovets checkpoint (Ukrainian side)
- 18:00 Arrival of international teams to the place of the exercise Javoriv military training ground (near Lviv)
  - LEMA and EMT internal work organizational briefing,
  - Working sites final check by EMT,
  - Host Nation Support (HNS),
  - Liaisons Officers (LO) role,
  - Safety & Security and situational briefing,

19.00 – 21.00 Dinner at hotels

#### 28<sup>th</sup> September, 2021

Javoriv military training ground (near Lviv)

#### 09:00 – Start of the exercise

- Request to ERCC for international assistance
- Virtual OSOCC "EU-CHEM-REACT FX activation"
- Border crossing checking procedures / Reception and Departure Centre (RDC) establishment
- Base of Operation (BoO) set up
- OSOCC establishment

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10:00 – 17:00 – field activities according to EMT and LEMA with EU CPT experts—teams interaction

12:30 - Lunch break

17:00 - End of this day field activities

- Summary of the day
- Night break SCBA refilling monitoring, operational readiness

19.00 Official Dinner: Hotel Mirage

#### 29<sup>th</sup> September, 2021

Javoriv military training ground (near Lviv)

08:00 - 12:00 – Field activities continuity according to EMT – LEMA with EUCPT experts-teams interaction

12:00 - Demobilization

- Debriefing, Hot wash up provided by evaluation team
- Lunch

13:00 – Closing ceremony

Lviv State University of Life Safety (35 Kleparivska St., Lviv)

15:00 - 17:00 - FX Lessons Learned Meeting

Media conference

#### EU-Chem-React-2 FX Handbook

#### Attachment 6.

#### Safety and security rules during FX

#### Standard safety/security guidelines:

In order to ensure personal safety and the safety of others, all FX participants agree to follow the safety rules during the course of the exercise:

- Follow all warning and safety signs given by staff.
- Observe normal safety rules and conduct yourself in a responsible manner at all times.
- During practical exercises and in specific places, you must wear/use your personal protection equipment.
- You must not be in the possession of alcohol, drugs or other narcotic substances, or be under their influence. If you break this rule, you will be excluded from the exercise and denied access to the exercise area.
- Smoking is not permitted anywhere other than in the specific smoking areas.
- Please report any unsafe situations to our staff.
- Some exercises will demand some physical exertion from you. If you have any doubts, please contact your medical advisor and trainer. If the rules require this, you must be in possession of a valid medical examination certificate.
- Please note that ICCSS will not be liable in a situation where any of your property is damaged, lost or stolen. We also strongly advise you not to wear any jewellery or ties during the exercise. If you choose to do so, you will do so at your own risk.
- Use equipment securely and properly and only if authorized to do so.
- Always check the safety of others and act whenever a hazardous situation occurs.
- Hazardous conditions, injuries or accidents must be reported to the on-site commander immediately, who will inform EMT and take all necessary action at the site of the incident to ensure an appropriate response to injury and ensure further injury is mitigated as far as is reasonably practical.
- Any member of the Exercise can interrupt any activity or procedure if they feel that a situation is about to or has occurred that is unsafe ('No Play' procedure).
- If members of the participating modules take unnecessary risks and refuse to follow the instructions from the on-site commanders or safety officers, they will be excluded from the exercise.

Furthermore, I've have been informed that during my participation in the EU CHEM REACT Exercise to be held in Lviv Region, Ukraine from 28<sup>th</sup> till 30 of September 2021 pictures might be taken and movie could be recorded. The visual material obtained will solely be used for promoting activities related to the Union Civil Protection Mechanism. For this purpose, I herewith give my informed consent to the unrestricted use and publication of any image in which I am displayed.

The undersigned hereby declares that he/she has seen, understood and agreed to the above, the FX General Safety and Security Rules

No.	Name and surname	Position in the team	Date of birth	Date	Signature
1					

**Team Leader signature** 

#### Attachment 7.

#### Exercise evaluation methodology

#### I. FX evaluation background, process, outputs and methodology

- 1. The aim of the FX is to test response to chemical and natural disasters under the Union Civil Protection Mechanism. The evaluation of the results of the Field Exercise under the EU-CHEM-REACT 2 project as well as of the overall project results is key component of the project implementation.
- 2. The purpose of evaluating the exercises is to assess whether and how did the exercise meet its objectives, identify possible areas of improvement and check if the exercise met the expectations of the participants.
- 3. **FX Evaluation Process.** The evaluation phases for FX include: a formal exercise evaluation and an FX Evaluation Report that identifies strengths and areas for improvement in terms of operational procedures, performance of involved resources, etc.
  - Recommendations related to areas for improvement will be identified to help develop
     Evaluation report and prepare clear message both for organizers and participants.
  - During and after the FX the Evaluation team will assess the quality of the conducted activities. It is important to keep a sharp eye on the progress of each action of the project to make sure that each of scheduled action is done according to timeline and meets determined objectives. Continuous process of evaluation will be employed to check an overall project quality. Evaluation team is expected to identify lessons learned and incorporate appropriate records into the Evaluation Report.
  - The internal evaluation will be done in the following manners: (i) during the exercise, input is gathered by the selected evaluators, (ii) organizers and participants of the exercises will be asked to take part in evaluation survey.
  - The final Evaluation Report is to be prepared on the basis and after the exercise input is gathered via evaluation forms given to participants, hot-washes and debriefings with participants coordinated by the organizers and finally lessons learned meeting with the exercise control organization.
  - 4. The outputs that the evaluation of the FX will include:
    - Planning documents, scenario, the TTX and FX manuals and other documents used in support and conduct of the exercises;
    - Feedback from the participants during the exercise briefings including the hot washup:
    - Action items identified subsequently to the TTX, CPX and FX by the different participating parties/institutions.
  - 5. The overall FX evaluation will use the baseline established by the TTX evaluation and CPX evaluation, and measure progress made by the different participating parties in their respective areas of responsibility and action (against the indicators and criteria established after the TTX), as well as assess the quality of interagency interactions within the overall response system.

6. The project evaluation methodology and implementation was based on the EU guidance: <a href="https://europa.eu/capacity4dev/evaluation\_guidelines/minisite/en-project-and-programme-evaluations">https://europa.eu/capacity4dev/evaluation\_guidelines/minisite/en-project-and-programme-evaluations</a>

#### II. FX evaluation criteria

- 1. The evaluation of the FX is a final step in the project implementation. The evaluation of success of the overall project, with an emphasis on the Table Top Exercise (TTX), Command Post Exercise (CPX) and Full Scale Field Exercise (FX), use the established evaluation criteria of the EU (relevance, effectiveness, efficiency, impact, and sustainability). It will use the intervention logic of the project as its conceptual framework and attempt to measure outputs against a set of indicators in relation to how the overall as well as specific project objectives have been met.
- 2. Since it is an EU funded project, it also was appropriate to add additional evaluation criteria specific to EU actions: added value (in relation to other EU financial instruments and mechanisms); coherence, consistency and synergies (with other EU actions as well as actions of other donors), and leverage (e.g., of political dialogue between the EU and partners).
- 3. With regard to evaluating the FX (as a mail deliverable of the overall project), specific evaluation objectives have been established. These specific objectives were defined as follows:
  - Establishing a baseline for the future assessment of the results achieved under the overall project (to be tested at the field exercise and project end)
  - Identifying specific steps that the participating parties plan to implement in order to enhance their Chemical safety and security response capacity, with a particular emphasis on their role in an interagency coordination and cooperation context
  - Contributing to a better understanding of the requirements in a multiagency Chemical safety and security response, and hence helping participating parties to improve their response planning.
  - The evaluation activities are designed and will be conducted to cover all phases of the FX scenario implementation.

# III. Evaluation Matrix with SMART indicators and judgment criteria for the Full Scale Field Exercise (FX)

Indicator and judgment criteria were designed so as to ensure that they are SMART (specific, measurable, achievable, relevant, time-bound). This will be involved for each of the project core activities including FX:

- 1. Based on the objectives of the specific activity, construction of an evaluation baseline for the assessment of the results;
- 2. For each inject, specification of the purpose of the inject, the expected outcome (benchmarking), and recording of the actual response to the inject (performance indicator);
- 3. A systematic review of deviations from expected outcomes, with an assessment of the effect that this had on overall performance, was conducted;
- 4. The same analysis was done for the overall outcome of the activity;

- 5. Identifying specific steps that the participating parties plan to implement in order to enhance their response capacity, based on the results of the activity conducted;
- 6. Extraction of lessons that may help in developing a better understanding of the requirements in a multiagency response, and hence helping participating parties to improve their response planning.

#### IV. Evaluation Indicators

- 1. The project evaluation puts an emphasis of qualitative rather than quantitative criteria. The data collection will combine surveys of key participants of the FX subsequently to the exercise, to validate key conclusions and assessments.
- 2. The evaluation process assisted in constructing this baseline was to identify areas where coordination between the different parties went smoothly, areas where coordination was less than optimal, actions by parties that were considered in the review of the FX to have been appropriate and effective, action areas where parties of the FX concluded they needed to implement improvements, and actual capability gaps that none of the participants could or had addressed address.
- 3. This baseline construction was linked to but separate from the identification of steps that the parties plan to take to improve their capacity and ability to coordinate with others. On the other hand, the specific steps that the participating parties planned to implement can be (to a degree) quantified, and indicators and judgment criteria can be developed after the FX based on the nature of these steps. Outcomes of the project can then be assessed using these indicators and criteria.
- 4. Another objective, namely improved understanding leading to better planning, led itself to a more qualitative evaluation approach that assesses how smoothly the interaction of the different parties in the response system played out, based on subjective assessments of the participants combined with observations by FX observers.
- 5. The evaluation process for FX and the whole project use multiple indicators to track the progress of the project implementation. The communication at local and national levels about UCPM and its usefulness and operability as a result of the project exercises is key program indicator for evaluation and the most important to track.

#### V. The SMART indicators

1. The SMART indicators have been developed and to determine the relevance and fulfilment of project objectives, efficiency, effectiveness, impact and sustainability, coherence and Community value communication at local and national levels about UCPM. Secondly, SMART indicators will enable to generate lessons learned to inform the decision making process on ways and means to improve national civil protection against CBRN disasters and use of UCPM. The following chart presents the use of SMART indicators with relevance to increased understanding of the UCPM and increased interoperability and national preparedness to use international tools and UCPM in case of CBRN emergency:

Specific	An increased understanding of the UCPM and increased interoperability and national preparedness to use international tools and UCPM in case of CBRN emergency
Measurable	quantitative — Increase of local and national stakeholders both professional and volunteer in civil protection and fire service engaged in U civil protection cooperation; qualitatively — increased knowledge about UCPM and experience to use it

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Available	Questionnaires will be attained from all participants to provide a broad survey of the changing attitudes and positive reactions/responses to use and promotion of UCPM among participants constituencies.
Relevant	data on the usefulness and growing national interoperability with the UCPM will be obtained during all the exercises and collected directly among the relevant participants based on accurate data and provided to relevant stakeholders
Time-bound	The conclusion of the Full Scale Exercise shall enable the achievement of the core objectives

#### VI. Evaluation Judgment Criteria and Data Sources

- A reference point established at the beginning of the project implementation is a low level of UCPM knowledge outside the EU and lack of relevant procedures to use it in case of civil protection emergency. Another reference point is lack of engagement/use of voluntary fire service as potentially important element in making UCPM more useful. Another one is lack of relevant procedures to train and exercise UCPM in trans-national context, outside the EU.
- 2. The project core Evaluation Criteria, Indicators, Judgment Criteria and Data Sources are presented below:

Evaluation Criterion	Indicator(s)	Judgment Criteria	Data Sources
Relevance	Alignment of the overall project objectives; Involvement of all right actors	Fitting of TTX objectives to project objectives and other countries security objectives; Selection of participating actors;	EU and partner country policies and strategy documents; All TTX documentation; Participants in TTX briefings;
Effectiveness	The TTX project has enhanced coordination among different actors in their responses; The TTX itself helped to build capacities;	Better coordination when compared to baseline; Concrete evidence produced by actors;	TTX produced results;
Efficiency	Costs involved to conduct TTX against the results (participation)	To compare with other comparable capacity building actions;	EU and OECD programming and financing documents;
Impact	The TTX has improved coordination, procedures and decision making practice: procedures/practices	Relevant changes have been formally accepted by the participants;	Feedback from actors;
Sustainability	Cooperation forms agreed during TTX have become part of the national systems;	Acceptance of changes and new patters; Follow-up	Feedback from actors
Coherence	TTX is an integral part of the program implementation as prerequisite for conduct of main activity, Full Scale Exercise;	Complementary with the participating countries policies and complementary with the other UCPM training and exercises program	EU and member States programming and executive documents on civil protection

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Evaluation Criterion	Indicator(s)	Judgment Criteria	Data Sources
Community	TTX adds benefits to	Inclusion in EU and Member	EU and member States
value added	Member States' capacity	States capacity building on	programming and
	building in civil protection	UCPM in neigh boring	executive documents on
	training and exercises	countries	civil protection

#### VII. Objectives that were used to decide success of FX evaluation

- 1. Establishing a baseline for the future assessment of the results achieved under the overall project (to be tested at the field exercise and project end);
- 2. Identifying specific steps that the participating parties plan to implement in order to enhance their CSS response capacity, with a particular emphasis on their role in an interagency coordination and cooperation context;
- 3. Contributing to a better understanding of the requirements in a multiagency civil protection response, and hence helping participating parties to improve their response planning.
- 4. The outputs that the evaluation of the TTX draw upon include:
  - Planning documents, scenario, the TTX handbook and other documents used in support and conduct of the exercise;
  - Feedback from the participants during the exercise briefings including the hot wash up sessions;
  - Action items identified subsequently to the TTX by the different participating parties/institutions.

#### VIII. Organisation of the FX Evaluation Team

- The FX Evaluation Team is a substantial part of the Exercise Management Team (EMT) /
  Exercise Conduct Executive Team (EXCON). The tasks of managing exercise evaluation and
  organizing team of evaluators is entrusted to ICCSS;
- 2. The Evaluation team, composed of 4 persons, will be selected based upon experience level, area of expertise and knowledge of procedures. It will include the members of TTX and CPX evaluation, to ensure continuity;
- 3. The Evaluation team will prepare Evaluation manual, summarizing criteria based on goals and objectives of the exercise and assessing how exercise concept, planning and conduct can contribute to goal achievement and completion of the objectives;
- 4. The exercise evaluation does not cover individual performance;
- 5. The members of the Consortium nominate participants to observe/support the work of the Evaluation Team.