

# SIMEX 2022

23. - 25. March 2022

Project **INDIMA**



**DEPARTAMENTUL  
PENTRU  
SITUAȚII DE URGENȚĂ**



media &  
consultancy



**INDIMA**  
INtegrated DisastEr Management - go digital



### **Dr Bogdan POP**

Deputy General Director  
Department for Emergency  
Situations, Romania

„The simulation exercise to be held in March 2022 in Timisoara, Romania, is the test of the network concept, one of the main results of the project INDIMA, funded by the European Union.

We strongly believe that the SIMEX will bring very important inputs, not only to the project INDIMA, but also for the improvement of the information management in Disaster Risk Reduction.“

„The landscape of Disaster Risk Management has significantly changed within the last decades. Civil Protection authorities had to deal with some state-owned enterprises, but nowadays a lot of providers of critical infrastructure and private stakeholders need to be integrated.

Developing a process to manage disasters and crises effectively is the objective of project INDIMA.

We researched needs and stakeholders, drafted the network concept, test it now in a simulation exercise and confirm it at the final workshop.“



**Josef H. RIENER, MSc**  
INDIMA Project Manager,  
publiComm GmbH

# SIMEX Report

As of 31 March 2022

<b>Work package</b>	<b>Work package 6</b>
<b>Number</b>	D6.7 SIMEX eval report
<b>Means of verification</b>	Report
<b>WP lead:</b>	MINISTRY of INTERNAL AFFAIRS GENERAL DIRECTION FOR MEDICAL EMERGENCIES (COO)
<b>Implementing entities</b>	Hungarian Red Cross, (BEN) iHELP Institute, Poland (BEN) Publicomm GmbH, Austria (BEN)
<b>Due Date</b>	M15
<b>Description</b>	SIMEX report, PDF file and Brochure, Min. 6 pages A4, English.

## There are 2 SIMEX reports:

- D6.7 SIMEX eval report, min 6 pages, PDF and brochure 31 March 2022
- D5.4 SIMEX report and recommendations, min 24 pages 31 May 2022

WP	D	Task	Description	Deliverable	Format	Visibility	Start	End	Status	Icon		
WP3	D3.3	D26	VR simulation plan	VR task time plan, PDF file, min. 6 pages A4, En...	PCC	Repor	Publi	28 Feb	23 Feb	24 Feb	Approved	👍
WP3	D3.5	D14	INDIMA media repor	Quarterly media report, PDF format, 6 pages, En...	PCC	Repor	Publi	31 Mar			Pending	👍
WP6	D6.7	D27	SIMEX eval report	SIMEX report, PDF file and Brochure, Min. 6 pag...	DSL	Repor	Publi	31 Mar			Pending	👍
WP1	D1.3	D5	INDIMA progress rep	Quarterly project progress report, min. 8 pages...	DSL	Repor	Publi	31 May			Pending	👍
WP5	D5.4	D28	SIMEX report and re	SIMEX report and recommendations, Min. 24 pages...	PCC	Repor	Publi	31 May			Pending	👍
WP4	D4.5	D29	Final Workshop	Workshop concluding the results of the workshop...	HRC	Webs	Publi	31 May			Pending	👍
WP3	D3.1	D10	INDIMA website, blc	INDIMA website, e-mail newsletter and blog. Fir...	PCC	Webs	Publi	30 Jun			Pending	👍

## Photo credits © 2022:

- ✓ Tamara Vukov Photography, tamifoto.hu
- ✓ Laurențiu Lazea - Inspectoratul pentru Situații de Urgență "Banat" al Județului Timiș

## 1. Setup of the SIMEX

At the two pre-exercise meetings of the project (one scheduled and one additionally conducted) the exercise could be prepared as good as possible.

PEM1: 25. – 28. October 2021, Békéscsaba

PEM2: 3. – 4. February 2022, Timișoara

### Virtual Reality supported simulation table-top exercise

- ✓ with all relevant actors,
- ✓ Wednesday, Thursday, Friday,
- ✓ to simulate the mission cycle in a "Blackout" situation.

No 24/7 exercise setup and no testing or validating of Civil Protection staff and participants in any way.

### The aim of the SIMEX is

- ✓ to test the implementation of the developed checklists,
- ✓ find improvements for the checklists, processes and handbook,
- ✓ to gain knowledge for the practise.

### The consortium partners contributing to the SIMEX:

- DSU: administration, organisation, VIP service, venue and evaluation
- SMURD-F: scenario and VR injects
- iHELP: EXCON, injects cell and supervision
- ISU Timiș: participants
- HRC: role-player and trainer
- PCC: project and exercise support, social media and documentation

### Covid and war in Ukraine

On one hand, the Covid-19 pandemic made it necessary to hold a second PEM on short notice in February in Timișoara to clarify the safety measures and possible restrictions on-site.

The second unexpected risk was the war in Ukraine, beginning three weeks before the SIMEX. DSU, HRC and the experts of iHELP, most professional members of the Polish State Fire Service, were active in the response activities. Therefore, many pre-planned participants of the SIMEX were not able to be in Timișoara, because they were working in different roles to cope with the refugee crisis.



## 2. INDIMA network concept and matrix

The aim of the project INDIMA is to develop a network concept and checklists to integrate the "new stakeholders" in DRM:

The aim of the network concept is:

- ✓ Identify/Reduce Risks, Critical Infrastructure, stakeholders,
- ✓ Integration of all relevant actors in DRM management,
- ✓ Preparedness of all actors and operational readiness,
- ✓ Integrated Response in accordance with Strategic Priorities,
- ✓ Recovery and restoring or continuing operations,
- ✓ Develop checklists for a Disaster Risk Management Handbook.

**The realisation of the SIMEX in Romania and the translated network concept:**

To avoid misunderstandings due to language deficits, we translated the network concept into Romanian language, done by an experienced field officer, Col Artur Vladimir Sedi.



Besides, that we developed the INDIMA matrix:



### 3. Schedule of the SIMEX

SIMEX		Day 1	Day 2	Day 3
0800	<b>Arrival of the participants</b> Registration Intro: Initial situation briefing	<b>National and Cross-Border Response:</b> Time: 296 – 120 hours after disaster Main task: coordination and liaison and fuel, food, medicines... Bilateral assistance is arriving from: - Hungary (Red Cross and SzFRS) - Hunagaian Water Aid - Serbia (TBC or role-played) → Hot wash up	<b>Evaluation meeting:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Summary of “Hot wash up”</li> <li><input type="checkbox"/> Exercise evaluation</li> <li><input type="checkbox"/> Project evaluation</li> <li><input type="checkbox"/> Observations</li> <li><input type="checkbox"/> Inputs for the network concept</li> </ul>	
1200				
1300	<b>Lunch break</b> <b>National Response:</b> Time: 2 – 48 hours after disaster Civil Protection establishes liaison: DSU, police, fire rescue, military TV, radio and media Critical Infrastructure provider → Hot wash up	<b>Lunch break</b> <b>Recovery:</b> Time: 188+ hours after disaster Main task: stakeholder integration Bilateral assistance is leaving - Restore, repair - Donations, handover, customs → Hot wash up		
1700				
2000	<b>Feedback</b> Social event: Dinner	<b>Feedback</b> Certificate handover Participants departure		

INDIMA-project (ECHO/B/03 - 101017935) | www.indima-project.eu

These steps of the DM cycle will be simulated to test the network concept

SIMEX		Day 1	Day 2	Day 3
0800	<b>Arrival of the participants</b> Registration Intro: Initial situation briefing	<b>National and Cross-Border Response:</b> Time: 96 – 120 hours after disaster Main task: coordination and liaison and fuel, food, medicines... Bilateral assistance is arriving from: - Hungary (Red Cross and SzFRS) - Serbia (TBC or role-played) → Hot wash up	<b>Evaluation meeting:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Summary of “Hot wash up”</li> <li><input type="checkbox"/> Exercise evaluation</li> <li><input type="checkbox"/> Project evaluation</li> <li><input type="checkbox"/> Observations</li> <li><input type="checkbox"/> Inputs for the network concept</li> </ul>	
1200				
1300	<b>Lunch break</b> <b>National Response:</b> Time: 2 – 48 hours after disaster Civil Protection establishes liaison: DSU, police, fire rescue, military TV, radio and media Critical Infrastructure provider → Hot wash up	<b>Lunch break</b> <b>Recovery:</b> Time: 188+ hours after disaster Main task: stakeholder integration Bilateral assistance is leaving - Restore, repair - Donations, handover, customs → Hot wash up		
1700				
2000	<b>Feedback</b> Social event: Dinner	<b>Feedback</b> Certificate handover Participants departure		

INDIMA-project (ECHO/B/03 - 101017935) | www.indima-project.eu

#### Scenario update to “freezing rain”

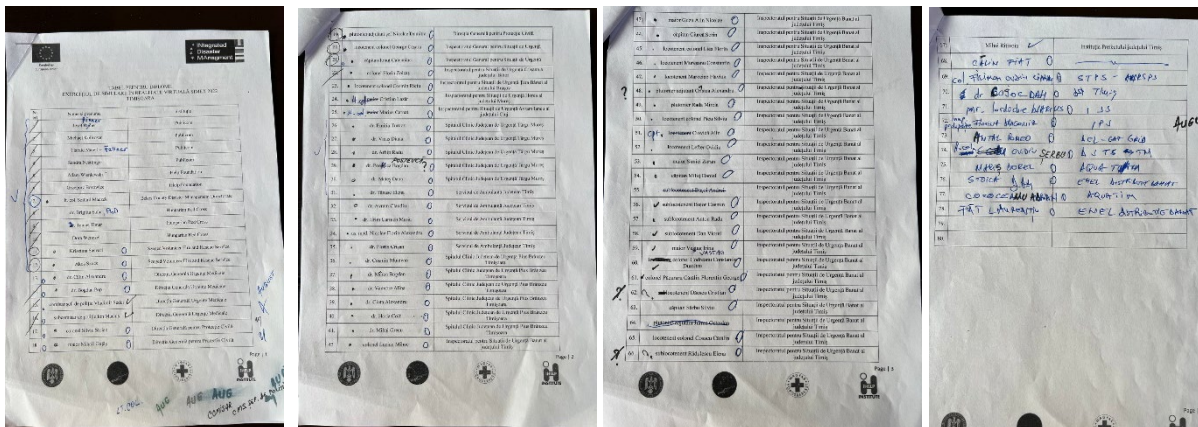
The scenario of the SIMEX was changed due to a negative TV report about a blackout situation. Nevertheless, the Project Director and the Project Manager agreed, to change the initial situation to a severe weather scenario.

The night before the SIMEX all injects were adapted to the new initial situation of freezing rain. This could be managed by the SMURD foundation and the PCCmedia manager.

## 4. SIMEX participants

76 registered persons (participants, staff and role-player) attended from 4 EU states

Austria	4
Hungary	6
Poland	2
Romania SIMEX participants	39
Romania VIP	5
Romania staff	11
Romania evaluators	3
Romania VR team	6



The participants at the certificate handover





## 5. SIMEX preparations:

SIMEX, the simulation exercise of the INDIMA project has the aim to prepare the participants for challenges in disaster management and the integration of all relevant stakeholders. The use of contemporary tools like virtual reality injects and situations and the newly developed network concept makes the exercise very realistic and cost-effective.



The SIMEX was supported by VR (Virtual reality) simulations of scenarios and injects to test the network concept. The two-day table-top exercise was going from phase I (national response) to phase II (national and cross-border response) to phase III (recovery), followed by day 3 (SIMEX evaluation).



SIMEX, the simulation exercise of the INDIMA project has the aim to prepare the participants for challenges in disaster management and the integration of all relevant stakeholders.



Two clear innovations have been presented at the SIMEX: the network concept and the full-on VR relying “dynamic” inject management for the simulation.



## 6. Day 1 – national response:

In the SIMEX the disaster managers from ISU (Inspectorate for Emergency Situations, Timiș County) have to cope with a series of disaster situations to test the network concept and find inputs for improvement.

### Day 1: 23 March 2022 (1300 – 1700)

A massive power outage took place. The situation in northwest Romania is still partly unclear, the counties of Timiș, Arad, Caras Severin and Hunedoara are severe affected and without electricity.

#### National Response: Time: 2 – 48 hours after the disaster occurred

- Civil Protection establishes coordination:
  - DSU, police, fire rescue,
  - TV, radio and media
  - Critical Infrastructure provider
- The IESJ TM (local CP) radio network and e-mail is OK, but overloads can occur

↑  
Test of the checklists  
of page 8 - 11

#### Expected outcome:

- Early warning/alert of the population
- Situation overview and management
- Emergency actions: save lives
- Damage mitigation
- Frequent coordination and update with DSU ops-centre's priorities
- Establish liaison cell/persons
- Identify safe routes and staging areas

**Outcome:**

- Initial decisions
- Coordination meeting w. stakeholders and utilities
- Establish liaison w. stakeholders
- **Networking with ALL**

Start of the SIMEX: briefing of the participants for the simulation exercise of the INDIMA project. There will be three sessions, today we start with the response phase to test the network concept in a severe weather-related emergency.



From 1200 UTC on we had a live stream of this event on our Facebook page.



## 7. Day 2 – cross border response:

The SIMEX runs at two levels: on-site the commanders of Inspectorate for Emergency situations, Fires rescue, SMURD and Salvarea (ambulance service) are leading the incidents. On the level of Timis county, the CJCCI (Country Center for Intervention Command and Control) is working with the general common operational picture and implements the inputs from the on-site commanders. There they are testing the usefulness of the INDIMA network concept.



### Day 2: 24 March 2022 (0800 – 1200)

The Northwest of Romania is still partly since one day without electricity, the counties of Timiș, Arad, Caras Severin and Hunedoara are severe affected and working to fulfil the basic needs...

#### Cross-Border Response: Time: 96 – 120 hours after the disaster occurred

- ❑ Main task: National: coordination, liaison and fuel, food, medicines...
  - ❑ Cross-Border: integration of bilateral assistance arriving from:
    - ❑ Hungary (Red Cross and SzFRS)
    - ❑ Serbia (TBC or role-played)

Test of the checklists  
of page 14 - 15

#### Expected outcome:

- Establish liaison with cross-border assistance forces and liaison persons
- Traffic control
- Secondary threats
- Anticipated evolution, short and mid-term developments
- Restore public services and security
- Frequent situation updates
- Documentation

#### Outcome:

- Clarification w. cross border assistance offers
- Coordination meeting w. stakeholders and utilities
- Coordination meeting w. cross border assistances
- **Networking with ALL**

INDIMA-project (ECHO/B/03 - 101017935) | [www.indima-project.eu](http://www.indima-project.eu)

A cross-border response inject is simulated. Liaison officers from a joint Hungarian and Austrian Red Cross EMT 1 are arriving at the CJSU and discussing options for assistance.





## 8. Day 2 – recovery:

Discussions in the County Committee for Emergency Situations. Police officers, authorities, ambulance service, county government and private companies as stakeholders are working with the INDIMA network concept

### Day 3: 24 March 2022 (1400 – 1700)

In Northwest Romania the restore and repair activities are in full swing, the cross-border assistance forces are demobilising and the handover process is started.

**Recovery: Time: 188+ hours after the disaster occurred**

- Main task: integration of all stakeholders
- Restore public services and repair coordination
  - Infrastructure restoration
  - Debris management and removal?
  - Cultural heritage protection
- Bilateral assistance is leaving
  - Hungary (Red Cross and SzFRS)
  - Serbia (TBC or role-played)

Test of the  
checklists of  
page 12 - 13

**Expected outcome:**

- o Management of donations, handover process, customs support for cross-border assistance for
- o Restore public services and security
- o Frequent situation updates
- o Documentation

**Outcome:**

- Restoration planning
- Coordination meeting w. politicians
- Coordination meeting w. stakeholders and utilities
- **Networking with ALL**

The cooperation between Civil Protection authorities, emergency services, utilities NGO and private stakeholders is increasing to restore critical infrastructure and protect cultural heritage.





## 9. Evaluation:

### From the proposal:

In March, the two-day lasting SIMEX will be conducted, due to have enough time for the evaluation and interpretation of the findings and lessons learnt. This VR supported simulation table-top exercise with all actors will simulate the disaster risk management process, test the implementation of the checklists and gain knowledge for the practise.



The evaluation phase includes a formal exercise evaluation, an integrated analysis, and an evaluation report that identifies strengths and areas for improvement, as observed during the exercise. This also includes the opportunity for participants to provide dynamic feedback on the exercise.

## 10. Day 3 -Evaluation meeting:

- Summary of “Hot wash up”
- Exercise evaluation
- Project evaluation
- Observations
- Inputs for the network concept

## 11. The final workshop in May

In 16.May 2022, the final recommendation workshop will be conducted as the meeting. From the findings of the workshops and the SIMEX, the final workshop will be organised as a hybrid workshop with the opportunity to have independent experts and consortium members as participants.

The aim is to validate the projects results and finalize and publish the final INDIMA concept and recommendations out of the lessons identified from the former conducted workshops and simulation exercise. The release the final network concept will be confirmed by experts at this final workshop to be published as the outcomes of the project.

## 12. Exercise Control Team

The consortium will provide a professional exercise control (EXCON) team that will assist the Chief Exercise Controller during the SIMEX.

The exercise management is a component of the overall project management used to carry out the activities needed to execute the SIMEX successfully. The used exercise management cycle involves four phases, which are collectively known as the exercise cycle.

### Conduct of The SIMEX:

Exercise conduct involves scenario planning, managing injects, and conducting immediate exercise wrap-up activities. Throughout these efforts, the engagement of elected and appointed officials by practitioners will ensure that the exercise is addressing the guidance and intent of civil protection officials. Injects will stimulate the dynamic of emergency activities and will test the coordination and interoperability of all actors involved.

37 exercise staff and 39 participants is not a bad relation even in a tabletop exercise. But given the circumstances, that this exercise played in three phases and exclusively with VR based injects it was an outstanding result for the approach of the project INDIMA: **going digital**



### The inject simulation stations:

The graph shows the exercise organisation with 3 VR simulation inject cells. These cells were manned by two experienced VR operators with much field experience. Opposite them were a commander (fire officer from ISU) a doctor from SMURD (Romanian EMS and extrication team), and an incident commander from Salvarea (Romanian ambulance service) to make decisions on-site and report to the County Committee for Emergency Situations. The CJCCI took their decisions using the assistance, given by the INDIMA network concept.









# Partner Roles and Responsibilities

	<p><b>Ministry of Internal Affairs</b> Department for Emergency Situations Coordinating Partner</p>	<p>GO: project lead, reports, representation, conduct and evaluation of the SIMEX</p>
	<p><b>Publicomm GmbH</b> Consortium Partner</p>	<p>SME: Planning and activities, communication, and visibility, Virtual Reality Simulation</p>
	<p><b>Hungarian Red Cross</b> Consortium Partner</p>	<p>NGO: research, online survey, and workshops</p>
	<p><b>iHELP Institute</b> Consortium Partner</p>	<p>NGO: SIMEX scenario and schedule, EXCON staff</p>
	<p><b>Subcontracted expert</b></p>	<p>Quality and risk management</p>
	<p><b>SMURD FOUNDATION</b> Subcontractor</p>	<p>Virtual Reality Simulation Exercise setup and management</p>

# Linked Third Parties

	<p><b>Austrian Red Cross</b></p>	<p>LTP are supporting with their expertise, contributing experts, nominate SIMEX participants and qualified role-players.</p>
	<p><b>Budapest Water Works</b></p>	
	<p><b>Szeged volunteer fire and rescue service</b></p>	



Funded by  
European Union  
Civil Protection

ECHO/B/03      101017935  
Project duration: 18 months  
Programme: UCPM  
Responsible Unit: ECHO/B/03

