



**BABEȘ-BOLYAI UNIVERSITY**

**Institute for Doctoral Studies**

**Faculty of Environmental Science and Engineering**

**Doctoral School of Environmental Science**



# **SUMMARY OF DOCTORAL THESIS**

## **FOSTERING ROMANIAN CIVIL PROTECTION IN THE CURRENT SECURITY CONTEXT**

### ***CHALLENGES AND OPPORTUNITIES SPECIFIC TO THE DEPARTMENT FOR EMERGENCY SITUATIONS AS PART OF THE EUROPEAN UNION APPROACH TO CIVIL PROTECTION***

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## GLOSSARY OF TERMS AND ABBREVIATIONS

AAR	After Action Reviews
ALA	Local Air Defence
AMP	Advance Medical Post,
App	DSU App
ARSVOM	Romanian Agency for the Rescue of Human Life at Sea
BBK	Federal Office of Civil Protection and Disaster Assistance
C.M/O/C/A.I.D	Municipal, Town, and Communal Disaster Defence Commissions
CAEN	Classification and codification of activities in the national economy
CAT-DDO	Catastrophe Deferred Drawdown Option
CBRN	Chemical Biological Radiological Nuclear
CBRNDET	CBRN Detection and Sampling
CECIS	Communication System of the Common Emergency Communication and Information System
CGAID	Government Disaster Defence Commission
CIC	Interministerial Crisis Cell
CIMU	Interdisciplinary Congress of Emergency Medicine
CJAID	County Disaster Defence Commissions
CJCCI	County Response Coordination and Command Centre
CJSU	County Committee for Emergency Situations
CLSU	Local Committee for Emergency Situations
CMX	Crisis Management Exercise
CNCAV	Committee for the Coordination of Activities on Vaccination
CNCCI	National Response Coordination and Command Centre
CNPPMSU	National Centre for Advancing Training in Emergency Management
CNSU	National Committee for Emergency Situations
CO IAI	Operational Centre for Emergency Alert and Response
COGIC	Inter-ministerial Crisis Management Operational Center (France)
COVID-19	Coronavirus disease 2019
COZ	Centres Opérationnels de Zones
CPU	Emergency Departments



DG-ECHO	Directorate-General for European Civil Protection and Humanitarian Aid Operations.
DGPC	Directorate - General for Civil Protection/DSU
DGSCGC	Directorate-General for Civil Protection and Crisis Management
DPC	Department of Civil Protection
DRR	Disaster Risk Reduction
DSU	Department for Emergency Situations
EADRCC	Euro-Atlantic Disaster Response Coordination Centre
ECDM	European Civil Defence Mechanism
ECPP	European Civil Protection Pool
ED	Emergency Department
EFFIS	European Forest Fire Information System
EMIZ	l'État-Major interministériel de zone
EMT	Emergency Medical Teams
EO	Emergency Ordinance
EoE	Exchange of Experts
ERCC	Emergency Response Coordination Centre
EU	European Union
EUCP	EU Civil Protection Teams
EUCPM	European Union Civil Protection Mechanism
EUCPT	European Union Civil Protection Team
FEMA	Federal Emergency Management Agency
FRB	Flood Rescue using Boat
GD	Government Decision
GDP	Gross domestic product
GEO	Government Emergency Ordinances
GFFF-V	Ground Forest Fires Fighting with Vehicles modules
HCP	High-Capacity Pumping
HG	Government Decision
HILP	High Impact Low Probability
ICDO	International Civil Protection Organisation
ICRC	International Committee of the Red Cross
IDRiM	Integrated Disaster Risk Management Society

IGAv	General Inspectorate for Aviation
IGI	Inspectorate for Immigration
IGSU	General Inspectorate for Emergency Situations
INSARAG	International Search and Rescue Advisory Group
IOM	International Organization for Migration
IR24	Integrated Resolve 2024
ISIC	International Standard International Classification
ISU	Inspectorate for Emergency Situations
IT	Information Technology
MAI	Ministry of Home Affairs
MEDEVAC	Medical Evacuation
MFF	Multiannual Financial Framework
MIC	Monitoring and Information Centre
MODEX	Modules Exercises
MS	Member States
MSB	Swedish Civil Contingencies Agency
NACE	Nomenclature of Economic Activities in the European Union
NATO	North Atlantic Treaty Organisation
NDRMP	National Disaster Risk Management Plan
NGO	Non-Governmental Organization
OCHA	Office for the Coordination of Humanitarian Affairs
OECD	Organisation for Economic Co-operation and Development
ONAC	National Office for Centralized Procurement
OUG	Government Emergency Ordinance
PACE	Parallel and Coordinated Exercises
PJ IAI	County Emergency Alert and Response Posts
PNMRD	National Disaster Risk Management Plan
POA	Advanced Operative Point
PDD	Sustainable development Programme
PTF	Border Crossing Point
PZDS	Préfet de zone de defenced et de sécurité
QR	Quick-response
RescEU	Strategic reserve of European disaster response capabilities and stockpiles

RMP	Risk Management Plan
RO-ALERT	Emergency Public Warning System
RO-MUSAR	Romanian Medium Urban Search and Rescue
SARS-CoV2	Severe acute respiratory syndrome coronavirus 2
SMURD	Mobile Emergency Service for Reanimation and Extrication
SNASC	National Strategy on Adaptation to Climate Change
SNMSU	National Emergency Management System
SNRRD	National Disaster Risk Reduction Strategy
SPSU	Private Emergency Services
SRSA	Swedish Red Cross and Swedish Rescue Services Agency
SThP	Permanent Technical Secretariat
SVSU	Volunteer Emergency Services
SWOT	Strengths Weaknesses Opportunities Threats
SZKG	Federal Civil Protection and Disaster Relief Act
TFEU	Treaty on the Functioning of the European Union
THW	Federal Agency for Technical Relief
ToT	Train the Trainers
UAT	Administrativ-Territorial Units
UAE	United Arab Emirate
UBB	Babeş-Bolyai University
UCPM	Union Civil Protection Mechanism
UN	United Nations
UNHCR	UN High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UPU	Emergency First Aid Units
VOIP	Voice Over IP
WHO	World Health Organization



## INTRODUCTION AND THESIS FRAMEWORK

### i) Background, problem and research gaps

The growing frequency and complexity of disasters in Europe, especially Romania, underline the pressing need for a holistic approach to emergency management. Although considerably more has been learnt scientifically about disasters and their consequences, the Romanian civil protection system has not been closely looked into.

Therefore, this **thesis examines the development and challenges of the civil protection system in Romania**, with a specific focus on the period from 2014. The Department for Emergency Situations (DSU) plays a vital role in this system, operating as the backbone of the National Emergency Response System.

The research study reveals **significant gaps in current academic work**, suggesting that many elements of the civil protection framework remain **inadequately researched**. Seeking to address existing gaps, the institutional, legislative, and operational frameworks governing emergency management in Romania were analysed. This analysis evaluates the effectiveness of the National Emergency Management System alongside Romania's contributions to the European Union Civil Protection Mechanism (UCPM). The role of civil society in crises is an essential topic of this thesis, especially regarding the management of the recent influx of Ukrainian refugees, where community engagement and cooperation serve as crucial for effective response efforts.

This thesis proposes **strategic options to enhance resilience and improve governance in disaster risk management**. It acknowledges the need for a collaborative approach involving both public authorities and civil society to establish a strong civil protection framework. It aims to develop the academic literature on civil protection and offer concrete recommendations for practical improvements in disaster management, applicable in Romania and the wider European and international context. At the same time, the thesis reveals the necessity of risk anticipation, investment in preparedness, and the promotion of resilience within communities in light of the anticipated increased incidence of disasters in the coming years.

From a **methodological perspective**, the thesis is developed using the SWOT analysis to make a comparative assessment of the civil protection systems in several EU Member States and to frame the conclusions and recommendations set out in each chapter, as well as questionnaires to establish possible future directions for action, and last but not least, an in-depth dive into the evolution of legislation and its impact in the field, highlighting the strengths, weaknesses, opportunities and threats shaping emergency management policy in Romania. The

author emphasises the need for an in-depth, up-to-date analysis of civil protection because research in the field is scarce and mainly outdated.

In regard to the author's **research contribution** to the knowledge in the field, this thesis brings to the forefront the following specific personal inputs:

- an analysis of the historical evolution and the paths of development of civil protection in Romania;
- two SWOT analyses of the national approach to civil protection and its place in the European context;
- four case studies: on the management of the Covid'19 pandemic, the Ukrainian refugee crisis, Middle East humanitarian crises, and climate change through the lens of the contribution to the management of forest fires at the European level;
- a new architecture of the institutional organisation of the national civil protection.

This thesis points out these **deficiencies and underlines the significance of more thorough scientific research in civil protection**. Focused on a practical approach over purely theoretical analysis, the thesis, which is based on the extensive experience of the author in civil protection, comprises seven chapters and conclusions that examine historical developments, legislative frameworks, and organisational changes in emergency management, mainly over the last decade. With the hope that these ideas would inspire more study related to their efficiency, the author offers several options to improve risk management capacity in Romanian society.

## ii) Objectives of the Thesis

The main scope of this thesis is: to enhance general knowledge, by providing to the research sector and the academic community, a comprehensive overview of the challenges and opportunities of Civil Protection in Romania by outlining objectives that address its evolution, current performance, and future perspectives while recognising the scarcity of academic research in this area.

The main objective is to examine the Romanian civil protection system and to identify areas where it needs to be strengthened and offer ways to develop, while tracing its evolution from its origins to the present, highlighting the key moments and significant transformations that have led to its current organization. At the centre of this analysis is the Department for Emergency Situations (DSU), whose strategic vision and contribution to the strengthening of intervention and cooperation capacities are assessed for the period 2014-2025. At the same time, the structure and performance of the National Emergency Management System (SNMSU) will be analysed in detail, with a special focus on its capacity to respond to major crises such as the Covid-19 pandemic. Another pillar of the research is international cooperation, examining Romania's active role in the European Union Civil Protection Mechanism (UCPM)

and participation in international humanitarian assistance and disaster response missions (including forest fires, pandemics and humanitarian crises in the Middle East). In addition to the institutional and operational approach, the thesis will also analyse the collaboration between public authorities and civil society, with a case study on the management of the refugee influx in Ukraine, emphasizing the role of NGOs, volunteers and local structures in coordinating interventions and support to displaced persons.

This thesis also sets out a series of specific objectives, as follows:

- ✓ to analyse the historical development of Romanian civil protection and identify major transformations;
- ✓ to assess the performance of the National Emergency Management System, including in the context of recent crises;
- ✓ to explore the strategic and institutional role of the DSU in the last 11 years (2014-2025) and to propose a future organisational architecture;
- ✓ to examine Romania's contribution to the UCPM and international cooperation in the field of civil protection;
- ✓ to conduct a comparative analysis between Romania and other EU Member States on the organization and effectiveness of civil protection systems;
- ✓ to analyse Romania's participation in international civil protection missions;
- ✓ to assess the cooperation with civil society in crisis situations, in particular in the context of the Ukrainian refugee crisis;
- ✓ to identify the challenges and opportunities for the future development of the Romanian civil protection system by formulating strategic recommendations.

Recognising that actions focused on investment in anticipation, prevention, and preparedness activities are crucial for reducing disaster risk prior to its occurrence and are typically less expensive than disaster response (Heo & Heo, 2022), the thesis introduces tools to strengthen the role of civil protection within the crisis management architecture.

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**Key Words:** Civil Protection, Department for Emergency Situations, International Assistance, European Union Civil Protection Mechanism, Civil Society Resilience, Emergency Management System, General Inspectorate for Emergency Situations

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### **iii) Research Output Arising from the Thesis**

#### **➤ Publications:**

1. Chapter 3, Chapter 4 and Chapter 5: Marius Dogeanu and Alexandru Ozunu, 2024 - *Fostering Resilience in Romania through European Collaboration: Challenges and Perspectives Specific to the Romanian Department for Emergency Situations as part of the*

*EU Civil Protection Approach*, Environmental Engineering and Management Journal, September 2024 Vol. 23, No. 9, 2005x, <http://doi.org/10.30638/eemj.2024.161>;

2. Chapter 4, Chapter 6, Chapter 7: Marius Dogeanu, Alexandru Ozunu and Cosmin Bunoiu - *Romanian Civil Protection: “National Export Product” - a radiography of civil protection international assistance missions* (AES Bioflux, 2025, Volume 17, Issue 1);

3. Chapter 2, Chapter 4: Alexandru Ozunu and Marius Dogeanu - *European disaster risk scenarios of large cities, challenges, and prospects for Romania as part of Southeast Europe approach to Disaster Risk Reduction in large cities*; Megacities and Disaster Management: Challenges and Prospects 21<sup>st</sup> Century, Bijayanand Misra, Lambert Academic Publishing, e-book: 9786207805907;

4. Chapter 7: Marius Dogeanu, Alexandru Ozunu, Daniel Gheorghita, Iordan Gavrilă and Mihai Lupu - *Cooperation with civil society from Romanian Civil Protection perspective: a case study on managing Ukrainian refugee flows*; article in final revision.

➤ *Presentations at International Conferences:*

1. Marius Dogeanu - Humanitarian Networks and Partnerships Weeks: Optimizing Emergency Preparedness for Effective Anticipatory Action and Response / *How can we better link preparedness with anticipatory action and response efforts?* Geneva March 2025;

2. Marius Dogeanu - *Organisational and Community Resilience Systems for Health* - Strategy and emergency management under social, technology, population migration challenges; the 10th Edition of the Interdisciplinary Congress of Emergency Medicine, July 4, 2024, Cluj;

3. Marius Dogeanu, Alexandru Ozunu - *Contributions on the use of Virtual Training in improving the Response to Civil Protection contexts*; SICHEM 2024, (SA OP04);

4. Marius Dogeanu – *Misinformation/Disinformation Management in Emergency Response/* Scientific Expertise and Disaster Management Interface: Challenges and Prospects for Better Policy and Practice; IDRIM Café Talk - Integrated Disaster Risk Management (IDRiM) Society, November 2023;

5. Marius Dogeanu & all – “*How to face the unthinkable?*”; 7<sup>th</sup> European Civil Protection Forum: “Towards faster, greener and smarter emergency management”, June 2022;

6. Marius Dogeanu - *Strengthening Global Collective Civil Protection Capacity* / Regional Approach to Disaster Management Response - European Union Civil Protection Mechanism; IDRIM Café Talk - Integrated Disaster Risk Management (IDRiM) Society, August 2021.



## CHAPTER 1 HISTORICAL HIGHLIGHTS - THE ROMANIAN CIVIL PROTECTION

### 1.1 The rational: What – Who – When – Where – Why – How

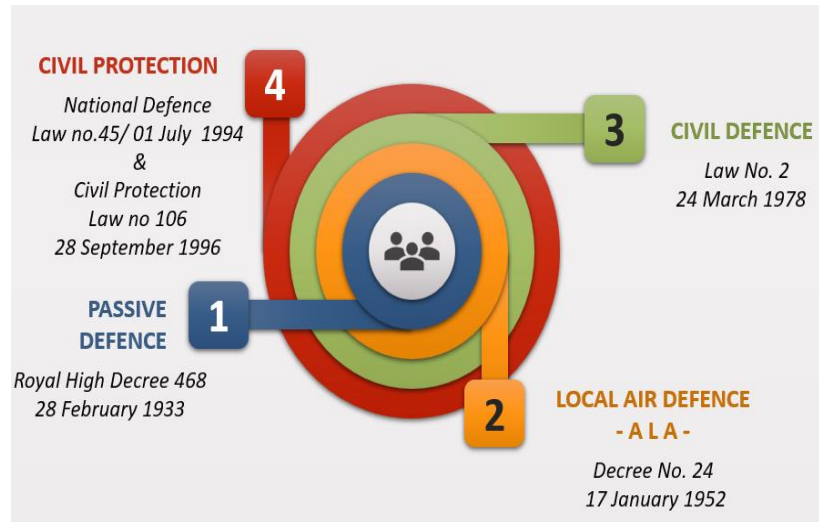
In the author's opinion, the development of the Civil Protection requires a careful analysis of the historical moments over more than 90 years of its presence in Romania - the Civil Protection begins its life as "passive defence", established by Royal High Decree 468 of 28 February 1933. This analysis will address the beginnings of civil protection, the rationale for adjustments, their frequency, the timing and manner of their implementation, and the challenges faced. These facets were explored through a series of critical enquiries: what, who, when, where, why, and how:

- **WHAT** historical highlights
- **WHO** civil protection
- **WHEN** 92 years of existence
- **WHERE** Romania
- **WHY** to explore the way forward and streamline actions
- **HOW** analysing the historical evolution, the drivers of change and understanding how civil protection has adapted to the challenges

Thus, looking from the '90s to the beginnings (Figure 1.1), we can easily identify the major historical **milestones**, **four** in number, defined according to the **change in the name** and the **legislative adoption** in Romania, namely:

- 1) **1994**, the expression "civil protection" formally introduced in the legislation: National Defence Law no.45 of July 01, 1994; came into force by the adoption of the Civil Protection Law No:106 in September 1996;
- 2) **1978**, the "civil defence" is defined by law (Law No. 2 of March 24, 1978);
- 3) **1952**, the "local air defence" (Decree No. 24 of 17 January 1952);
- 4) **1933**, in order to limit the consequences of aerial bombardment on the population or resources of the territory, the "passive defence" was established (Royal High Decree 468 of 28 February 1933).

The shifts connected with the name of Civil Protection were driven by the necessity of further developing its original goal and *constantly accommodating changing geopolitical circumstances: from simply limiting the effects of aerial bombardment on the population or territorial*



**Figure 1.1** Historical Highlights - The Romanian Civil Protection

*resources (1933) to ensuring the protection of the population, goods, cultural values, and environmental factors in the event of war or disaster (1996).* Civil protection began and remains **committed to a no combative posture**, with its various names always striving to preserve this essential facet while preserving its original aim, so to speak, "**to safeguard**".

## 1.2 Civil Protection phases

**The first stage (1933–1952)** laid the **legislative** and **practical foundations for passive defence**. Under the Ministry of the Interior, until the outbreak of the Second World War, passive defence focused on population preparedness and the establishment of initial guidelines and regulations. During this early period, the population, under pressure from the approaching Second World War, fully embraced passive defence.

**The second phase (1952–1978)** begins with the **set-up of the Local Air Defence Command** under the Ministry of the Interior as well as the establishment of dedicated units at the local and enterprise levels. Concerns caused by the so-called Cold War made things less clear at this point. The Ministry of National Defence took over the Local Air Defence (Apărarea Locală Antiaeriană, **ALA**) in 1958. Regardless of the level of population preparedness, its primary objective was to enhance the shelter pool and local planning.

**The 1977 earthquake** also somewhat shocked the ALA, whose structures participated in the rescue operations alongside all the military structures and all staff working with "*high political and patriotic responsibility*" (Order No. 1036 of March 5, 1977/Ministry of the Interior – on the measures adopted by the authorities to mitigate the consequences of the earthquake). This was a real hands-on lesson for the young civil protection staff who were involved in the

rescue actions and who, later in their work, **translated the "lessons identified" into "best practices" for civil protection.**

In the more than 90 years of existence of civil protection, in the full socialist revolution of Romania, **the third phase (1978-1996)** represents the period with the strongest emphasis of affiliation to the communist slogan specific to those times: **"of the entire nation"**. A concept that today is requested and present in all the EU, NATO and UN approaches, and it **includes "all the hazards and the whole society approach"**.

### 1.3 Next steps

Over time, the tasks have basically remained unchanged; what has brought all this development to the forefront has been the focus, to a greater or lesser extent, on particular nuances. In completing the above conclusions, it is worth pointing out that according to the "The Geneva Conventions (1949)" and their "Additional Protocols" (1977), art. 61, civil defence represents *"the performance of some or all of the undermentioned humanitarian tasks intended to protect the civilian population against the dangers and to help it to recover from the immediate effects of hostilities or disasters and also to provide the conditions necessary for its survival."*

Furthermore, to highlight this idea, if we examine the **two original texts in English and in French**, we find in Art. 61 the following translations: **"civil defence" in the English version** and **"protection civile" in the French version.**

To conclude, as can be understood from the Protocols, Civil Protection is considered as a number of entities, not just one single institution, and the central element is the citizen that is part of the solutions, not the problem and, as we will explain further in Chapter 2 and in particular in Chapter 3, as well as in the section dedicated to future directions and Conclusions, Civil Protection will continue to progress. Thus, the ideas presented in Chapter 3 come from the author's perspective as a natural evolution although some critics might see the proposals as a revolution.

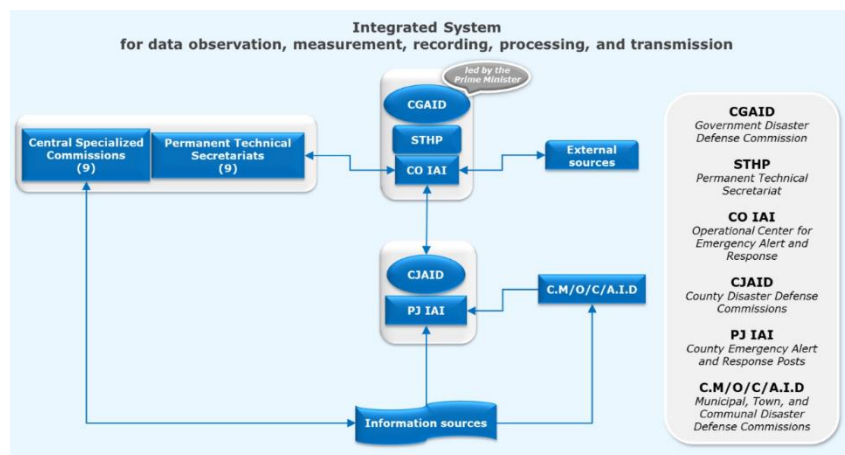
## CHAPTER 2 NATIONAL EMERGENCY MANAGEMENT SYSTEM: SPECIFIC DEVELOPMENTS AND PERFORMANCE

### 2.1 The beginnings

The National Emergency Management System (*Sistemul Național pentru Situații de Urgență* - SNMSU) was established by Emergency Ordinance (EO) No. 21 of April 15, 2004 "for the prevention and management of emergency situations, ensuring and coordinating the human, material, financial and other resources necessary to restore a state of normality" (EO 21/2004 -Art. 1(1)) and is **composed** of "a network of entities, and structures competent in emergency management, organized by levels or areas of competence, which is equipped with the infrastructure and resources necessary to perform the tasks set out in this Emergency Ordinance" (EO 21/2004 - Art. 1(2)).

### 2.2 Evolution of the SNMSU

In a span of mainly ten years, the **Governmental Commission for Disaster Defence** (CGAID - Comisia Guvernamentală de Apărare Împotriva Dezastrelor – Figure 2.1), led by the Prime Minister alongside nine central specialised commissions for different disaster types, under EO 47/1994, was **replaced** by the **National Committee for Emergency Situations** (CNSU), defined by EO 21/2004.



**Figure 2.1** Integrated system for data observation, measuring, recording, processing and communication

From the very beginning, the **organization of the SNMSU** (Figure 2.2) has been assigned to the **public administration authorities**, under which a **network of entities, bodies and structures** responsible for emergency management is established. This network is structured by levels or areas of **competence**, including both prevention and response elements as well as recovery/rehabilitation, with the following main pillars:

- national mechanism;
- integrated decision-making;
- coordinated emergency response;
- disaster prevention and risk reduction activities.

The entire activity of SNMSU covers a range of actions and measures to ensure **warning**, implementation **prevention and protection** measures, **response**, **emergency assistance**, **declaration of alert or state of emergency**, **requesting international assistance** or

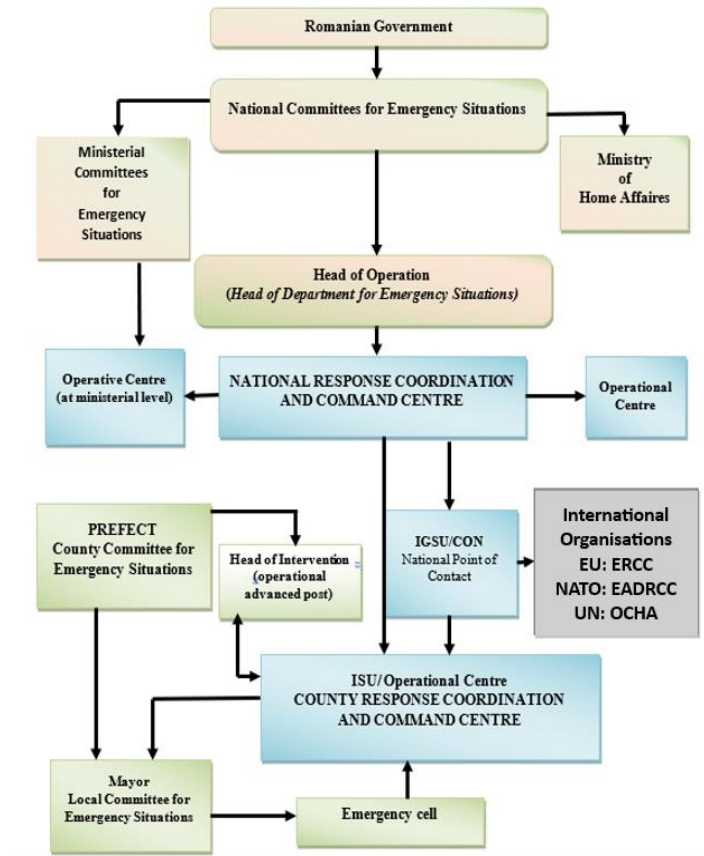


Figure 2.2 SNMSU - architecture components

providing **compensation**, involving **all authorities** responsible for managing the type of risk, from those with a leading role in implementing prevention, preparedness, response, and rehabilitation measures to those supporting only emergency response, with a gradual allocation of resources according to scale and intensity.

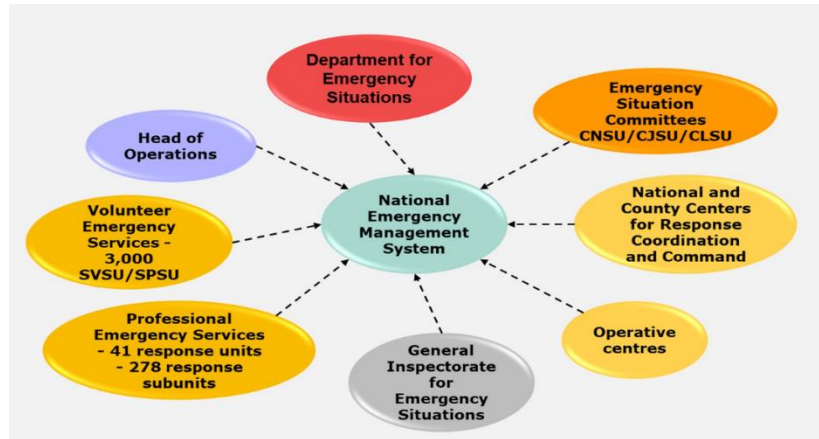
In order to ensure a rapid and efficient response capacity of the entities having a decision-making role, **operational centres** are established and running as specialized technical-operational structures with personnel from responsible agency.

Regarding the committees established at **county** or **national** level, the duties of the operative centres are assigned to the **operational centres** belonging to the county/București-Ilfov inspectorates for emergency situations/Inspectorate General for Emergency Situations. For providing decision support and integrated coordination of all the resources involved in the response operations, the **response coordination and management centres at the county/**

**Bucharest municipality level**, as well as the **National Response Coordination and Command Centre**, are temporary organized and operate during emergency as inter-institutional structures with staff from all the authorities and institutions involved in risk management (Figure 2.3).

In this complex, interlinked and integrated structure of the **National Emergency Management System**,

beside the General Inspectorate for Emergency Situation, the need for a permanent structure was identified. This structure will provide a coherent and integrated coordination of the activities of the specialized structures that



**Figure 2.3** SNMSU – main components

ensure the response, especially when the life and safety of people are endangered. Thus, as of 2014, the **Department for Emergency Situations** was established as an operational structure without legal personality within the Ministry of Home Affairs.

## 2.3 General Inspectorate for Emergency Situations – core pillar of SNMSU

In 2004 the General Inspectorate for Emergency Situations (IGSU) was established as a result of the fusion of the General Inspectorate of the Military Fire Brigade and the Civil Protection Command. In fact, it was the first specialized response structure to be operationalized in the new integrated architecture of what is today the SNMSU.

This whole IGSU architecture, which includes human resources and specialized equipment designed to ensure response to various types of risk, is the result of the development of the professional skills of staff who today act not only to extinguish fires or occasionally to limit and remove the effects of floods, but also provide a range of missions including first aid and emergency medical assistance, rescue people and animals from hostile environments, the extrication of victims of road and other accidents, CBRN (chemical substances, radioactive materials, biological or nuclear hazards) interventions, the provision of water or electricity for essential needs and many other such situations where life, health or property are endangered. But it is not only the increase and diversification of staff training that has made the IGSU the

central element of the SNMSU's operational field, it is also the endowment with state-of-the-art technology, mainly achieved by accessing non-reimbursable European funds.

## 2.4 Case Study – SNMSU managing Covid'19 pandemic scenario

### 2.4.1 The context

The management of the COVID-19 pandemic from epidemiological perspectives calls for a series of actions and measures where all components of the SNMSU were forced to act in a permanent interdependent relationship so that, on the one hand, sick people could receive all the basic conditions for recovery and, on the other, essential systems, particularly the health system, could continue to function to ensure that everyone's essential needs could be met.

### 2.4.2 The structure

In this context, through an approach adopted at the highest decision-making level at administrative, legislative and organizational levels, a unprecedented series of measures in Romania's recent history are being adopted, establishing exceptional situations, limiting freedoms, transferring responsibilities to the decision-making level and creating complex mechanisms within the SNMSU to ensure a tailored response to the daily needs generated by the COVID-19 pandemic. At the core of the developed mechanisms within the SNMSU will find:

- ✓ **at the strategic - decision level:** CNSU headed by the Prime Minister;
- ✓ **at the tactical level** – coordinator: DSU led by the Head of the Department; and at national level National Institute of Public Health, while at the local level, the county emergency committees, respectively the Emergency Situations Committee of the Municipality of Bucharest, with the Prefects being in charge;
- ✓ **at the operational level** - IGSU, Ambulance Services, SMURD, health units, public health directorates, police, gendarmerie, border police;

### 2.4.3 The measures

By Decree no. 195 of March 16, 2020, the **President of Romania** established a "**state of emergency**" for a period of 30 days, which is extended for another 30 days by Decree no. 240 of April 14, 2020. This creates the necessary framework for immediate actions and at the same time ensures an increase in the authority of the institutions that are called upon to ensure

compliance with the required measures to limit the spread of the disease and to ensure the necessary time to adapt the health system and the economy to the new social situation.

During the period of the two decrees, the adaptation of measures at both the decision-making and operational levels was ensured by issuing **12 military ordinances** and **14 decisions of the CNSU**, as well as by issuing subsequent implementing acts, in particular orders of the Head of Operations, for example:

- operational case management by the National Response Coordination and Command Centre (CNCCI);
- the appointment of the National Institute of Public Health for the coordination and monitoring of sampling, data collection and reporting of surveillance results;
- suspension of residents' internships and their deployment at the level of the Public Health Directorates in order to be assigned according to the needs;
- the introduction of quarantine in some areas or localities.

#### ***2.4.4 The implementation***

The instruments for analysing situations, coordinating responses, and making decisions during the pandemic can be represented by specific statistics as follows:

- i) **at the national decision level:** the CNSU in the two years of major impact of the pandemic (2020 and 2021) it adopts 181 decisions establishing the organizational framework and conduct of the activity to limit the spread of infections and ensure the necessary conditions for the provision of specialized medical care;
- ii) **at the operational level**, the implementation of the measures decided is realized by actions and activities assumed by the Department for Emergency Situations being materialized in the decision documents issued in the years 2020 and 2021, respectively:
  - 1) **3245 orders of the Head of Operations** (quarantine, derogation from quarantine measure);
  - 2) **3678 orders of the Head of the Department for Emergency Situations** (zonal quarantine, detachments of medical personnel);
  - 3) **939 orders of the Head of the Department for Emergency Situations** (distribution of equipment and airlifted medical transfers).
- iii) **at the local (county) level** - thanks to the activity of the County/Municipality Committees in the more than **10.000 extraordinary meetings** organized during



2020-2021 and the County/Municipality Response Coordination and Command Centre (CJCCI), who were activated at the beginning of the pandemic and who were operating 24 hours a day during the whole pandemic, an effective joint work of all authorities was reached, leading to the implementation of the measures adopted at the national level, such as:

- limiting activities with a high risk of spreading the virus, or even banning them for limited periods of time;
- quarantine or isolation and verification of compliance with these measures;
- suspend transportation to certain risk areas;
- ensuring the security and protection of critical infrastructure objectives;
- online courses by educational institutions;
- gradual closure of border crossing points;
- restriction of movement outside homes;
- temporary suspension of hospitalization of non-emergency patients.

To conclude, the **adaptability and flexibility** of the mechanisms developed within the SNMSU in a pandemic context, both at national and especially at international level have allowed, in delicate situations when the Romanian **healthcare system was on the verge of collapse**, to identify **support solutions from European countries** (as described in Chapter 6), either by **transferring critical patients**, which led to a decrease in pressure on medical staff, or by receiving donations of equipment and medical supplies, which led to an increase in the capacity of intensive care departments.

## CHAPTER 3 STRATEGIC VISION: DEPARTMENT FOR EMERGENCY SITUATIONS

### 3.1 The inception

The foundation of the Department for Emergency Situations (hereinafter referred to as "DSU") in 2014, was the natural solution to the growing need at the level of the SNMSU to ensure **unified, integrated, and permanent coordination**, with specialised personnel, of the emergency response actions performed by all the dedicated structures that operate when the life, integrity or property of people are endangered as a result of emergencies (The Report of the Supreme Council of National Defence on the activities carried out in 2014, 2015). The aim was to maximise the use of all available resources and to capitalise on the experience available across the whole spectrum of stakeholders, as well as the **creation of an operational structure** with no legal personality to bring the emergency response system under the "umbrella" provided by law (Dogeanu & Ozunu, 2024). For the first time in Romania's modern history, the new approach has placed all emergency services under a **single coordination** (Figure 3.1), aimed at ensuring the coordination "...on a permanent basis, at the national level, the prevention and management of emergency situations, securing and coordination of human, material, financial and other resources necessary to restore normality, including qualified first aid and emergency medical assistance in the emergency care unit and departments, hereinafter referred to as UPU/CPU, until hospitalisation".



**Figure 3.1** DSU – single coordination hub

(Source: <https://www.dsu.mai.gov.ro/despre> - DSU report activity 2020)

### 3.2 2014÷2025: DSU key outputs

The DSU brings with it a major transformation of the MAI, **improving its capacity to prevent and rapidly respond to disasters**. It will contribute substantially to **strengthening**

and **improving preparedness** to manage risk scenarios in a way that meets today's requirements. Throughout this process, the adequate **endowment**, and staff **training** and, in particular, the building of **public education** represented the key objectives of the DSU (Dogeanu & Ozunu, 2024).

Access to **non-reimbursable funds has been the main vehicle** for achieving this goal. Thus, in more than 11 years of existence of the DSU, projects financed by non-reimbursable external funds have been submitted and are being implemented both at the level of the Department for Emergency Situations and the structures under its coordination, for a total amount of approximately **1.043 million euro**.

Technically, the **VIZIUNE-2020 Programme**, which is valued at over 675 million euros and was co-financed by the **Cohesion Fund through the Operational Program Large Infrastructure 2014-2020**, is the benchmark in terms of strategic enhancement of the SNMSU. The project's overall objective was to "develop and strengthen the disaster and **HILP** (High Impact Low Probability) event response capacity of the responsible authorities through the development of the following strategic pillars: **land, sea/river, air**" (Dogeanu & Ozunu, 2024).

On the other hand, the activities carried out by the DSU in the period 2014-2020 in the context of regulatory, operational, human resources management, and international, as well as in accessing non-reimbursable funds, have highlighted the inadequate size of the structure in relation to the commitments and the need to reorganise the DSU as a key element of the National Emergency Management System (Dogeanu & Ozunu, 2024).

In the context established by Law 253/2020, functional bodies were created within the DSU, specifically the **General Directorate for Medical Emergencies**, the **General Directorate for Civil Protection**, and the **Directorate for Decision Support** (Figure 3.2).

Additionally, to strengthen strategic capabilities, the DSU made substantial contributions to:

- a) reviewing the legislation in terms of risk management
- b) to assure an integrated approach to emergency management with a view to

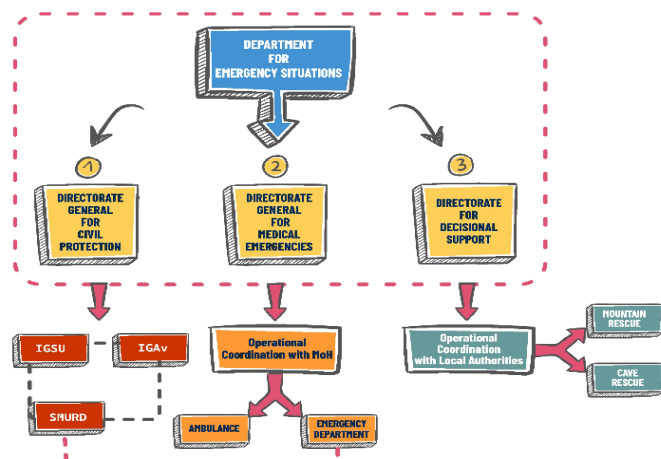


Figure 3.2 DSU organizational chart

increasing the operational efficiency of all stakeholders, including at the decision-making level.

c) **informing and educating the population in the field of civil protection** – the *Fii pregătit* (Get Ready) **platform** and the **DSU mobile app** are valuable resources developed with the objective of providing citizens with efficient and quick access to information.

d) **implementation of the RO-ALERT system**

e) **increasing Romania's contribution in the international arena**

f) **increasing the capacity to access funding** while strengthening the position of civil protection in Romania as the main pillar of the UCPM.

### 3.3 DSU way ahead

#### 3.3.1 *The context*

At the Romanian level, the complexity and seriousness of these events **demand close cooperation between multiple ministries and institutions in different fields of activity**, each with a cross-cutting impact on the entire governmental spectrum.

The involvement of all institutions in Romania, vertically, from field interventions up to the governmental and even presidential level, as well as the collaboration with private and non-governmental actors, demonstrated the need for an **integrated approach and an updated institutional framework**.

The **multi-sectorial impact** of recent events has shown us that the **present structure** of the government's structure is **undersized** and that the **coordination competences cannot be covered by a single ministry**, thus creating links that make it **difficult to respond to complex emergencies** and to implement prevention and preparedness policies. To underpin this decision and coordination framework, it is essential to **optimise the support mechanisms** and **strengthen the institutions' response capacity**.

These lessons have shown us that, in order to face the challenges ahead, it is imperative to **update the way inter-institutional collaboration works**, to provide **increased decision-making support** to the Prime Minister and to ensure that government structures are prepared to effectively manage any major cross-sector crisis, especially in the current geopolitical security context.

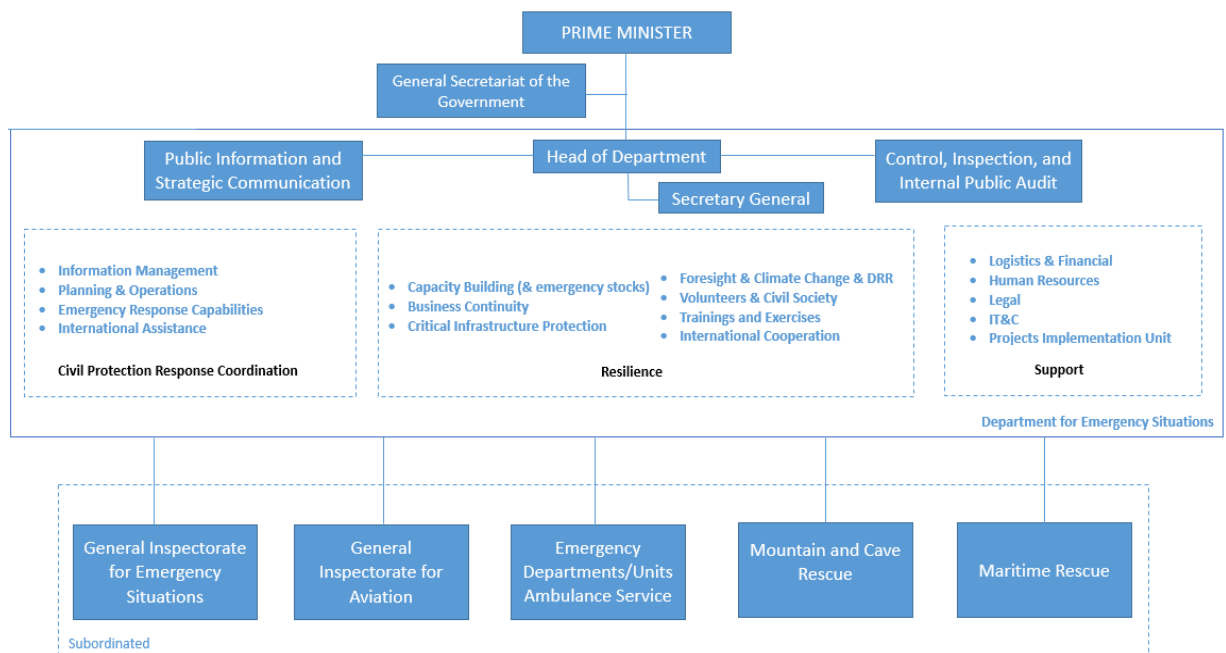
### 3.3.2 The concept

Through reorganising the existing set-up, placing the **DSU under the direct coordination of the Prime Minister** constitutes a strategic measure to ensure an even fast and efficient response to emergency situations. It will allow direct line access to government assets, facilitating faster allocation of funds and support in crisis situations. This arrangement will also allow **closer coordination between the DSU and other national ministries and agencies**, thus streamlining a real whole-government effort for a more effective response and a unified approach at the national level.

#### 3.3.2.1 The architecture

The draft concept of the new institutional architecture proposal (Figure 3.3) is based on **three essential building blocks** aimed at organising and further strengthening the activity:

- **resilience** – this pillar looks both at the necessary measures for anticipation and mitigation of the impact of disasters and at the preparedness of the population, communities, and responsible authorities;
- **civil protection response coordination** – this pillar manages immediate response and rescue operations, ensuring effective coordination of available resources;
- **support** – entails the administrative and support functions necessary for the smooth running.



**Figure 3.3** DSU architecture (proposal)

### 3.3.2.2 Challenges and vulnerabilities

- **institutional resistance among the transferred entities:** some institutions or structures taken over may oppose change, which could create difficulties in harmonising procedures and workflows, leading to inefficiencies in the initial phases of reorganisation;
- **political and social resistance:** the process of setting up the new architecture and the redistribution of resources or authority within the emergency system may be subject to some political or social actors' resistance, who may perceive these changes as a threat to their own interests or positions. The example of October 2015, Collective Club fire, proved that emergency situations management can easily lead to a change of government, no matter the real consequence management. Therefore, even from a political perspective, ensuring a direct link between the prime minister and the responsible institution in the field of emergency situations does not create additional risks.
- **administrative and managerial capacity:** ensuring effective and competent leadership within the agency and developing a team capable of managing challenges and crisis situations could be a vulnerability if human resources and expertise are not adequately available.

## 3.4 Conclusions

Through **reorganizing the existing set-up**, placing the DSU under the direct coordination of the Prime Minister **constitutes a strategic measure** to ensure an even fast and efficient response to emergency situations and an **essential step** to enhance the **efficiency of emergency** and **civil protection services** in Romania. **Reinforcing decision support at government level**, together with the **development of analysis and foresight capabilities**, would allow more **accurate anticipation of threats, reduce losses** and **optimize the use of resources**.

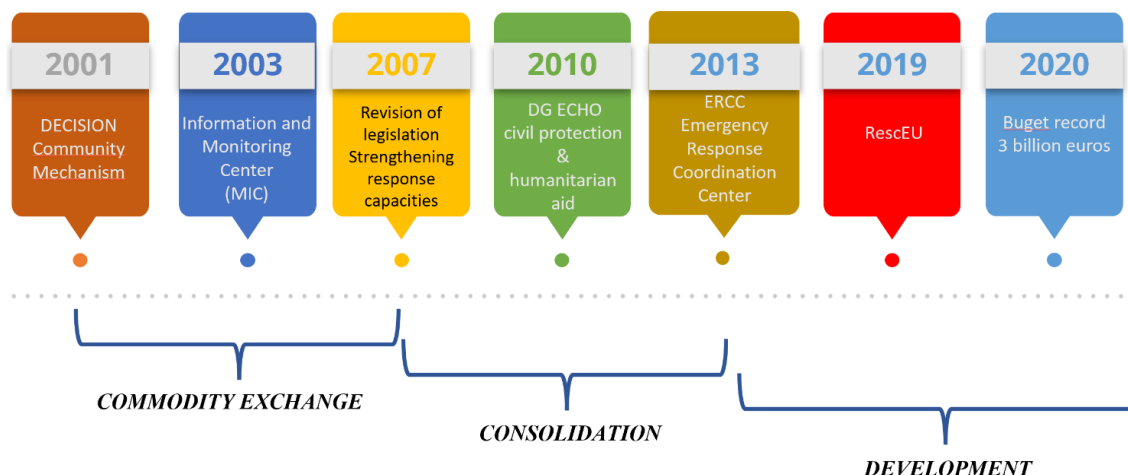
To conclude, the **proposed solution** should not be perceived as **shocking**, except by **those resistant to evolution**, this concept is not particularly new. The proposal for a Civil Protection Agency emerged shortly after the establishment of the IGSU in 2005, as certain limitations of the new structure became apparent. The subsequent phase (establishment of DSU) initiated in January 2014, ten years post-establishment of the IGSU, serves as an **intermediary measure** to address the initial deficiencies, aiming at achieving the foundational concept of 2005 in a more refined manner to meet current requirements.

## CHAPTER 4 INTERNATIONAL COOPERATION AND DISASTER RESPONSE TOOLS: THE EUROPEAN UNION CIVIL PROTECTION MECHANISM – ROLE & FEATURES

The objective of this chapter is **to explore the structure and evolution of the UCPM**, focusing on the operational and legal challenges that impact its effectiveness in disaster management. In addition to addressing the **legal framework governing the UCPM, funding mechanisms, interoperability of resources and lessons to be learned** from recent activations of the Mechanism will be explored.

### 4.1 The role and state of play of the UCPM

The UCPM was developed as a coordination and support tool between Member States and participating states, aiming to improve the collective response capacity to natural and man-made disasters. Since then, the UCPM has undergone a process of development, adaptation and consolidation to respond more adequately to the increasingly complex needs of civil protection at European and international level. According with Dogeanu & Ozunu, 2024, since its foundation in 2001, the UCPM has evolved through three main phases (Figure 4.1):



**Figure 4.1** Key milestones in the development of the EUCPM

- the '*commodity exchange*' phase **2001-2007** – according to the EC 792(2001) decision, the original blueprint of what today we call the **Union** Civil Protection Mechanism (UCPM) was *Community mechanism to facilitate reinforced*

*cooperation in civil protection assistance interventions.* Several major disasters occurred during this phase: floods - Czech Republic (2002), earthquake - Algeria (2003), tsunami - Indian Ocean (2004), earthquake - Pakistan (2005). The assistance provided consisted mainly of goods sent by Member States. The EU's coordination function was to align needs with available resources at the Member States level.

- **‘consolidation’ phase: 2007 – 2013** - legislation is being revised to strengthen the response capacities of the UCPM and improve preparedness. New pillars are being developed, such as:
  - **European Emergency Response Capacity** - consisting of a voluntary pool of pre-committed response capacities of the Member States, including teams (modules), other response capacities and experts;
  - **EU Civil Protection Expert Teams** - experts (assessment/coordination) from Member States;
  - **Program of courses and exercises;**
  - **Funding disaster preparedness projects** - developing response capacity.
- **‘development’ phase: 2013 - present** - in 2013 the Emergency Response Coordination Centre (ERCC) is established, improving coordination, planning and response tools (Parker et al., 2019).

In 2019, during the **Romanian Presidency of the Council of the European Union**, the Union Civil Protection Mechanism was upgraded and **rescEU was created**, initially consisting of **aircraft, helicopters and specialized medical equipment**. RescEU represents **the first-ever strategic reserve at the EU level**.

## 4.2 The main pillars of the UCPM

### 4.2.1 Risk prevention and vulnerability reduction

Particularly in view of climate change and growing extreme weather events, this section looks into the importance of risk prevention inside the Union Civil Protection Mechanism (UCPM) to protect populations and critical infrastructure from disasters. It underlines the importance of a united preventative system with consistent policies, strategic financial tools, and national risk assessments sent by Member States to the European Commission. At the same time, National Disaster Risk Reduction Plans, which establish priorities, based on

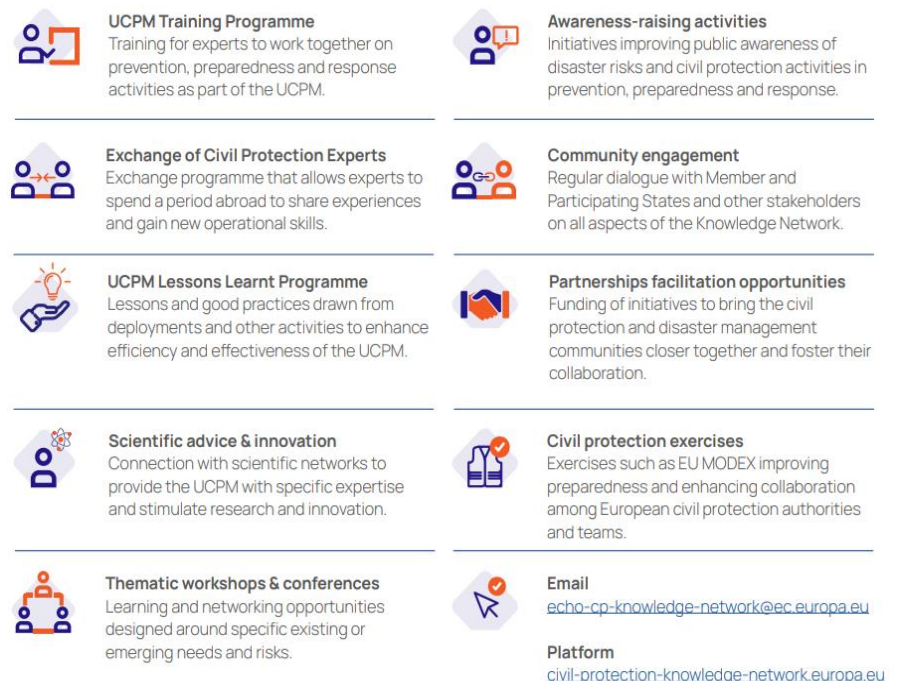


scientific evaluations and address climate change and critical infrastructure, are central to this approach. The analysis underlines how national prevention plans are improved by the Peer Review Program.

The UCPM also offers technical and financial assistance for initiatives on disaster risk reduction. Aiming to raise general disaster resilience in Europe, it encourages cross-border cooperation.

#### 4.2.2 Civil protection preparedness

The EU has established the Union Civil Protection Knowledge Network (Figure 4.2) to address the challenges posed by climate, health, and technological threats. The initiative enhances collaboration, shares best practices, and promotes the development of expertise in disaster prevention and response. The network offers training programs, exercises, and applied research designed to enhance response capabilities for operational staff and decision-makers. The preparedness architecture comprises essential elements such as the UCPM Training Program, aimed at enhancing technical skills and strategic decision-making, and the Exercises Program, designed to test response capabilities in realistic scenarios. The Exchange of Experts program promotes mobility among civil protection practitioners, enabling the sharing of experiences and best practices, thereby fostering a cohesive European civil protection culture. The UCPM advocates for a strategic and continuous training approach aimed at fostering a resilient and adaptable civil protection system and, thereby, enhancing Europe's collective disaster response capabilities. Emphasising continuous learning and the integration of lessons

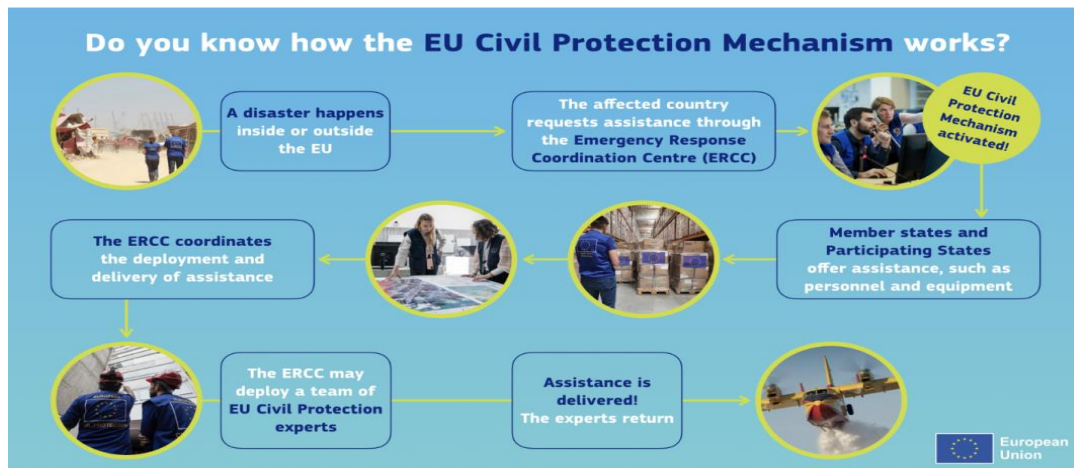


**Figure 4.2** Union Civil Protection Knowledge Network activities  
 (Source: <https://civil-protection-knowledge-network.europa.eu/ucpkn>)

learnt is essential for enhancing preparedness strategies and achieving optimal readiness for future challenges.

### 4.2.3 Response framework: UCPM – core strengths

UCPM has updated its regulatory framework to efficiently deal with complex emergencies by improving response times, quickly mobilising resources, and establishing strategic partnerships. Key developments involve the shift from mostly reactive approaches to a proactive framework, with the Emergency Response Coordination Centre (ERCC) serving as the central hub for coordinating responses (Figure 4.3).



**Figure 4.3** Steps to activate the UCPM (Source: [https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/eu-civil-protection-mechanism\\_en](https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/eu-civil-protection-mechanism_en))

The UCPM has broadened its operational scope to encompass health crises, conflicts, and humanitarian emergencies, illustrating its flexibility and adaptability in response frameworks. The creation of rescEU, a strategic reserve designed to address deficiencies in national capabilities, in conjunction with the European Civil Protection Pool (ECPP) and the incorporation of digital platforms such as the Common Emergency Communication and Information System (CECIS) to enhance communication and resource distribution have been decisive in delivering disaster response. Recent crises, including the COVID-19 pandemic and the Ukraine conflict, have demonstrated the UCPM's capacity to respond effectively to various challenges by providing logistical support, humanitarian assistance, and medical evacuations. The UCPM serves as a model of collaboration and resilience, highlighting the EU's dedication to solidarity and collective disaster preparedness while consistently adapting to emerging risks.

## 4.3 Challenges and prospects for strengthening the UCPM

The European Commission's 2024 report on Article 6 underscores the significance of improving disaster risk management through refined risk assessments that adequately consider complex consequences and the long-term effects of climate change. The report calls for

improved guidelines and knowledge exchange to strengthen disaster resilience, guiding UCPM actions towards resilience until 2030.

The UCPM has evolved into an essential crisis response framework; however, there is a pressing need for strengthening its capabilities and financial resources to effectively tackle future challenges. The discrepancy between public perception of risk and actual preparedness underscores the significance of fostering a culture of resilience across society.

The primary emphasis is on high-impact, low-probability (HILP) events, including extreme weather and pandemics. The European Union seeks to enhance risk management via rescEU, which establishes a strategic reserve of resources. Recent initiatives focus on developing capabilities such as firefighting aircraft and emergency medical equipment while enhancing response times via resource pre-positioning.

#### ***4.3.1 Evolution of the UCPM and future Mechanism architecture***

One of the priorities for the immediate future is to reinforce the logistical capabilities and essential resources available for emergency response. The creation of regional hubs for stockpiling and distribution of essential resources was discussed to ensure adequate response time in case of simultaneous crises.

Another key issue is the need to improve the decision-making process and strengthen joint planning tools for crisis response. To this end, the recommendation is to develop common standards of action for specific complex emergency scenarios so that the response at European level can be faster and more efficient.

At the same time, the proposed reforms cannot be achieved without a revision of the financial framework for the functioning of the UCPM. Increasing demand for deployments and the growing complexity of crises require more flexible budget planning.

#### ***4.3.2 The future of European civil protection: challenges and ways ahead***

The UCPM has to be redefined as a fundamental component of the EU's security and resilience architecture given current geopolitical and climatic volatility rather than just a reaction tool.

Some of the main options are improving the financial sustainability and decision-making of the UCPM, fostering an integrated, whole-of-society approach to preparedness, and adopting an all-hazards strategy. Anticipating and preventing crises rather than only reacting to them

aims the EU to set up coherent strategies and build societal resilience. Recent evaluations highlight the UCPM's strengths and vulnerabilities, stressing the need for faster, better-coordinated responses and improved resource allocation.

Financial sustainability is essential, requiring long-term resource planning and diversified funding sources. Civil protection should be integrated into the broader EU security architecture, encompassing energy security and critical infrastructure protection. Ultimately, civil protection must evolve into a strategic component of EU security, supported by foresight, cooperation, and adaptation, ensuring the EU can protect populations and critical infrastructures effectively.

## CHAPTER 5 COMPARATIVE STUDY OF CIVIL PROTECTION SYSTEMS IN THE EU - *SWOT ANALYSIS* -

The purpose of this comparative study is to **review performances and weaknesses of centralised and decentralized structures**. For the purpose of the study, several countries with recognised international civil protection systems have been selected: France, Germany, Italy, Sweden and Romania. The study will look into each of the organisations from an **administrative and operational perspective** in relation to their national activities as well as in regard to international operations within the UCPM framework.

### 5.1 General overview of selected civil protection systems

#### 5.1.1 *Centralised systems*

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**France's civil protection system** is a comprehensive framework designed to ensure the safety and well-being of its citizens in the face of a variety of hazards, ranging from natural disasters to industrial accidents and public health emergencies. The system is structured around national coordination, regional and local implementation, and active involvement of volunteer organizations (<https://www.interieur.gouv.fr/Le-ministere/Securite-civile>).

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**The Directorate-General for Civil Protection and Crisis Management (DGSCGC)**, within the Ministry of Home Affairs, is responsible for anticipating and monitoring crises affecting internal and civil security.

Emergency services are provided daily under the mayor's authority, by municipal or departmental, civilian or military bodies, with **22% of civil and military firefighters** and **78% of firefighters being volunteers** ([https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/national-disaster-management-system/france\\_en](https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/national-disaster-management-system/france_en)).

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**Italy's civil protection system** is widely regarded as one of the most sophisticated and integrated in Europe, designed to tackle a wide range of natural and man-made disasters. Given the country's vulnerability to natural hazards such as earthquakes, floods, and

volcanic eruptions, the system is focused on preparedness, response, and recovery, with a decentralized but coordinated approach. Italy's system benefits from a well-defined structure that balances centralized coordination with decentralized execution.

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**The Department of Civil Protection (DPC)** provides oversight at the national level and ensures that emergency management efforts align with national policies. At the same time, the regional and local authorities are responsible for carrying out the response based on their specific needs and contexts. This decentralization allows for a tailored approach to disaster management, particularly in areas with distinct geographical or socioeconomic challenges (<http://www.protezionecivile.gov.it>).

### 5.1.2 *Decentralized systems*

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**Germany's civil protection system** is well-organized and operates at multiple levels, ensuring preparedness for disasters and emergencies. The structure is designed to manage and mitigate a variety of risks, from natural disasters to large-scale emergencies and even threats from industrial accidents or terrorist events.

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According to the Constitution, the **federal states** ("Länder") are responsible **for disaster management ("Katastrophenschutz") in times of peace**. They have enacted respective disaster management laws, defining - inter alia - the responsible disaster management authorities and delegating several administrative and operational tasks to the regional and local level.

In the case of defence, e.g. in times of war or armed conflict, the Federation oversees civil protection ("Zivilschutz"), as laid out in the **Federal Civil Protection and Disaster Relief Act (ZSKG)**.

The Federal Ministry of the Interior, Building and Community (BMI) is the superior federal government authority for civil protection, supervises the 2 national civil protection agencies:

- i) **The Federal Office of Civil Protection and Disaster Assistance (BBK)**: it carries out specific tasks of the Federation concerning civil protection, such as risk management, warning of the population, information and resource management, chemical, biological, radiological and nuclear defence (CBRN) and health protection, protection of critical infrastructure and cultural property, research, international cooperation, etc.

- ii) **The Federal Agency for Technical Relief (THW)** is a governmental non-profit organisation. As a technical and operational agency, its tasks include technical relief and assistance in a large number of emergencies, within Germany and abroad. More than 1.8 million volunteers constitute the backbone of the system, which is reinforced by professional full-time staff (<https://www.thw.de>).

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**Sweden's civil protection system** is designed to effectively manage a wide range of risks, including natural disasters, accidents, and social disruptions. The crisis and emergency management system is based on 3 principles. The principle of responsibility -the stakeholders retain their ordinary responsibilities in situations of crisis and disaster. The principle of proximity - crises and disasters should be managed as close as possible to those primarily concerned. The principle of similarity - the methods and structures used in disaster management, should be as similar as possible to those used in normal circumstances.

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- iii) **The Swedish Civil Contingencies Agency (MSB)** is the central authority responsible for national civil protection efforts. It works under the Ministry of Defence and is tasked with coordinating disaster preparedness, response, and recovery at the national level.

## 5.2 Study of civil protection authorities by SWOT Analysis

The purpose of the study on civil protection systems is to look into the working arrangements for coordinating civil protection measures nationally as well as the contributions to the UCPM by the respective selected Member States and the dynamics compared with the Romanian system.

Although Romania has significantly less experience in the international arena, the comparative data in the table below (Table 5.1) shows that our country has developed a highly effective system over the past decade.

These statistics reveal several features that delimitate the countries' profiles regarding their contributions to the Union Civil Protection Mechanism (Figure 5.1):

- the **larger countries** (France, Germany, and Italy) **provide most of the capacities** to the international assistance process - which is justified by the size, resources and variety of risks they face. This provides a consistent base on which the UCPM is built;

- the **large number of experts mobilized by Sweden** is invaluable for providing specialized expertise and facilitating better coordination (even though Sweden has a significant lower number of inhabitants).
- **all countries can provide essential expertise;**
- Romania and Sweden contribute with critical response capabilities in the rescEU (that enhance the overall capacity of the UCPM). The conclusion is that any **country can fill niche roles;**
- the diversity of contributions in terms of capacity and types of skills demonstrates how the **Mechanism benefits from complementarity between larger and smaller countries;**
- **solidarity:** addressing requests for assistance in a consistent way underlines the effectiveness of the Mechanism;

	structure	staff profile	preparedness	miscellaneous
FRANCE	- centralized system at the level of the Ministry of Interior - responsible structure: General Directorate of Civil Protection and Crisis Management (DGSCGC).	78% of the firefighters are volunteers.	- includes mandatory exercises	- DGSCGC coordinates 12 regional defense and security zones, - the regions are led by prefects
GERMANY	- decentralized federal system - responsibility at Land level - the federal level can provide support on request	- 1.8 million volunteers supplement the professional staff.	-includes extensive training and exercise programs	
ITALY	- centralized system coordinated by the Civil Protection Department, - strong responsibilities at local and regional level	- multiple categories of personnel: firefighters, military, police, but also contributions from research /science health field, - well-developed volunteer system	- frequent exercises at local and regional level	well-developed alert/warning systems
SWEDEN	- decentralized system - municipalities have the primary responsibility - national structure: Civil Contingencies Agency (MSB) within the Ministry of Defense	- system of volunteers including – roster from all over the world	- emphasis on courses provided by the MSB	- prevention plays a key role - comprehensive risk assessment.
ROMANIA	- centralized/integrated system - decision body: the National Committee for Emergency Situations, - operational body Department for Emergency Situations	- staff with multiple expertise - poorly developed volunteer system	- well-developed exercise system at subunit/unit level	DSU/IGSU – the main response structure

**Figure 5.1** Analysis of the civil protection system in France, Germany, Italy, Sweden and Romania  
(Source: Dogeanu & Ozunu, 2024)

Another key element with a direct implication into the effectiveness, performances and results of a national civil protection authority is the position within the governmental structure - we may clearly observe from the analysed countries that some of the authorities are positioned in the **Ministry of Home Affairs** (France, Germany and Romania), in Sweden it performs under the **Ministry of Defence** whereas in Italy it's positioned at the **Prime Minister's Office**.



Country	UCPM Activations (After 2016)	UCPM Offers (After 2010)	Experts Deployed in UCPM Missions (After 2016)	Capacities Offered in Civil Protection Pool (ECP)	RescEU Capacities
France	11	91	60	20	6
Germany	5	56	24	8	5
Italy	10	55	24	6	4
Sweden	6	30	45	4	5
Romania	7	37	13	10	6
*					
*pre-positioning missions are not included in the number of UCPM activations Romania has responded to					

**Table 5.1** Country profile within the UCPM (December 2023)

The analysis was expanded conducting a SWOT analysis on **centralised versus decentralised disaster management approaches** as illustrated in the Figure 5.2.

Category	Decentralized Management (e.g. Germany, Sweden)	Centralized Management (e.g. France, Italy, Romania)
STRENGTHS	<p><b>Flexibility:</b> quick adaptation to local conditions and needs</p> <p><b>Community involvement:</b> high potential for community involvement and volunteering</p> <p><b>Local knowledge:</b> relies on local experience for risk assessment and management</p>	<p><b>Resource allocation:</b> Efficient allocation and mobilisation of resources</p> <p><b>Standardisation:</b> Similar standards and practices at national level</p> <p><b>Strategic planning:</b> High capacity for long-term strategic planning</p>
WEAKNESSES	<p><b>Dispersed resources:</b> possible unequal distribution of resources.</p> <p><b>Difficult coordination:</b> possible challenges in coordinating efforts between different regions.</p> <p><b>Inconsistent standards:</b> potential variations in standards and procedures</p>	<p><b>Bureaucratic risk:</b> possible bureaucratic delays</p> <p><b>Low local involvement:</b> may have lower levels of community involvement.</p> <p><b>Centralized control:</b> challenges in managing all elements centrally</p>
OPPORTUNITIES	<p><b>Innovation:</b> potential for innovative local solutions</p> <p><b>Capacity building:</b> opportunities for capacity building at local level</p>	<p><b>National programs:</b> the ability to implement initiatives and programs at the national level.</p> <p><b>International cooperation:</b> strong approach on international cooperation and support</p>
THREATS	<p><b>External dependencies:</b> high dependence on external support in the event of major disasters</p> <p><b>Limited resources:</b> smaller/less developed regions will have limited access to resources</p>	<p><b>Dependence on the central authority:</b> regions can become overly dependent on central support</p> <p><b>Misallocation:</b> Risk of misallocation of resources due to lack of information at local level</p>

**Figure 5.2** SWOT analysis of disaster management systems / centralized vs. decentralized

(Source: Dogeanu & Ozunu, 2024)

### 5.3 Conclusions

Each system - centralized, decentralized, or a hybrid - has its advantages and disadvantages. Ideally, a hybrid model that combines the best aspects of both centralized and decentralized approaches would offer the most balanced solution for most countries, particularly in a complex and diverse region like the European Union.

## CHAPTER 6 ROMANIAN CIVIL PROTECTION: "NATIONAL EXPORT PRODUCT" – A RADIOGRAPHY OF CIVIL PROTECTION INTERNATIONAL ASSISTANCE MISSIONS

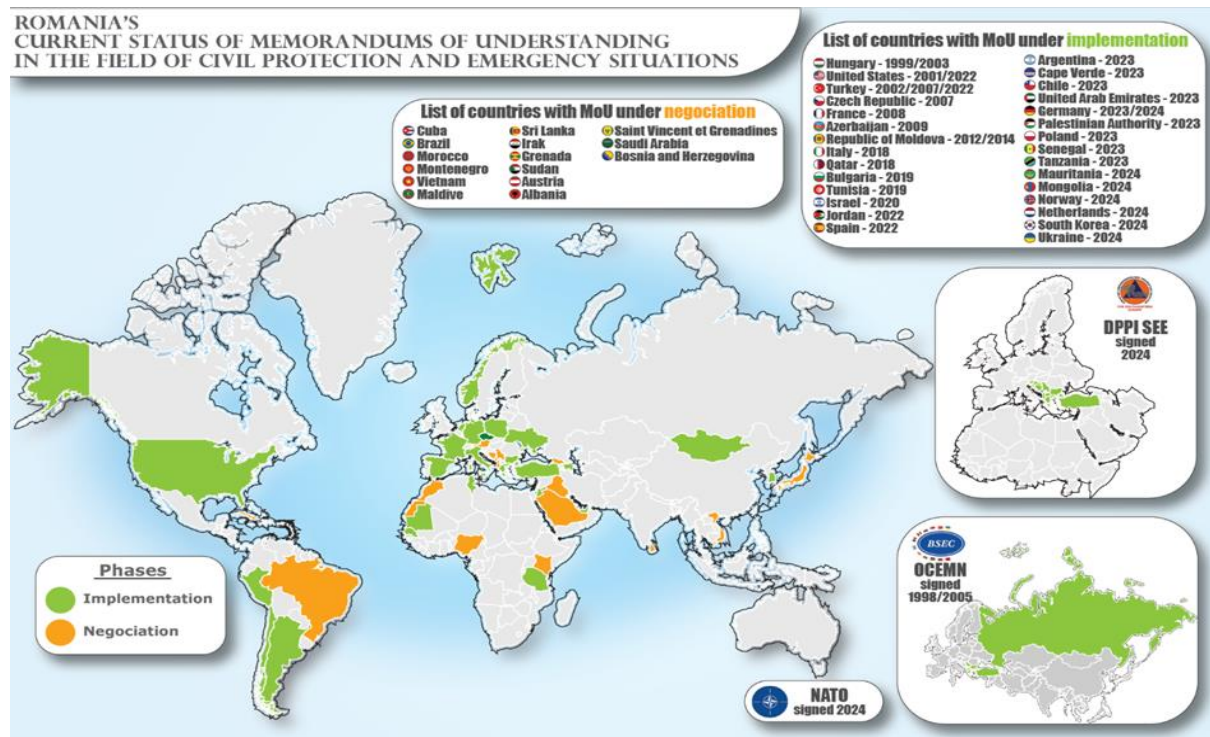
### 6.1 The rationale

This Chapter examines Romania's path in assuming an **active role in international assistance** through its Civil Protection. We will analyse the institutional mechanisms through which this commitment is conducted, the structures involved and the means through which the necessary resources are mobilized. At the same time, the **logistical, financial and operational challenges** faced by the Romanian teams in the field will be **highlighted**, providing a practical perspective on the **efficiency of interventions and how to optimize them**. Last but not least, this study will prove how these missions have contributed to the strengthening of **Romania's position as a humanitarian security player**, providing a comprehensive overview of the impact of these interventions on the European, and global, civil protection system.

### 6.2 Romania - a reference partner in international civil protection assistance

In the last 10-15 years, Romania has consolidated its position as a key player in European and international civil protection mechanisms through the efforts of DSU and its subordinated structures. This approach not only ensure a **rapid and efficient response to disasters at national level**, but have also become a reference point in **fostering international assistance**, actively contributing to **European and global solidarity**.

By actively participating in the European Union Civil Protection Mechanism (UCPM), the DSU has proven **Romania's capacity to mobilize resources and expertise** in support of other countries in need. The international missions carried out in recent years, such as the interventions following the earthquakes in Albania and Türkiye, the medical support provided during the COVID-19 pandemic or the forest fires in Greece, France, Montenegro, North Macedonia, have highlighted Romania's institutional robustness and its commitment to the values of European solidarity.



**Figure 6.1** Overview of civil protection and emergency cooperation agreements

Another key aspect of promoting international assistance is the close cooperation with similar structures in all EU Member States and outside the EU borders. In this respect, Romania, in addition to its close links with the UCPM, as well as with other major international entities (such as NATO or various UN institutions), has signed numerous **cooperation documents with civil protection services** around the world (Figure 6.1).

### 6.2.1 Actions to develop response capacities

Since 2014, Romania has developed and operationalised several civil protection teams, or modules, for international assistance in line with the EU's standards and as part of the European Civil Protection Pool (ECPP). Rapid and effective disaster response relies on these modules, which comprise CBRN Detection and Sampling units, Medium Urban Search and Rescue, and high-capacity pumping. Romania's ECPP contributions additionally encompass teams like Emergency Medical Teams and specialised firefighting units.

Additionally, the DSU is developing RescEU response capabilities to cope with health and disaster crises and keeping strategic stocks of necessary materials. A significant undertaking is the establishment of a RescEU wildfire fleet, a RescEU Emergency Medical Team (EMT), and CBRN response capabilities to manage nuclear, biological, chemical, and radioactive threats. The above developments, together with professional training and customised disaster response

initiatives, help reinforce Romania's role in the EU's shared emergency response by guaranteeing readiness and efficient support in times of crisis.

### 6.2.2 Romania's international assistance missions

Romania's participation in international assistance missions was uncommon and limited until the Department for Emergency Situations (DSU) was established in 2014 and significant investments were made in emergency services. Romania has

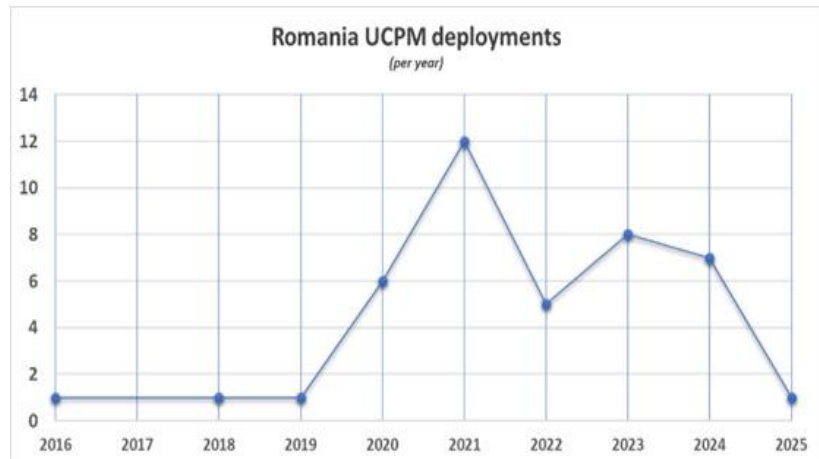


Figure 6.2 Romanian UCPM deployments based on Annex no. 1

allocated over one billion euros for equipping emergency services, positioning itself as a significant contributor to international disaster assistance.

Since 2020, (Figure 6.2) Romania has significantly expanded its international assistance efforts, emerging as a key contributor to the European Civil Protection Mechanism (UCPM). The country has responded to different requests by offering support on a global scale.

## 6.3 Case studies – forest fires, Covid'19 pandemic, Middle East humanitarian crisis

### 6.3.1 Forest fires

In the face of climate change, forest fires have become an increasingly threat in Europe, calling for prevention, preparedness and response measures by Member States and European institutions.

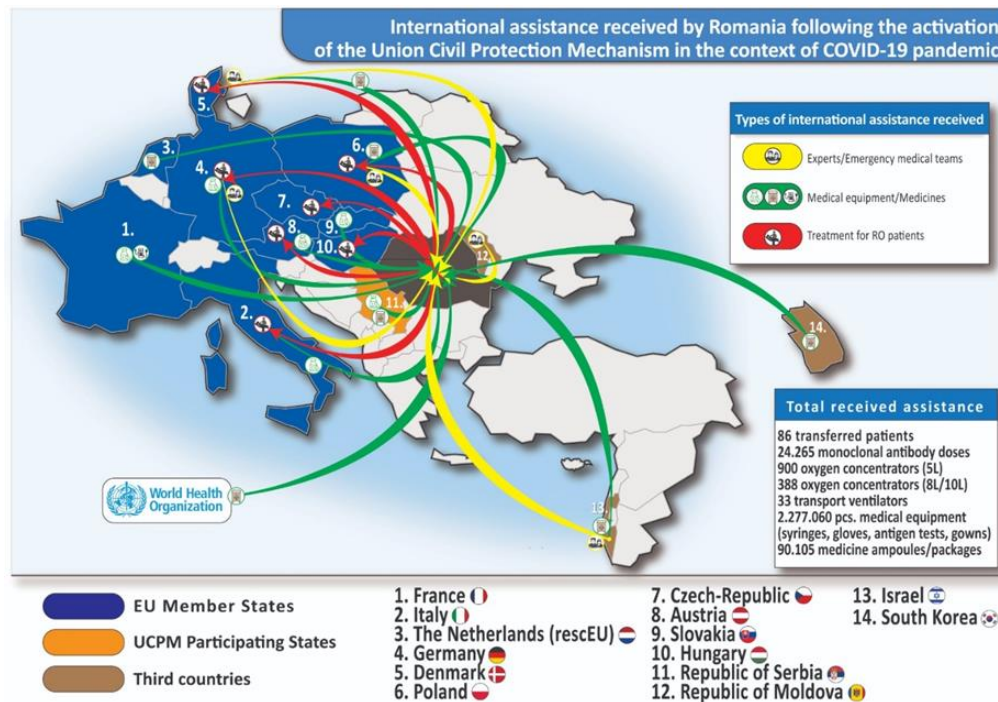
Although Romania typically experiences limited wildfires, notable increases occurred recently, with 719 documented fires in 2022, although this number declined to 124 in 2023. Since 2021, Romania has increased its participation in international firefighting efforts, providing substantial support to Northern Macedonia, Montenegro, Albania, and Greece through the deployment of intervention teams and equipment. Romania has consistently

addressed requests for assistance by deploying specialised firefighting modules and aircraft to several European nations, such as Slovenia and France. Romania's proactive measures and rapid responses have strengthened its commitment to international solidarity and effectiveness in combating forest fires, establishing a significant presence in European disaster response operations.

### 6.3.2 Covid'19 pandemic

Misinformation and public distrust hampered vaccination campaigns despite early achievements in controlling the virus and a good starting a vaccine campaign, hence causing an increase in COVID-19 cases in the autumn of 2021.

Overwhelmed healthcare systems pushed Romania to seek foreign support. Assistance came from several nations (Figure 6.3), especially with medical personnel and supplies, to boost Romanian efforts.



**Figure 6.3** International assistance received by Romania in the Covid'19 context

(Source: DSU activity report 2022 - <https://www.dsu.mai.gov.ro/despre>)

Romania got help during the epidemic and helped to support more than 20 countries, thus strengthening its position as a reliable partner at the international level. The crisis underscored the necessity for cross-border cooperation and integrated response systems, thereby reinforcing Romania's dedication to international solidarity and cooperation during disasters.

### ***6.3.3 Romania's involvement in humanitarian assistance in the Middle East***

Romania has been actively involved in humanitarian aid for Palestinians in the Gaza Strip since the Middle East situation escalated in October 2023. While stressing the necessity to protect all people under international humanitarian law, the country objected to the terrorist attacks. From late October 2023 through 2024, Romania's support was organised around three key pillars: delivering food and basic supplies, providing specialised medical treatment for Palestinian youths, and assisting EU countries to provide treatment to patients. By the end of 2023, Romania delivered more than 230 tonnes of humanitarian aid and participated in maritime shipments coordinated via a new Cyprus corridor set up in May 2024. Demonstrating its ability to respond swiftly to humanitarian emergencies, Romania has successfully relocated 86 paediatric patients, along with 216 companions from Gaza via Israel to Romania, Norway, Belgium, France, Germany, Greece, Ireland, Italy, Luxembourg, Romania, Slovakia, Spain and Albania for medical care, since September 2024.

In October 2024, Romania also started a support operation to Lebanon, providing humanitarian assistance and assisting in the evacuation of its suffering people. This reaction emphasised Romania's dedication to safeguarding vulnerable groups and assisting global initiatives to stabilise the area.

## **6.4 Conclusions**

Before closing, it is appropriate to highlight that the source of the data on which this study was conducted is based on very few postings on the official websites of the Romanian Government, DSU, IGSU, or the ministries with responsibilities within the SNMSU. As a rule, these postings emphasize missions carried out quantitatively. Even this weak indicator, in conjunction with the number of press statements and data available at the European Commission level, was the trigger for determining the **key role played by Romania in the field of civil protection at the international level.**

In conclusion, **Romania's** evolution in international assistance through civil protection is a clear demonstration of its **progress, professionalism and commitment to European and global solidarity.** The continuation of this effort requires not only maintaining the current development trajectory, but also a **long-term strategic vision** aimed at ensuring that Romania remains an **essential partner in disaster management and the protection of vulnerable communities at international level.**



## CHAPTER 7 COOPERATION WITH CIVIL SOCIETY: A CASE STUDY ON MANAGING UKRAINIAN REFUGEE FLOWS

### 7.1 Background

The Russian invasion has generated the **largest refugee crisis in Europe** since the Second World War, with a devastating impact on those displaced, and has also caused new challenges, hardly anticipated for Romania and its neighbouring countries, considering their proximity to the conflict zone, and their status as a " gateway" to the European Union.

The main objective was to identify the problems encountered, assess the effectiveness of the response, and provide possible ways to better coordinate and integrate refugees into society.

### 7.2 General response framework

#### *7.2.1 Overview of refugee flows in Romania since the beginning of the conflict*

Since the beginning of the conflict in Ukraine, Romania has experienced a significant influx of refugees. According to *Romania's response to the Ukrainian Refugee Crisis Report*, published by Prime Minister's Chancellery, by the beginning of 2023, more than 3 million Ukrainian citizens crossed Romania's borders, of which about 107,000 chose to stay in our country (Romania's response to the Ukrainian refugee crisis, 2023). Updated data indicate a considerable increase in these figures. As of January 16, 2025, more than 11 million Ukrainian refugees have entered Romania, according to Border Police data.

#### *7.2.2 Main challenges in managing the crisis*

The management of the Ukrainian refugee crisis involved multiple challenges for the Romanian authorities and partners involved. One of the main **difficulties** was the **transition from emergency assistance to long-term integration actions**. This required additional efforts to ensure the refugees' independence by providing access to employment and integrating children into the Romanian education system.

Another significant challenge was the **language barrier**, which made it difficult for refugees to communicate and integrate into local communities. Language differences affected access to essential services and employment opportunities, highlighting the need for Romanian language support programs for refugees.

In addition, providing **long-term housing solutions** was a major challenge. Many of the initial accommodation facilities were intended for temporary stays, and identifying suitable and sustainable housing options required additional resources and planning.

### ***7.2.3 The role of stakeholders: public authorities, NGOs, volunteers, international organizations***

The response to the refugee crisis in Ukraine was organized on two distinct levels:

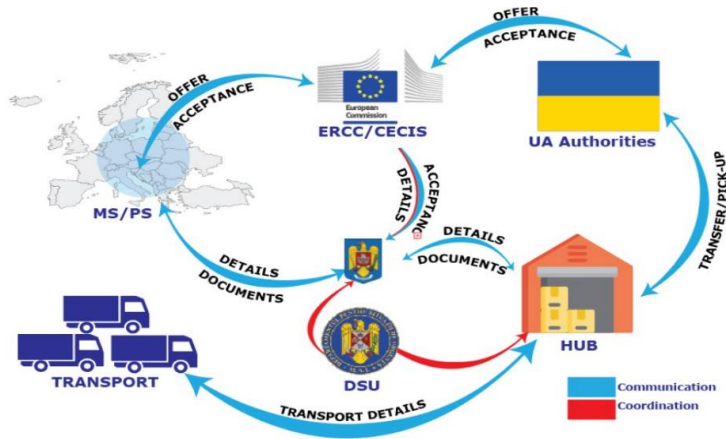
- The **first level, coordinated by the DSU**, focused on the **emergency response** and included **immediate measures** such as the **management of transit centres** at border crossing points, the provision of humanitarian **transportation**, temporary **shelter, food** and basic **medical assistance**. DSU through the **IGSU mobilized** both huge **logistical and human resources** to respond rapidly to the influx of refugees, working with local authorities, NGOs and international organizations.
- The second level was medium - and long - term **protection and integration**, coordinated at the strategic level by the Chancellery of the Prime Minister, through the elaboration and implementation of **the National Plan of Measures** for the Integration of Ukrainian Refugees (EO 100/2022).

## **7.3 Emergency response**

The Emergency Support platform, launched by Code for Romania and the Department for Emergency Situations, centralizes resources from civil society for effective crisis management. Microsoft Teams enhances real-time collaboration and coordination among various stakeholders.

In response to the humanitarian crisis, 15 transit centres were established in counties bordering Ukraine and Moldova, accommodating over 21,000 refugees by early 2025. These centres provided essential services, coordinated by the National Centre for Coordination of Intervention (CNCCI) through civil society collaboration.





**Figure 7.1** International assistance flow via Logistic HUB  
(Source: DSU Activity report for year 2022)

A Logistics Hub in Suceava County, operational under the European Union Civil Protection Mechanism, facilitated the storage and distribution of humanitarian aid (Figure 7.1), managing 136 international missions that transported vital supplies from 18 countries.

In summary, a comprehensive and collaborative approach underpinned the emergency response, emphasizing structured coordination, resource management, and the facilitation of humanitarian support to refugees and affected populations.

## 7.4 Methodology

This analysis is based on a combined research method, including analysis of **official documents, direct observation, consultations with NGO representatives and policy impact analysis**. The data and information used comes largely from open sources, such as government reports, legislative documents, studies by international organizations and materials provided by institutions involved in the response to the crisis.

## 7.5 Key outcomes

- a) *How was the management of this influx organized and what difficulties were encountered?*
  1. **cross-sectorial cooperation framework should be developed**
  2. **centralized coordination mechanism**
  3. **standardized communication and data sharing platform**
  4. **collaborative planning and coordination -**
  5. **lessons identified transformed in lessons learned**
- b) *To what extent has the current legislation been adequate to this situation and where adjustments are needed?*
  1. **revision of HG 557/2004**
  2. **establish a nationally responsible structure**

- 3. **revision of Uncontrolled Movement Concept**
- 4. **updating and modernizing of the Romanian National Disaster Risk Reduction platform** and including the **civil society**

*c) How did the responsible institutions work together and what were the main bottlenecks in coordination between them?*

- 1. **NGOs national register**
- 2. **developing specific up scaling procedures**
- 3. **create scenarios and planning**
- 4. **training & exercises**

*d) What solutions can be applied to improve the integration of refugees in communities?*

- 1. **different level of needs of refugees depending on their backgrounds**
- 2. **special attention to women with kids or accompanied minors**

*e) How was data on refugees collected and managed and what problems were identified in this process?*

- 1. **Data collection is fragmented**
- 2. **Systems are not easily configurable**
- 3. **Refugees' reluctance to provide personal information**

## 7.6 Conclusion

Romania's response to the Ukrainian refugee crisis was both **tailor-made** and **effective** in the short term, but **required high operational and logistical efforts**. The experience of this process highlights the need for **structural reforms** to **optimize cooperation between the authorities and civil society**, thus **preventing bottlenecks and duplication of efforts**. Improved **legislative clarity**, more effective **inter-institutional and government-wide coordination**, inclusive **integration mechanisms** and **digitization** of refugee management processes are essential for a faster, more coherent and more sustainable response to similar future crises.

## CHAPTER 8: CONCLUSIONS & PROSPECTIVE DEVELOPMENTS

### 8.1 SWOT analysis of the national civil protection environment

Since all the chapters, from **Chapter 1 to Chapter 7**, include **comprehensive sections with recommendations, directions for future action or conclusions**, the author considered it appropriate that this last chapter, the one "**summarising the findings**", **be based on a SWOT analysis** - to underpin the analysis of identified challenges. Being, as mentioned above, a chapter focusing on the compilation of a wide range of partial conclusions, this SWOT analysis was carried out with a rough granularity in order to **highlight the main courses of action** to be taken in the coming period on the evolution of Civil Protection in Romania and, thus, of the DSU (Table 8.1).

**Table 8.1** SWOT analysis of Civil Protection in Romania

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>the regulatory framework of the SNMSU has been continuously revised over the last 20 years;</li> <li>decision-making system: in place, operational and efficient;</li> <li>committed role of the entities that are part of the SNMSU;</li> <li>strong emergency response force;</li> <li>existence of sectorial response strategies for: climate change, National Disaster Risk Reduction Strategy – including its implementing Plan, a strengthening role of DSU;</li> <li>centralized coordination of response structures;</li> <li>existence of specialized civil protection structures at MAI/DSU level;</li> </ul>	<ul style="list-style-type: none"> <li>inadequate financial resources to cover all needs, especially in the upcoming future for continuous upgrading of equipment;</li> <li>training of personnel needs improvement and adaptation to emerging types of risks - aligned with "Career Guide" for the IGSU staff as well as training technique (focus more on practical aspects);</li> <li>reform of the Fire Fighters Faculty and IGSU school for emergency management;</li> <li>still old infrastructure in many counties, not adapted to current needs, especially in rural areas (World Bank, PDD);</li> <li>IGSU&amp;IGAv logistic structure currently under developing - transport capacities for large number of people - by roads or</li> </ul>

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>● decision-making structures and coordination and leadership mechanisms in place at national level;</li> <li>● maintaining and strengthening the role of authority alongside the role of response structure;</li> <li>● national, integrated and flexible response system;</li> <li>● rapid allocation of additional resources;</li> <li>● National response frameworks for major hazards (earthquake, forest fires, floods, pandemics, CBRN);</li> <li>● "National export product" in the field of international cooperation;</li> <li>● capacity to respond to requests for international assistance;</li> <li>● new and modern response capabilities;</li> <li>● development and operationalization of a national warning system (RoAlert);</li> <li>● national preparedness and information solutions (web portal, modern IT applications);</li> <li>● implementation of quality management by establishing certified standards and working procedures;</li> <li>● capacity to attract and implement external funding;</li> <li>● public perception and confidence in the institution's role as an emergency response authority and structure;</li> <li>● partnerships with public institutions, private companies and relevant NGOs;</li> <li>● approval of "Career Guide" for the IGSU staff;</li> <li>● establishment of School of Applied Management for Emergency Situations</li> </ul>	<p>aerial, refugee camps and emergency stocks;</p> <ul style="list-style-type: none"> <li>● lack of highly-qualified and experienced teachers - both at the level of the Firefighters College and IGSU training schools;</li> <li>● complex and dense regulatory framework, constantly amended over the last 20 years;</li> <li>● emergency system heavily reliant on authorities with low community and volunteer involvement;</li> <li>● young people's not finding it motivating to be active in this field;</li> <li>● relatively weak links with the research or academic environment;</li> <li>● substantially dependent on funding from external grants versus budgetary solutions;</li> <li>● complex and bureaucratic administrative procedures for the proactive engagement of local authorities;</li> <li>● difficulties in recruiting and securing qualified staff;</li> <li>● the hierarchy of positions in the IGSU structures is less attractive for moving from local to county or national level</li> <li>● the need to improve and diversify methods of preparedness and awareness-raising;</li> <li>● lack of disaster continuity and recovery plans for essential institutions and services (regulatory framework on continuity of governance);</li> <li>● vulnerability to new and emerging risks such as cyber-attacks and technological risks, artificial intelligence, but also to classic ones like refugee influx;</li> <li>● weak human resources policy and foresight.</li> </ul>

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>☞ international strategic framework (Sendai Framework for Disaster Risk Reduction 2015-2030) - to steer the upgrading of national legislation;</li> <li>☞ national strategy for disaster risk reduction - the action plan sets specific courses of action;</li> <li>☞ European disaster resilience goals - to direct future courses of action at EU and national level;</li> <li>☞ accessing external grant funding - for the development of national and European response capacity;</li> <li>☞ consultancy and financial assistance provided by international bodies with expertise in the field (e.g. World Bank - CAT-DDO);</li> <li>☞ contribution to the strengthening and development of international cooperation mechanisms;</li> <li>☞ consolidation of the National Platform for Disaster Risk Reduction with a role in the implementation of strategic objectives in disaster risk reduction;</li> <li>☞ continued development of early warning systems at local level;</li> <li>☞ modernization and extension of the response sub-units network with positive impact on the services level and the response time;</li> <li>☞ legal framework of filling the staffing gaps of the IGSU and its structures;</li> <li>☞ implementation of a national framework for the assessment and measurement of consequences (development of a methodology for damage assessment and</li> </ul>	<ul style="list-style-type: none"> <li>● increasing the frequency and intensity of extreme weather events due to climate change;</li> <li>● rapid and uncontrolled urbanisation, which can lead to increased vulnerability to natural disasters;</li> <li>● aging infrastructure insufficiently prepared to deal with large-scale disasters;</li> <li>● hybrid threats that can affect emergency response capacity;</li> <li>● limited financial and human resources dedicated to disaster preparedness and response;</li> <li>● dependence on international aid and technical assistance for emergency management for minor emergencies;</li> <li>● the fragility of communities as a result of the lack of preparedness of the population for emergency situations;</li> <li>● public health problems and possible epidemics that may follow a major disaster;</li> <li>● addressing vulnerable groups (children, elderly, people with disabilities) during emergencies is currently in the initial stages of development - with no national culture in this sector at the time being;</li> <li>● the need to constantly update and adapt emergency plans and response strategies;</li> <li>● the risk of undermining public confidence in the authorities' ability to effectively respond to emergencies caused by fake news and disinformation.</li> </ul>

OPPORTUNITIES	THREATS
<p>implementation of the UN system - DESINVENTAR);</p> <p>☞ improved cooperation with NGOs and civil society;</p> <p>☞ REPowerEU/Recovery and Resilience Plan - improving infrastructure: seismic strengthening combined with energy efficiency measures, updates of the earthquake risk building list;</p> <p>☞ increasing the level of preparedness of the population - developing multiple mobile preparedness solutions (acquisition of mobile training centres through the World Bank program)</p>	

## 8.2 Challenges and Perspectives – The path forward for DSU and Romanian Civil Protection

The above SWOT analysis suggests **six "hotspots"** where **further action should be focused**. These are basically the **lines of action** where the author considers that efforts should be directed in the next phase in order to continue **to ensure the further evolution of the system** while maintaining **Romania's status as a generator of civil protection**:

**I. updating the legislative framework:** at the moment the urgency is to harmonize roles and responsibilities in a single piece of legislation, which must include clear terms of reference, the establishment of risk indicators and the creation of a flexible framework at least for the next matters:

- ❖ **shelter**
- ❖ **evacuation**
- ❖ **alarming**
- ❖ **funding**
- ❖ **strengthening of the role of DSU**

**II. reinforce the integrated emergency response:**

**III. implementation of sustainable financing solutions**

**IV. active participation of the whole of society**

**V. enhancing Romania's role in international cooperation mechanisms by maintaining a key role at EU level**

**VI. Romania becomes a key actor of the RescEU**

### 8.3 Conclusions

**Scope:** as stated from the very beginning, this thesis is intended: **to enhance general knowledge by providing to the research sector and the academic community a comprehensive overview of the challenges and opportunities of Civil Protection in Romania, within a defined timeframe (2014-2025) and emphasizes the context of the emergence of the DSU.** To offer at the end a very detailed picture – **a complete puzzle**, as the **pieces are continuously present around us**, in the legislative framework that not many people discover or understand in depth, in the everyday actions that pop up in the news, on social media sites; **but the pieces are disconnected** and not always create the **true image of reality**. For this reason, and considering the **lack of recent scientific papers in this field**, the author found it an appropriate choice.

**Objectives:** through this **thesis**, the author **expected** first and foremost **to provide an in-depth analysis** of the Romanian Civil Protection in the last 10 years. In this period, the Romanian **civil protection** system has evolved substantially, becoming a **robust framework** that embraces the **highest international standards** for disaster preparedness, response, and resilience. Case studies deepened this **multi-level introspection**, motivating the actions taken or, where appropriate, justifying the conclusions and recommendations presented.

Despite Romania's progress in civil protection, the thesis **identifies key challenges** that continue to impede the system's full potential. **Financial limitations, outdated infrastructure, and administrative complexity** limit local authorities' proactive engagement and delay modernisation efforts. These issues point to a need for sustainable and diversified funding mechanisms, including increased national investment and exploration of external grants or international partnerships. Furthermore, **prioritising continuous training and professional development** for emergency personnel will be essential for **addressing emerging risks**, including those associated with **climate change** and **technological hazards**.

Last but not least, this thesis served to illustrate that we are living in a **highly interconnected environment** made up of diverse but interdependent systems. This global interconnectedness has shown us how quickly national disruptions can escalate and impact

entire regions and then spread globally. We need continued and **increased public awareness** of disaster risk reduction, prevention, and risk understanding.

To compress into a few paragraphs all the conclusions and recommendations detailed in all eight chapters of this thesis has been a challenging exercise. In the author's opinion, all the proposals are worth capitalizing on to demonstrate their sustainability. However, considering the extensive area covered by the thesis – a true **compendium of the activity of the DSU and Civil Protection in Romania** – the author chose to select in this part of the thesis only a few of them whose immediate implementation would lead to a domino effect that would eventually reach a much larger number of recommendations.

**Added value:** before concluding, it is pertinent to mention that the primary hurdle to the development of this thesis was the **absence of data from official sources**. This circumstance may suggest that this thesis relies on a weak evidence base. It's important to make it clear that the **research is based on: interviews** (see survey responses in Chapter 7), **official documents** (citations can be found in all chapters) that the author was able to make available on the updated DSU portal as part of his job, and **personal experience** gained since 1999 in civil protection system at the national and international level. This combination aligns well with the study's objectives, despite its limitations, from the author's perspective as a practitioner.

Furthermore, the author's opinion that the **low number of research projects about Romanian Civil Protection and its challenges** is justified, particularly due to this **limited data context**. Last but not least, the few publications related to the Romanian civil protection stakeholders are mostly the result of "**laboratory analysis**"- type evaluations and less internal analysis, technical and specific ones, at the level of competent structures.

For this reason, **the added value of this work - the author's personal contribution** - lies in the fact that once collected, all this scattered information that has been the object of this thesis and of the recommendations made for the future action will from now on be **the starting point for other studies**. With the finalisation of this thesis, the **following research works will certainly have a much broader evidence base**. And this means that the outcomes of **future scientific analyses will be more successful**, as these will **secure better and better knowledge**. In turn, this improved scientifically based knowledge will ultimately result in **enhancing civil protection** and therefore **saving lives and properties**.



## DISSEMINATION OF RESEARCH OUTPUTS & FUTURE RESEARCH WORKS

### i) personal contributions

The writing process of this thesis led to the publication of **three original articles** (with recognised impact factor like: ISI, BDI or US international e: book) with an **additional article** currently in the final stage of **revision for publication**, as follows:

➤ *publications:*

1. Marius Dogeanu and Alexandru Ozunu, 2024 - Fostering Resilience in Romania through European Collaboration: Challenges and Perspectives Specific to the Romanian Department for Emergency Situations as part of the EU Civil Protection Approach, Environmental Engineering and Management Journal (**ISI listed**), September 2024 Vol. 23, No. 9, 2005x, <http://doi.org/10.30638/eemj.2024.161>;
2. Marius Dogeanu, Alexandru Ozunu and Cosmin Bunoiu - *Romanian Civil Protection: “National Export Product” - a radiography of civil protection international assistance missions*; Advances in Environmental Sciences – (**BDI listed**) International Journal of the Bioflux Society (AES Bioflux, 2025, Volume 17, Issue 1), <http://www.aes.bioflux.com.ro>;
3. Alexandru Ozunu and Marius Dogeanu - European disaster risk scenarios of large cities, challenges, and prospects for Romania as part of Southeast Europe approach to Disaster Risk Reduction in large cities; Megacities and Disaster Management: Challenges and Prospects 21<sup>st</sup> Century, Bijayanand Misra, **Lambert Academic Publishing**, e-book: 9786207805907;
4. Marius Dogeanu, Alexandru Ozunu, Daniel Gheorghita, Iordan Gavrilă and Mihai Lupu - Cooperation with civil society from Romanian Civil Protection perspective: a case study on managing Ukrainian refugee flows; **article in final revision**.

On the other hand, the author's contribution must also be seen through his participation in **international conferences** organized by the academic world (UBB, IDRiM, SICHEM or

CIMU) or **professional conferences** organized by the EU or the UN. All of these activities have contributed to the dissemination of the insights developed in this thesis both among practitioners and at the academic level

➤ *presentations at International Conferences:*

1. Marius Dogeanu - *How can we better link preparedness with anticipatory action and response efforts?* - Optimizing Emergency Preparedness for Effective Anticipatory Action and Response; Humanitarian Networks and Partnerships Weeks; Geneva; March 2025; - practitioners;
2. Marius Dogeanu - *Organisational and Community Resilience Systems for Health* - Strategy and emergency management under social, technology, population migration challenges; the 10th Edition of the Interdisciplinary Congress of Emergency Medicine, July 4, 2024, Cluj; - academics;
3. Marius Dogeanu, Alexandru Ozunu - *Contributions on the use of Virtual Training in improving the Response to Civil Protection contexts*; SICHEM 2024, (SA OP04); - academics;
4. Marius Dogeanu – *Misinformation/Disinformation Management in Emergency Response/ Scientific Expertise and Disaster Management Interface: Challenges and Prospects for Better Policy and Practice*; IDRIM Café Talk - Integrated Disaster Risk Management (IDRiM) Society, on-line; November 2023; academics;
5. Marius Dogeanu & all – “*How to face the unthinkable?*”; 7th European Civil Protection Forum: “Towards faster, greener and smarter emergency management”, Brussels, June 2022; - practitioners;
6. Marius Dogeanu - *Strengthening Global Collective Civil Protection Capacity/ Regional Approach to Disaster Management Response* - European Union Civil Protection Mechanism; IDRIM Café Talk - Integrated Disaster Risk Management (IDRiM) Society, on-line; August 2021 - academics.

Moreover, as project leader for **field exercises** with forces responding to floods, forest fires or CBRN risks since 2015, in almost 25 such examples (MODEX), the author had the unique opportunity to verify and adapt the concepts described in this thesis. Furthermore, the quality of the Director General of the DGPC within the DSU has been instrumental in the successful implementation of the approaches outlined in this thesis, which of course can and should be further developed.

➤ *field activities:*

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**real missions:**

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- head of the Romanian mission deployed to Türkiye in the aftermath of the earthquake, leading the response of 110 Romanian search and rescue experts, in Hatay, 08<sup>th</sup> -18<sup>th</sup> February 2023;
- head of DSU response team deployed to Siret, to support the Ukraine refugee; 01<sup>st</sup>- 13<sup>th</sup> March 2022; Siret, Romania;
- head of Romanian medical team deployed to Moldova in the support of Covid'19 management; 30<sup>th</sup> April – 15<sup>th</sup> May 2020; Republic of Moldova;

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**simulations:**

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- EU MODEX NEW WAVE POLAND 2023 – Poland; 05<sup>th</sup> – 08<sup>th</sup> September 2023; water-related exercise with participation from: Austria, Belgium, Croatia, Czech Republic, Finland, and Ukraine;
- EU ROMODEX 2021 – Romania (Arges); 17<sup>th</sup> – 20<sup>th</sup> November 2021; water-related & CBRN exercise with participation from: Slovenia, Moldova, Portugal and Romania;
- EU ROMODEX 2021 – Romania (Arges); 20<sup>th</sup> -23<sup>th</sup> OCTOBER 2021; water-related exercise with participation from: Slovenia, Baltic countries, Belgium, Spain, Croatia, Slovak Republic and Romania;
- EU MODEX PT 2023 – Portugal; 02<sup>nd</sup> -06<sup>th</sup> May 2023; forest fires exercise with participation from: Greece, Germany, Italy, Portugal and Spain.

From this perspective, the author concludes that the **objectives** outlined in the introductory part of the thesis **have been successfully achieved**, resulting in significant **original contributions** that **enhance the understanding of civil protection concepts and institutional frameworks** in Romania.

**ii) future research works**

This thesis highlights the necessity for additional research and provides key opportunities for further exploration in the field of civil protection, as outlined below:

- ✓ the development of research work to fundament civil protection activities, as well as the **differences between “civil protection” and “civil defence”**;

- ✓ the **proposed model DSU architecture** - it is an invitation for researchers from different fields to **review the proposed idea from several angles**;
- ✓ the **future research to develop comparable models for interested countries**, ultimately contributing to the improvement of civil protection services at the national level;
- ✓ the **cooperation with civil society** and the **model used by the Romanian authorities** needs to be further analysed and framed from academic perspective;
- ✓ the **impact of climate change on emergency management** - it is urgently needed to design a scientific model of the response procedures as well as to develop new equipment suited to this context;
- ✓ **research on how to communicate with the population** and the measures to be taken at the individual level, with scientific algorithms that can prove the actions proposed, will complement the authority's action;

## KEY REFERENCES

- Additional Protocols of Geneva Conventions, 1977, available at: <<https://www.icrc.org/en/law-and-policy/geneva-conventions-and-their-commentaries> [accessed December 2, 2024]
- Albulescu A.-C., 2023, Exploring the links between flood events and the COVID-19 infection cases in Romania in the new multi-hazard-prone era. *Natural Hazards* **117**, 1611–1631.
- Arghius V., Botezan C., Gagi A., Samara I., Senzaconi F., Ozunu A., 2011, Normalized economical floods damages in Romania during 2000-2009, *Environmental Engineering and Management Journal* **10**, 17–21.
- Boca G., Ozunu A., Vlad S.N., 2010, Screening of NaTech hazards: Case study of the Tarnavelor plateau, Romania. *Environmental Engineering and Management Journal* **9**, 1329–1333.
- Communication from the Commission to the Council and the European Parliament on the evaluation of the Union Civil Protection Mechanism-Strengthening EU's emergency, preparedness, (2024). <[https://ec.europa.eu/echo/files/evaluation/2024/com\\_2024\\_212\\_f1\\_communication\\_from\\_commission\\_to\\_inst\\_en\\_v3\\_p1\\_3425414.pdf](https://ec.europa.eu/echo/files/evaluation/2024/com_2024_212_f1_communication_from_commission_to_inst_en_v3_p1_3425414.pdf)> [accessed March 9, 2024].
- Community response to the flooding in central Europe, 2002. <<https://eur-lex.europa.eu/EN/legal-content/summary/community-response-to-the-flooding-in-central-europe.html?fromSummary=16and>> [accessed June 14, 2024].
- Crane M.F., Searle B.J., Kangas M., Nwiran Y., 2019, How resilience is strengthened by exposure to stressors; the systematic self-reflection model of resilience strengthening, *Anxiety Stress Coping* 32(1), 1-17.
- De Lauri A., 2018, Humanitarian Diplomacy: A New Research Agenda. Bergen: Chr. Michelsen Institute (CMI Brief 2018:4).
- DG ECHO, 2024, Evaluation of the EU Civil Protection Mechanism shows need for more integrated crisis management, Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO), European Commission. <[https://civil-protection-humanitarian-aid.ec.europa.eu/news-stories/news/evaluation-eu-civil-protection-mechanism-shows-need-more-integrated-crisis-management-2024-05-29\\_en](https://civil-protection-humanitarian-aid.ec.europa.eu/news-stories/news/evaluation-eu-civil-protection-mechanism-shows-need-more-integrated-crisis-management-2024-05-29_en)> [accessed September 27, 2024]
- Dogeanu M., Ozunu A., 2024, Fostering resilience in Romania through European collaboration: challenges and perspectives specific to the Romanian Department for Emergency Situations as part of the EU civil protection approach. *Environmental Engineering and Management Journal* 23(9), 2005-2026.
- Dogeanu M., Ozunu A., Bunoiu C., 2025, Romanian Civil Protection: “National Export Product” - a radiography of civil protection international assistance missions; Advances in Environmental Sciences - International Journal of the Bioflux Society (AES Bioflux, 2025, Volume 17, Issue 1), <http://www.aes.bioflux.com.ro>;

- Gheorghiu A.D., Torok Z., Ozunu A., Antonioni G., Cozzani V., 2014, Comparative analysis of technological and NATECH risk for two petroleum product tanks located in seismic area, *Environmental Engineering and Management Journal* **13**, 1887–1892.
- Glencross A., 2022, The EU to the rescEU? Assessing the geopolitics of the EU's medical stockpile. *European View*. 21(1), 48-55.
- Gromek P., 2023, Shaping National Security through International Emergency Mechanisms and Disaster Risk Reduction. Overview of the Problem, In: *Shaping National Security. International Emergency Mechanisms and Disaster Risk Reduction*, Gromek P., Feltynowski M., Wojakowska M. (Eds.), Routledge - Taylor and Francis, New-York, 1-20.
- Guidelines “Certification and Registration” of Response Capacities in the European Civil Protection Pool ECPP)  
<<https://ercportal.jrc.ec.europa.eu/DesktopModules/ResponseCapacity/Documents/Certification%20Guidelines%20-%20October%202019.pdf>> [accessed November 24, 2024].
- Gürel E., 2017, SWOT analysis: A theoretical review, *Journal of International Social Research* **10**, 994–1006.
- Heo B.-Y., Heo W.-H., 2022, Integrated approach analysis of the effectiveness of disaster prevention projects. *International Journal of Disaster Risk Reduction*, 69, 102732, <https://doi.org/10.1016/j.ijdr.2021.102732>, accessed July 14, 2024.
- Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I) (with annexes, Final Act of the Diplomatic Conference on the reaffirmation and development of international humanitarian law applicable in armed conflicts dated 10 June 1977 and resolutions adopted at the fourth session). Adopted at Geneva on 8 June 1977. Available at: <<https://treaties.un.org/doc/publication/unts/volume%201125/volume-1125-i-17512-english.pdf>> [accessed August 7, 2024].
- Scurtu C., 2022, Organizarea și acțiunea sistemului de apărare a Dobrogei în anii 1939-1941, *Gândirea Militară Românească* **2**, 211.
- Sendai Framework for Disaster Risk Reduction 2015-2030.  
<<https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030> [accessed October 22, 2024].
- Special Report - The Union Civil Protection Mechanism: coordinating the response to disasters outside the EU has been generally effective - Court of Auditors, Romania – 2016,  
<[https://www.eca.europa.eu/Lists/ECADocuments/SR16\\_33/SR\\_DISASTER\\_RESPONSE\\_RO.pdf](https://www.eca.europa.eu/Lists/ECADocuments/SR16_33/SR_DISASTER_RESPONSE_RO.pdf)> [accessed July 20, 2024].

**ANNEX No. 1**

**International assistance offered by Romania  
between 1999 and 2024**

*(data collection and compilation from open sources - web pages or social media - the Romanian Government, Ministry of Home Affairs, Department for Emergency Situations, and General Inspectorate for Emergency Situations)*

No. crt.	Country	Type of assistance	Emergency	Year
1.	Türkiye	Search and rescue team	Earthquake	1999
2.	Türkiye	Search and rescue team	Earthquake	1999
3.	Morocco	In-kind	Earthquake	2004
4.	Bulgaria	In-kind (anti-pollution materials)	Danube pollution	2006
5.	Hungary	In-kind (flood protection)	Floods	2006
6.	Greece	Aerial forest fire-fighting	Fires	2007
7.	Hungary	In-kind – (flood protection)	Floods Red Sludge	2010
8.	Moldova	In-kind - flood protection materials & rescue teams	Floods	2010
9.	Libya	Consular - air evacuation	Conflict	2011
10.	Türkiye	In-kind (Van earthquake)	Earthquake	2011
11.	Bulgaria	In-kind – (flood protection)	Floods	2012
12.	Serbia Bosnia and Herzegovina	In-kind & pumping teams	Floods	2014
13.	Slovenia	Electric generators (blizzard, ice)	Extreme weather conditions	2014
14.	Serbia	In-kind	Migration flows	2015
15.	West Africa	In kind (Ebola)	Health crisis	2016
16.	Macedonia	In kind - flood protection materials	Floods	2016
17.	Greece	Aerial Fire-fighting	Fires	2018
18.	Albania	USAR & in-kind	Earthquake	2019
19.	Greece	In kind	Migration flows	2020
20.	Italy	medical team (ICU) Covid19	Health crisis	2020

No. crt.	Country	Type of assistance	Emergency	Year
21.	Italy	Personal protective equipment from the Romanian rescEU medical stockpile	Health crisis	2020
22.	Republic of Moldova	medical team (ICU) Covid19	Health crisis	2020
23.	Spain	Personal protective equipment from the Romanian rescEU medical stockpile	Health crisis	2020
24.	North Macedonia Montenegro	Personal protective equipment from the Romanian rescEU medical stockpile	Health crisis	2020
25.	Lithuania	Personal protective equipment from the Romanian rescEU medical stockpile	Health crisis	2020
26.	Czech Republic	Ventilators from the RO rescEU medical stockpile	Health crisis	2020
27.	Serbia Montenegro	Personal protective equipment from the RO rescEU medical stockpile	Health crisis	2020
28.	North Macedonia	Personal protective equipment from the Romanian rescEU medical stockpile	Health crisis	2020
29.	Lebanon	In kind (Lebanon explosion)	Technological disaster	2020
30.	Croatia	In -kind shelter	Earthquake	2020
31.	Republic of Moldova	Personal protective equipment from the Romanian rescEU medical stockpile	Health crisis	2021
32.	Slovakia	ICU medical team Covid 19	Health crisis	2021
33.	Republic of Moldova	In-kind Covid 19 Vaccine doses	Health crisis	2021
34.	Republic of Moldova	In-kind Covid 19 Vaccine doses	Health crisis	2021
35.	North Macedonia and Montenegro	Personal protective equipment from the Romanian rescEU medical stockpile	Health crisis	2021
36.	Serbia	In-kind Covid 19 Vaccine doses	Health crisis	2021
37.	Republic of Moldova	In-kind Covid 19 Vaccine doses	Health crisis	2021
38.	India	In-kind medical equipment	Health crisis	2021
39.	Republic of Moldova	In-kind Covid 19 Vaccine doses	Health crisis	2021



No. crt.	Country	Type of assistance	Emergency	Year
40.	Ukraine	Personal protective equipment (masks, coveralls, disposable gloves)	Health crisis	2021
41.	Republic of Moldova	In-kind Covid 19 Vaccine doses	Health crisis	2021
42.	Ukraine	In-kind Covid 19 Vaccine doses	Health crisis	2021
43.	Republic of Moldova	In-kind Covid 19 Vaccine doses	Health crisis	2021
44.	Greece	Ground Forest firefighting forces with vehicle	Fires	2021
45.	Greece	Ground Forest firefighting forces with vehicle	Fires	2021
46.	Tunisia	ICU medical team & Covid 19 Vaccine doses	Health crisis	2021
47.	Vietnam	In-kind Covid 19 Vaccine doses	Health crisis	2021
48.	Egypt	In-kind Covid 19 Vaccine doses	Health crisis	2021
49.	Republic of Moldova	In-kind Covid 19 -tests	Health crisis	2021
50.	Ukraine	In kind (shelter & gas)	Conflict	2022
51.	Republic of Moldova	In kind – energy crises (fuel)	Conflict	2022
52.	Ukraine	In kind (Food and fuel)	Conflict	2022
53.	Republic of Moldova	Transportation of refugees	Conflict	2022
54.	Republic of Moldova	Injured patients’ transportation	Conflict	2022
55.	Ukraine	rescEU medical stockpile - EU Logistic HUB	Conflict	2022
56.	Slovenia	Aerial fire-fighting equipment at the UCPM	Conflict	2022
57.	Republic of Moldova	In kind – medical items	Conflict	2022
58.	France	Forest Fire Fighting with Specialized Vehicles (GFFF-V)	Fires	2022

No. crt.	Country	Type of assistance	Emergency	Year
59.	Greece	Forest Fire Fighting with Specialized Vehicles (GFFF-V) pre-positioning pilot program	Fires	2022
60.	Republic of Moldova	Transportation of NATO medical supplies	Health crises	2022
61.	Ukraine	rescEU shelter stockpile generators donation	Conflict	2022
62.	Türkiye	2 x MUSAR	Earthquake	2023
63.	Syria	Shelter tents/modules from the RO-SHELT rescEU shelter stock hosted by Romania	Earthquake	2023
64.	Türkiye	Shelter tents/modules from the RO-SHELT rescEU shelter stock hosted by Romania	Earthquake	2023
65.	Syria	In kind (food& NFI)	Earthquake	2023
66.	Türkiye	Logistical equipment from the RO-SHELT rescEU shelter reserve hosted by Romania	Earthquake	2023
67.	Greece	Forest Fire Fighting with Specialized Vehicles (GFFF-V) pre-positioning pilot program	Fires	2023
68.	France	Forest Fire Fighting with Specialized Vehicles (GFFF-V) pre-positioning pilot program	Fires	2023
69.	Greece	ground forest firefighting intervention team	Fires	2023
70.	Greece	ground forest firefighting intervention team	Fires	2023
71.	Jordan	In kind for Gaza refugee	Conflict	2024
72.	Ukraine	Experts - European Civil Protection Team	CBRN	2024
73.	Gaza Strip	Food and NFI (via Cyprus)	Conflict	2024
74.	Gaza Strip	Evacuation of injured persons	Conflict	2024
75.	Republic of Lebanon	In kind - food products and NFI	Conflict	2024
76.	Chile	Expert in European Civil Protection Team	Fires	2024
77.	France	International support mission for rapid response to forest fires in the framework of the pilot pre-positioning program of the MCPMU	Fires	2024
78.	North Macedonia	Aerial forest fighting	Fires	2024

No. crt.	Country	Type of assistance	Emergency	Year
79.	Albania	Aerial forest fighting	Fires	2024
80.	Greece	Ground forest fighters with vehicle / pre-positioning program	Fires	2024
81.	Bosnia and Herzegovina	In -kind	Landslides	2024