Emergency Planning Guidelines

Prevention, Preparedness and Response to natural and man-made disasters in Eastern Partnership countries phase 3 (PPRD East 3)

August 2023















DOCUMENT CONTROL SHEET

Proje	Project Title nce Number Total budget Funded by ect start date ect end date Beneficiary Countries	Prevention, Preparedness and Response to natural and man-made disasters in Eastern Partnership countries -phase 3 (PPRD East 3)Ref. Ares(2019)5721249 - 12/09/20196 000 000 EuroEuropean UnionOctober 2020October 2024Eastern Partnership countries Armenia, Azerbaijan, Georgia, Moldova, UkraineThe Swedish Civil Contingencies Agency (MSB)			
	Consortium	Emergency Services Academy Finland, Ministry of Interior of the Slovak Republic – Section of Crisis Management, Centro Internazionale In Monitoraggio Ambientale (CIMA) Italian Red Cross (CRI)			
Report number / name File name		DOCUMENT DESCRIPTION Emergency Planning Guidelines PPRD East 3 - Emergency Planning guidelines			
Num	Date ber of pages Annexes	August 202390 (not considering annexes)10 + 2			
	Key-words	Emergency planning, Civil Protection, data gathering, early warning early action, standard operating procedures, operational structures, risk, scenarios, stakeholders.			
DOCUM	ENT CONT	ROL LOG			
Version	1		2	3	4
Data of issue	August 202				
Lorenzo MaChiara GornPreparedMatilde SangbyJean BaptisteAlessandro ICorinna Vul		i alli Bove Benati			
				Doc	ument Status
Preliminary				Fir	
			~		
PU					nination Level
PU PP		Restricted	d to other program	Public nme participants	X
RE			roup specified by		
CO			ly for members of		

Contents

Abbreviations	5
Purpose and objectives	7
Bibliography	10
Introduction	14
CROSS-CUTTING ISSUES IN EMERGENCY PLANNING	16
Gender and human rights perspective	16
Environment and climate change	17
TERRITORIAL LEVELS AND EMERGENCY PLANS	18
THE MODEL DEFINED	18
MIRROR - THE FOUR STEPS PLANNING METHODOLOGY	20
EUROPEAN COMMISSION'S GOALS AND INDICATORS	22
STEP 0 Analysis of the Civil Protection System, its structure and	
capacities	25
0.1 THE QUESTIONNAIRE	26
0.1.1 COMPILATION AND SCORE	27
0.2 THE COLLECTION OF INFORMATION	28
STEP 1 Response Plan	29
1.1 TERRITORIAL FRAMEWORK OF REFERENCE	30
1.2 THE ELEMENTS:	31
1.2.1 LEGAL FRAMEWORK AND MANDATE	31
1.2.2 ADMINISTRATIVE AND GEOGRAPHIC FRAMEWORK	32
1.2.3. COMPONENTS AND OPERATIONAL STRUCTURES	33
1.2.4. STRATEGIC BUILDINGS AND INFRASTRUCTURE	36
1.2.5. OTHER RELEVANT INFRASTRUCTURES	37
1.3. ACTIVATION CASCADE	38
1.3.1 IDENTIFICATION OF THE CONFIGURATION STATUS	39
1.3.2 THE PHASES OF THE INSARAG CYCLE	40
1.3.3 THE ACTIVATORS	42
1.3.4 THE ACTIVATED	42
1.3.5 ACTIVATION AND EMERGENCY OPERATIONS CENTRES	43
1.4 CIVIL PROTECTION RESPONSE MODULES	47
1.5 STANDARD OPERATING PROCEDURES	51
1.5.1 DIFFERENT OPERATING PROCEDURES FOR DIFFERENT	
PURPOSES	52
STEP 2 Analysis of information on risk and scenarios	54
2.1 STAKEHOLDERS ANALYSIS	55
2.2 RISK IDENTIFICATION AND ANALYSIS	56
2.2.1 DEFINING THE SCOPE	56

2.2.2 DEFINITION OF HAZARD	56
2.2.3 LIKELIHOOD ESTIMATION	56
2.2.4 ASSESS EXPOSURE AND VULNERABILITY	57
2.2.5 RISK EVALUATION AND RISK CLASSES HAZARD AND RIS MAPS	60
2.3 EARLY WARNING SYSTEMS	61
2.4 DISASTER RISK SCENARIOS	63
STEP 3 Adapting the response plan to the scenarios	67
3.1 ADAPTING THE ELEMENTS OF THE RESPONSE PLAN TO THE SCENARIOS	70
3.1.1 THE ALERTING SYSTEM and the PREVENTIVE ACTIONS	70
3.1.2 THE ORGANISATION OF THE CIVIL PROTECTION STRUCTURE BASED ON THE IDENTIFIES SCENARIO/S	71
3.1.3 EMERGENCY OPERATIONS CENTRES	72
3.1.4 EMERGENCY AREAS AND STRUCTURES	73
3.1.5 TELECOMMUNICATIONS	74
3.1.6 ACCESSIBILITY	76
3.1.7 THE TERRITORIAL PRESIDIUM	76
3.1.8 THE HEALTHCARE SERVICE AND ASSISTANCE FOR VULNERABLE GROUPS	79
3.1.9 OPERATIONAL STRUCTURES	82
3.1.10 LOGISTICS	83
3.1.11 OPERATION OF ESSENTIAL SERVICE NETWORKS	84
3.1.12 ENVIRONMENTAL PROTECTION	86
3.1.13 DAMAGE ASSESSMENT	86
3.1.14 THE EMERGENCY BOUNDARY CONDITION WHEN AVAILABLE	00
	88
3.1.15 ADMINISTRATIVE CONTINUITY	88
Annexes	90

Abbreviations

MIRROR	Regional Integrated Module for Response, Operational Management, and Resilience
CSOs	Civil Society Organization
CBRN	Chemical, Biological, Radiological, and Nuclear
СР	Civil Protection
DRA	Disaster Risk Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
RFL	Restoring Family Links
EU	European Union
GIS	Geographic Information Systems
IFRC	International Federation of Red Cross and Red Crescent Societies
DRA	Disaster Risk assessment
EMT	Emergency Medical Teams
EOC	Emergency Operation Centre
ERT	Emergency Response Team
EWS	Early Warning System
EWEA	Early warning Early Action
HNS	Host Nation Support
HQ	Headquarters
INSARAG	International Search and Rescue Advisory Group
IT	Information Technology
ltRC	Italian Red Cross
MIRA	Multi-sector Initial Rapid Assessment

LGBTQI+	Lesbian, Gay, Bisexual, Transgender Queer/questioning and Intersex.
NDRA	National Disaster Risk Assessment
NUTS	Nomenclature of Territorial Units for Statistics
NUTS 1	Major socio-economic regions
NUTS 2	Basic regions for the application of regional policies
NUTS 3	Small regions for specific diagnosis
PGI	Protection, Gender and Inclusion
PPRD EAST 3	Prevention, Preparedness and Response to natural and man- made disasters in Eastern Partnership countries Phase 3
SGBV	Sexual and Gender-based Violence
SOPs	Standard Operating Procedures
SWOT	Analysis of Strengths, Weaknesses, Opportunities, Threats
TLC	Telecommunication
UCPM	Union Civil Protection Mechanism
UDRG	Union Disaster Risk Goals
UNDRR	United Nations Office for Disaster Risk Reduction (formerly UNISDR)
USAR	Urban search and Rescue
WEA	Wireless Emergency Alerts
WP	Work Package
WP C	Work Package on Emergency Preparedness
WP H	Work Package H on Risk Management Capabilities

Purpose and objectives

The Emergency Planning Guidelines is developed in the framework of the WP C Emergency Preparedness, Activity C.1.1 Development of National Planning Guidelines, within the PPRD East3 Programme.

Since one of the purposes of the PPRD EAST3 programme is to strengthen Emergency Preparedness capabilities in the Partner Countries, a comprehensive planning process, which includes operationalised anticipatory actions, and an effective interagency coordination is essential to support prevention, to structure stronger national Civil Protection systems, regional development and cross-border actions.

For the purpose of carrying out civil protection activities such as forecasting, prevention, risk mitigation, emergency management and overcoming them, these guidelines are presented in order to guarantee homogeneity throughout the national territory in the civil protection planning method for the various territorial levels. Civil protection emergency planning is an activity which must be carried out jointly by all the administrations at the various territorial levels for the preparation and management of civil protection activities, respecting the principles of territorial jurisdiction. The purpose is to homogenise the civil protection planning method at the various territorial levels in regards to the management of activities connected to calamitous events of different nature and severity in order for them to work more efficiently when a disaster occurs. These Guidelines are intended as a tool for ensuring a common standard basis in the process of drafting emergency plans at local, regional or national level.

The Guidelines propose a specific methodology, even though other methodologies can be suggested, the purpose of the Guidelines is merely to explain the process and propose a structure for emergency planning that can be presented and eventually evaluated.

This Technical Guidelines is receiving recommendations from the Sendai Framework, the INFORM approach, and the UNDRR's strategic framework.

The Sendai Framework for Disaster Risk Reduction 2015–2030 outlines seven clear targets and four priorities for action to prevent new and reduce existing disaster risks, one of them is "Enhancing disaster preparedness for effective response". This priority highlights the importance of having a comprehensive and proactive approach to disaster preparedness in order to minimise the impact of disasters and ensure a swift and effective response when they occur.

An additional purpose of the development of the Guidelines is to bring together some key strategies and actions that can contribute to enhancing disaster preparedness for effective response, in alignment with the Sendai Framework and in connection with the Regional DRA Guidelines:

Risk Assessment and Early Warning Systems:

- Conduct thorough risk assessments to identify and understand the potential hazards in the area.
- Develop and strengthen early warning systems to provide timely alerts to communities about impending disasters, allowing them to take necessary actions to protect themselves.

Capacity Building:

- Build the capacity of communities, local governments, and relevant stakeholders to understand and manage disaster risks effectively.
- Provide training in disaster response, including first aid, search and rescue techniques, and evacuation procedures.

Infrastructure and Resilience:

- Invest in resilient infrastructure that can withstand the impact of disasters, such as earthquake-resistant buildings or flood-resistant roads.
- Implement building codes and land-use planning that consider potential hazards.

Community Engagement and Education:

- Raise awareness within communities about disaster risks and the importance of preparedness.
- Promote community-led initiatives for disaster preparedness and response, fostering a sense of ownership and responsibility.

Simulation Exercises and Drills:

- Conduct regular disaster response drills and simulation exercises involving all stakeholders, including government agencies, non-governmental organisations, and communities.
- Evaluate the effectiveness of response plans through these exercises and identify areas for improvement.

Collaboration and Coordination:

- Establish strong collaboration and coordination mechanisms among different government departments, agencies, and organisations involved in disaster management.
- Facilitate communication and information-sharing to ensure a unified response during emergencies.

Inclusive approaches:

- Consider the diverse needs, risks and priorities of all groups in the society, including women, girls, boys and men, youth, elderly, people with disabilities, and other minority groups in disaster preparedness and response planning. Special attention should be given to vulnerable and marginalised populations.
- Ensure that plans and actions are inclusive of all segments of the society.

• Promote active participation of actors that have gender and human rights expertise and organisations that represent the whole society in planning and response actions.

Technology and Innovation:

- Leverage technology for improved data collection, analysis, and dissemination during disasters.
- Explore innovative solutions such as drones for damage assessment or mobile apps for emergency communication.

Post-Disaster Recovery Planning:

• Integrate disaster preparedness into long-term development plans and recovery strategies to build back better and more resilient communities.

Policy and Legislation:

- Develop and enforce policies and legislation that support disaster risk reduction and preparedness efforts.
- Allocate sufficient resources for disaster management initiatives at all levels of government.

By implementing these strategies and actions, governments, organisations, and communities can work together to enhance disaster preparedness and ensure effective responses, reducing the human, economic, and social impacts of disasters as outlined in the Sendai Framework.

The guide provides a set of tools that can be adapted considering a country's priorities for further development of emergency planning at all territorial levels.

The proposed models, templates and annexes are additional tools in support to the emergency planning process that can be useful to standardise the process throughout the country.

The development of this document was co-financed by the European project PPRD East 3 - Prevention, Preparedness, and Response to natural and man-made disasters in Eastern Partnership Countries. The same guidelines, with the appropriate variations, are used in the framework of joint action between the partners of the Project for the drafting of the Emergency Plans of the Emergency Systems of the Countries involved.

Bibliography

- 01. Marin-Ferrer, M., Vernaccini, L. and Poljansek, K., Index for Risk Management
- 02. INFORM Concept and Methodology Report Version 2017, EUR 28655 EN, doi:10.2760/094023
- 03. UNISDR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030.
- 04. Decree of the President of the Council of Ministers. (Italy, 2008, 3 December). Operational guidelines for emergency management.
- 05. Legislative Decree. (Italy, 2012, 28 February). No.178 and subsequent modifications on the organisation of the Italian Red Cross Association.
- 06. Legislative Decree. (Italy, 2018, 2 January). No. 1 Civil Protection Code.
- 07. Directive of the President of the Council of Ministers. (Italy, 2021, 30 April). Guidelines for the preparation of civil protection plans at different territorial levels.
- 08. Battiston, S., Friedemann, M., Barth, B., Vendrell, J., Martin, D., Martinis, S., Pignone, F., Knopp, C., Trasforini, E., Milla Gascón, D., Massucchielli, L., Jasic, N., Briant, J., & Riedlinger, T. (n.d.). HEIMDALL: a technological solution for floods and multi-hazard management support. doi:10.3311/FLOODRisk2020.18.4.
- 09. Vanolo, A. (2014). Smartmentality: The Smart City as Disciplinary Strategy. Urban Studies, 51(5), 883-898. doi:10.1177/0042098013494427.
- Morandi, C., Rolando, A., & Di Vita, S. (2016). From Smart City to Smart Region. Springer, Politecnico di Milano. ISBN: 978-3-319-17338-2.

- Cialdea, D. (2018). Smart Planning: Sustainability and mobility in the age of change. ISBN: 978-3-319-77681-1.
- FEMA (Federal Emergency Management Agency) US Department of Homeland Security.
 - a. (n.d.). ICS-100: Introduction to ICS (EMI Number: IS100).
 - b. (n.d.). ICS-200: ICS for Single Resources and Initial Action Incidents (EMI Number: IS200).
 - c. (n.d.). ICS-300: Intermediate ICS for Expanding Incidents (EMI Number: G300).
 - d. (n.d.). ICS-400: Advanced ICS Command and General Staff—
 Complex Incidents (EMI Number: G400).
 - e. (n.d.). ICS 402 Incident Command System (ICS) Overview for Executives/Senior Officials (EMI Number: G402).
- 13. North Atlantic Treaty Organization.
 - a. (n.d.). NATO STANAG 7193: Incident Command System for Fire and Emergency Services Responses to Incidents.
- BCERMS (British Columbia Emergency Response Management System).
 (n.d.). Overview "Operations and Management Standard 1000". Retrieved from http://www.pep.bc.ca/bcerms/bcerms_overview-manual.pdf.
- California Department of Forestry and Fire Protection. Cole, D. (n.d.). The Incident Command System: A 25-year evaluation by California practitioners.
- 16. Société Française de Médecine de Catastrophe. Abate, L. (n.d.). [Title in French, potentially "Emergency Management for Human and Environmental Protection"]. Retrieved from

http://www.sfmc.eu/La_Gestione_delle_Emergenze_per_la_Protezione_del 1_Uomo_e_dell_Ambiante__Abate_L.pdf.

- Dipartimento dei Vigili del Fuoco, del Soccorso Pubblico e della Difesa Civile. (2005, 29 Luglio). Lettera Circolare Prot. n. 6294/24205-EM.
- Birkmann, J. (ed) (2006), Measuring vulnerability to natural hazards towards disaster resilient societies, United Nations University Press, Tokyo.
- 19. Bollin, C., Cardenas, C., Hahn, H. and Vatsa, K. S. (2003), Natural Disaster
- 20. Network; Disaster Risk Management by Communities and Local Governments,
- 21. Washington, D.C.: Inter-American Development Bank.
- 22. UNISDR (2009), Terminology on Disaster Risk Reduction.
- 23. Dottori, F., Salamon, P., Bianchi, A., Alfieri, L., Hirpa, F. A. and Feyen, L.
- 24. (2016), Development and evaluation of a framework for global flood hazard
- 25. mapping, Advances in Water Resources 94, 87-102,
- 26. doi:10.1016/j.advwatres.2016.05.002.
- 27. CIMA Foundation (2015), Improvement of the Global Flood Model for the
- 28. GAR15, GAR 2015 Background Papers for Global Risk Assessment.
- 29. Heidelberg Institute for International Conflict Research (2016), Conflict
- 30. Barometer 2015, Heidelberg.
- 31. Smidt, M., Vernaccini, L., Hachemer, P. and De Groeve, T., The Global
- 32. Conflict Risk Index (GCRI): Manual for data management and product output, EUR
- 33. 27908 EN, doi:10.2788/705817
- 34. Kaufmann, D., Kraay, A. and Mastruzzi, M. (2010), The Worldwide

- 35. Governance Indicators: Methodology and Analytical Issues, World Bank Policy
- 36. Research Working Paper No 5430, available at SSRN:
- 37. http://ssrn.com/abstract=1682130
- 38. Rao, S. (2013), Regional and national capacity to cope with humanitarian
- 39. risk (GSDRC Helpdesk Research Report), Birmingham, UK: Governance and Social
- 40. Development Resource Centre, University of Birmingham.
- OECD/JRC, Handbook on Constructing Composite Indicators. Methodology
- 42. and user Guide, OECD Publishing, 2008, ISBN 978-92-64-04345-9.
- 43. PPRD East 3, 2021, Practical guidelines for integrating gender, human rights and environmental issues in DRM

Introduction

This document is designed to guide planning officers through the emergency planning process. These Guidelines aim to accompany the compilation of the emergency plan model, whether it is in the "analogue" version or part of the planning software. The document, as well as the model of the emergency plan, is made up of five chapters, as listed below:

- Introduction definition of emergency planning, impact on territorial levels, and description of the planning methodology adopted.
- Step 0 Analysis of the Civil Protection or Emergency Management System, its structure and capabilities.
- Step 1 Development of the Response Plan
- Step 2 Territorial and environmental information
- Step 3 Definition of Scenarios and application of Early Warning Early Action The chapters include different annexes as follows:
 - Step 0
 - Annex "PPRD Assessment tool"
 - Step 1
 - Annex "Response Plan Model"
 - Annex Guidelines for drafting SOPs" and template
 - Annex "Support Functions"
 - Annex "Inclusion and Integration of CSOs&Volunteer-based Organisations" Annex "Blueprint for supporting Civil Protection Organisations in developing

Online Volunteers Activities"

- Step 2
 - Annex "Model for Analysis of information on risk and scenarios"
- Step 3

Annex "Model for Adapting Response Plan to scenarios"

Emergency management planning is subject to innovation and organisational change. The ever more concentrated focus on resilience, climate change, community-based risk reduction, new threats, and deliberate attacks requires an always up-to-date planning methodology. In these guidelines, the necessary relationships between the Emergency Management System organisational model, operations, business continuity plan, and contingency plan, as well as incident and action plan templates, are defined. These tools must be connected and interrelated, both to provide consistency in the response and to be able to prepare resources and the population adequately. The guidelines indicate the fundamental elements and steps to follow to allow in-depth and adequate planning, which must consider the complexity of the National Civil Protection system and apply to any type of event. A particular focus is aimed at data management and its integration at all levels, both internal and external, since the integrated and multi-stakeholder approach to planning is an essential element of the coordination system, as well as providing a competitive advantage in understanding its structure.

To allow adequate activation and use of resources, as well as adequate planning, data exchange, and communication, it is necessary to build planning tools that are adaptable to all levels of the organisation and can be easily shared externally or internationally. This facilitates the identification of responsibilities and how they are dealt with from an operational point of view.

What is needed in order to do all of this, is a **civil protection plan**, which is a set of operational intervention procedures to deal with any disaster expected in a given territory. The plan implements the forecasting and prevention programme, and is the tool that allows the authorities to prepare and coordinate relief interventions to protect the population and property in an area at risk. The plan is divided into three main parts: 1. General part: collects all the information on the characteristics and structure of the territory;

2. Planning outlines: they establish the objectives to be achieved in order to give an adequate civil protection response to any emergency situation, and the skills of the various operators;

3. Intervention model: assigns decision-making responsibilities to the various levels of command and control, uses resources rationally, defines a communication system that allows for a constant exchange of information.

Plan objectives:

- assigns responsibility to organisations and individuals to take specific actions, designed in time and place, in an emergency that exceed the response capacity or competence of a single organisation;
- describes how actions and relationships between organisations are coordinated;
- describes how to protect people and property in emergencies and disasters;
- identifies available personnel, equipment, expertise, funds, and other resources to be used during response operations;
- identifies the initiatives to be implemented to improve the living conditions of any evacuees from their homes.

It is a document that must be constantly updated, and that must take into account the evolution of the territorial structure and the variations in the expected scenarios. The exercises also contribute to updating the plan because they validate its contents and

evaluate the operational and management skills of the personnel. In fact, training helps personnel who will be employed in an emergency to familiarise themselves with the responsibilities and tasks they must perform in an emergency. A plan must be flexible enough to be used in all emergencies, including unforeseen ones, and simple enough to become operational quickly.

The Plan, as defined in this document, bases its main elements on three concepts:

- The Plan is a data acquisition and sharing tool. It is built to request data from the compilers and automatically process it into a rapidly deployable tool.
- The Plan is an operational tool that is based on real situations. The scenarios become its central focus and the starting point the planner will use during prevention and response actions.
- The Plan is also a prevention tool; it must, therefore, contain the useful elements for managing the risk and sharing the forecasting and prevention data owned by the organisation with other players.

CROSS-CUTTING ISSUES IN EMERGENCY PLANNING

PPRD East 3 aims to integrate essential cross-cutting issues (CCIs) into all phases and parts of the programme, therefore these guidelines also incorporate the PPRD Practical guidelines for gender, human rights and environmental aspects in Disaster Risk Management¹.

Gender and human rights perspective

Natural hazards are gender neutral, but their impacts are not. Different people in the society face different levels of exposure to natural hazards and have different needs when disasters strike. This inequality is created by gender relations and social discrimination in society.

The integration of a gender and human rights perspective in disaster preparedness and response lays a strong foundation for mitigating the impacts of disasters and delivering responses that meet the distinct needs of all societal groups.

Environment and climate change

Environmental integration in emergency preparedness and response action is to twofold and includes:

¹ www.pprdeast3.eu/about-the-programme/cross-cutting-issues/

- Preparing to respond to direct and indirect environmental consequences, and Mainstreaming environmental concerns in planning of response action
- Preparing to respond to environmental consequences entails identifying acute environmental concerns and the root environmental causes of a crisis, as well as pre-crisis vulnerabilities tied to environmental issues.
- Mainstreaming environmental concerns in humanitarian action puts focus on raising awareness and identifying opportunities to reduce the negative environmental impacts of response actions.
- Including environment aspects as part of preparedness planning lays the foundation for their integration in the response phase and further in the DRM cycle. When done right, preparedness planning permits various actors to come together and mitigate risk. It also allows for synergies between fields, such as land use planning, environmental protection and health, and safety protection.

In the European commission's recommendation on the Union Disaster Resilience Goals, it is emphasised that strengthening disaster resilience in the area of civil protection should be:

- "inclusive"; to ensure no one is left behind by taking into account the specific needs and drivers of vulnerability of people such as gender, age, economic, educational and social background, disabilities; and geographic exposure to specific risks.
- "sustainable" taking into account nature-based solutions, the impacts of climate change and environmental degradation on disaster risks and the prevention and mitigation of the environmental impact of disasters paying special attention to minimising the environmental impact of civil protection operations.

These alignment and integration are key to ensure the programme contributes to strengthening capacities in disaster risk management (DRM) systems in a way that enhances sustainability and the resilience of the society as a whole, leaving no one behind, and should be seen as "horizontal principles and approaches" to underpin disaster resilience.

TERRITORIAL LEVELS AND EMERGENCY PLANS

The guidelines anticipate the requirement for conducting a risk analysis to identify the threats and vulnerabilities of the region. This analysis helps in defining objectives and actions to prevent and manage emergencies, as well as establishing emergency scenarios and preparing specific emergency plans for each considered scenario. The results of

the Disaster Risks Analysis, in fact, have to be integrated in the Emergency Plan, to support scenario definition, preparedness and response actions.

Considering the necessity to enhance the capacity of civil protection planning, support effective response to local emergencies caused by disastrous events, and standardise the planning approach across different territorial levels of coordination, these guidelines serve as a crucial tool for preparing Civil Protection plans that are capable of ensuring proper emergency management and ensuring the safety of all citizens in a population, leaving no one behind

The territorial framework of reference might include:

- National level
- Regional level (NUTS1)
- Homogeneous areas of risk with supra-municipal extension (specific for civil protection purposes or any other NUTS2)
- Municipal level (Municipalities)

By encompassing the territorial levels, the guidelines facilitate a comprehensive and coordinated approach to civil protection planning, addressing emergencies at various scales and ensuring efficient allocation of resources and response efforts.

THE MODEL DEFINED

The COVID19 emergency has highlighted the complexity of coordinating multisite/multi-hazard events and the need to make a wide range of assets available (human resources, materials, means, tools, data and information) in response, recovery and to deal with concomitant situations caused by both natural and man-made events, or as a result of distant crises. In fact, with the pandemic, it was necessary to carry out a profound rethinking, not so much of the basic strategy or priorities, but of how to integrate the various planning elements, to create a real emergency ecosystem.

The Italian Red Cross has developed the Regional Integrated Module for Response, Operational Management, and Resilience - MIRROR, from now on defined "Planning Methodology" - to support planning activities in a comprehensive and adaptable manner while enhancing internal capabilities. It represents an emergency ecosystem, encompassing essential elements to foster, develop, nurture, and enhance the organisation's and its Partners' Disaster Risk Management capacity.

This planning model is highly shareable and exportable, becoming a reference for other civil protection structures. Firstly, it aims to establish an integrated system for resource management that effectively and efficiently responds to disasters. Secondly, it seeks to integrate various rescue units at both regional and national levels.

However, the proposed planning model goes beyond just being a response mechanism. It represents a system that takes a significant step forward by providing comprehensive

training to volunteers for Civil Protection tasks, enabling their versatile use in various scenarios.

It takes into consideration both the basic needs of Emergency Management and the capabilities of the territorial units. It must be considered as a variable geometry system, which means it has the possibility of deploying individual groups, teams, or resources and modifying the size of the teams and - consequently - of the groups according to the real situation/event to be faced. It is a different and innovative approach that foresees continuing training at all levels; use of the Incident Command System; permanent multi-risk approach; database of national and shared personnel, means, and equipment; Coded and shared Standard Operating Procedures (SOPs); shared and integrated alert system; Standardised and unitary Italian Red Cross Emergency Plan; single IT system adopted at each level for the management of operations and activation of resources; retrieval and sharing of information and reporting; operational planning in the event of an event; Information Management.

This approach aims to improve resilience at institutional and community levels. It is a guiding model for the development of future civil protection structures, emphasising the importance of preparedness and capacity building in organisations.

Finally, it means having a system integrated with the Regional Mobile Columns², able to receive the directives of the National Civil Protection Department; this doesn't imply losing the independence of the organisation, but rather enhancing it in order to provide an increasingly structured capability.

There are seven pillars on which it is based:

- 1. Manage all planning processes
- 2. Exchange plans with Partners
- 3. Provide a platform for resilience and prevention activities
- 4. Fund-specific projects
- 5. Integrate project results and their products
- 6. Identify gaps and structure new projects in planning
- 7. Unify the planning system at EU level

Disaster mitigation measures can be both structural (physical construction and application of engineering techniques to achieve hazard resistance and resilience in structures or systems) and non-structural (disaster risk prevention, monitoring, policy and law sharing, active exchange of data and procedures, stakeholder involvement in decision-making, risk awareness, training and education).

 $^{^2}$ Civil Protection unit ready to go and able to mobilise quickly in the event of an emergency in the region. It consists of teams of rescuers, professionals and volunteers, and vehicles, also belonging to different organisations, capable of working together in a unified and coordinated manner.

MIRROR - THE FOUR STEPS PLANNING METHODOLOGY

The planning process, valid for each structure and level, was structured according to the following 4-step procedure:

Step #	Name	Action	
0	Assessment of the System, structures and capacity	Identification of the capacity, analysis of the system and gap analysis	
1	Response Plan	Definition of the Response Plan, as holistic plan for deploying response actors to face disasters or crisis	
2	Information Management on Risk and Scenarios	Environmental and stakeholders analysis, as well as integration of Disaster Risk Analysis	
3	Adaption of the Response Plans to the Scenarios	Integration of steps 1 and 2 in pre-defined scenarios	
Test	Exercises and Tests	Table-top or real scale exercises used to tes the plan	

Step 0 serves as a comprehensive assessment, involving an analysis of components under the responsibility of individuals, teams, or departments. This phase aims to establish the plan's baseline by scrutinising the organisation's capabilities, identifying strengths, areas for improvement, and potential development opportunities. Analysing the structure and capabilities, whether at the national, regional, or local level, enhances disaster preparedness and response quality. It includes defining minimum standards, indicators, tools, and references that are continuously updated and effective.

Step 1 is structured based on territorial competence levels. This section focuses on developing the response plan, which must include a comprehensive list of operational capabilities in terms of resources, materials, and human personnel. It also entails creating an activation cascade and utilising operational response modules. The response plan is constructed based on essential data collected to create the broadest emergency plan.

The objective of Step 2 is to determine the model and approach for developing the emergency plan framework. During this phase, elements are gathered to understand the dangers and risks of the territory, potential scenarios, and the locations and regular activities of other Operating Structures covered by the Plan. This section of the plan describes the surrounding situation of the Civil Protection system or organisation, and is vital for preventing resources from overlapping and to coordinate effectively with other stakeholders during emergencies.

Step 3 entails adapting the response plan to the specific scenarios, making it an essential component. This step aligns the plan's operational capabilities, the Civil Protection System's intervention model in the territorial area of competence, and the individual or combined risks for either simple or multi-risk scenarios.

The different steps will be in-depth explained in the document.

EUROPEAN COMMISSION'S GOALS AND INDICATORS

The European Commission established common goals to boost disaster resilience in the areas of Civil Protection, which aim to improve the capacity of the EU, its Member States, and Participating States to the EU Civil Protection Mechanism, to anticipate and withstand the effects of future major disasters and emergencies.

These guidelines have been developed also according to them, please see the following charts in regards to the goals shared in February 2023.

The Disaster Resilience Goals are:

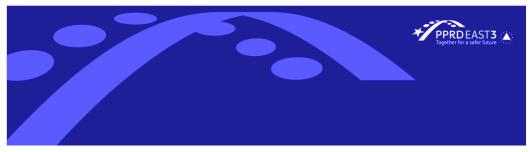
GOAL 1	Anticipate	To improve risk assessment, anticipation, and disaster risk management planning in the face of increasingly cross-sectoral and interdependent risks.	Flagship initiative: To develop 10 Europe-wide disaster scenarios covering 16 key hazards faced by the EU that have cross-border impacts.
GOAL 2	Prepare	To increase risk awareness and disaster preparedness of the population to reduce the impact of future disasters.	Flagship initiative: To develop #preparEU, a pan-European risk awareness initiative for disaster risk.
GOAL 3	Alert	To enhance early warning to ensure warning messages at national, regional, and local levels reach the right people at the right time.	Flagship initiative: To link global early warning to local action in Europe. The ERCC has developed a range of automated European and global early warning and detection systems, and is developing a multi-hazard 'dashboard' that provides European situational awareness to emergency managers.
GOAL 4	Respond	To enhance the UCPM response capacity to fill critical gaps and avoid further deterioration of a situation when the national capacity is overwhelmed.	Flagship initiative: To scale up the rescEU strategic reserve. This includes a doubling of rescEU's aerial firefighting fleet by 2023, with an additional 2 helicopters and 14 light aircraft.
GOAL 5	Secure	To ensure a robust civil protection system which remains operational 24/7, both during and after disasters, when it is most needed.	Flagship initiative: Stress-testing the emergency operation centres across Europe. This flagship will pilot a pan-European disaster preparedness stress test', which will check the business continuity of emergency operation centres.

The following "UDRG" indicators are connected to the EU Civil Protection Mechanism (UCPM), and the guidelines will apply them, customised to a national Civil Protection System. Considering some of the indicators for each goal in fact, you will find many parts in the documents, and throughout the different emergency planning steps to support them.

Indicators	Emergency Planning Guidelines
	UDRG 1 can be found in Step 2 - Information Management on Risk and

be continuously updated and expanded as needed".	Scenarios, and Step 3 - Adaption of the Response Plans to the Scenarios . Anticipatory action refers to actions we can take before a predicted hazard hits to prevent or reduce its potential impacts, without Step 2 and 3 it will not be possible to organise these actions that are essential within the emergency planning.
UDRG 2 Prepare (Risk Awareness) - "By 2023, 90% of the population of the Union should be well aware of disaster risks in their region".	UDRG 2 can be found in Step 3 , because after adapting the Response Plan to the scenario, it will be easier to structure the awareness activities in order to inform and educate the population in regards to specific risk within the region and country they live in. These activities will also support interagency coordination, and collaboration with CSOs and volunteer- based organisations to enhance capacity. For more information please refer to the additional annexes of Step 1 .
UDRG 3 Alert (Forecasting, detention and monitoring) - "Integration and Interoperability of systems".	UDRG 3 can be found in Step 1 - Development of the Response Plan in regards to structuring the competence and the actions of the different operational structures and territorial levels, based also on escalation of the events, and in Step 2 in regards of the further stakeholder analysis that will be carried out based on the risks, the Early Warning System, and the scenarios that will be identified. A particular reference will be made also to the integration of the plans of high-risk infrastructures and dangerous substances, such as heritage and livelihood to ensure less impact.
UDRG 4 Respond (Wildfire response) - "The UCPM should at least be able to respond to needs in six Member States simultaneously with aerial forest fire fighting capacities once national capacities are overwhelmed, for a minimum of 1 day and a maximum of 7 days".	UDRG 4 can be found in Step 1 , customised to the national response capacity to wildfire risk. For international activities, it will be possible to refer to the Transboundary Planning and

	Preparedness Guidelines that will be developed within the PPRD East 3 project within 2024.
UDRG 5 Secure (Business continuity planning) - "Regularly revise plans and procedures to make them more flexible and adaptable to the expected consequences of the current and future disasters"	UDRG 5 Relates to all steps respectively, in order to have an integrated ongoing response system, especially considering Step 3 that has specific sections in this regard. It'd be important to integrate business continuity of the different agencies and organisations.



STEP 0 Analysis of the Civil Protection System, its structure and capacities

Step 0 is intended for all purposes as an assessment, i.e. an analysis of one or more components that are under the responsibility of an individual, a team or a department. This phase will support the definition of the baseline of the plan through the analysis of the capabilities of the Civil Protection system, and to identify strengths and elements to improve, as well as to develop opportunities.

It is important to regularly review all stakeholders' roles in the national and local emergency preparedness and response mechanisms, to continuously adapt to changes of the risks and scenarios, and to adopt new approaches, technologies, laws and standards to ensure rapid and adequate services.

Analysing the system - be it at the national, regional or local level - and its capabilities, allows to improve the quality and responsibility of disaster preparedness and response, including minimum standards, indicators, tools and references that are increasingly updated and effective. Finally, it will be of utmost importance to identify and define the reason for the identified gaps so that the necessary actions can be taken for improvement.

Preparedness for Effective Response³ uses an assessment framework to assess response and supports a multi-sectoral analysis process to identify and incorporate areas of an organisation's response into an effective plan of action. The approach includes the use of a series of assessment tools to provide to different organisations for an in-depth understanding of their performance and the state of their capabilities in order to have a real picture of the entire system's capacity.

³ PER is a IFRC cyclical approach for a National Society (NS) to systematically assess, measure, and analyse the strengths and weaknesses of its response system in order to take remedial actions. https://go.ifrc.org/

0.1 THE QUESTIONNAIRE

In practical terms, this stage involves carrying out a questionnaire. Questionnaires are one of the most widespread tools for collecting information, but also one of the most modifiable and adaptable tools to suit your needs. In the case of the analysis and evaluation activities of a system, it proves to be one of the most suitable. This tool must include all the sections that can be analysed, the priority areas for each of them, and the reference parameters that are identified. If a section in the questionnaire is not compiled, part of the evaluation will be necessarily lost. The questionnaire is structured as follows in an excel file:

,	Sub-priority areas	Benchmarks	Scoring system (U-5)	Description of the score		
---	-----------------------	------------	----------------------	-----------------------------	--	--

This step is essential to understand if something is missing in the system and if so guide the actions to be taken to fill the gaps found. It is necessary to understand not only the capacity in terms of men-equipment-materials but also in terms of policies and governance. Questions to be answered are grouped into:

- Policies, strategies and standards is there a strategy aimed to identify the general objective to be achieved through the operations that the Civil Protection System implements in the response to disasters or crises? And is this strategy reflected and described in a document? Is it possible that a strategy is identified and recognized at the national level but it is not applied at the local level? The result will bring the possibility to decide whether or not it is appropriate to give support to the local authorities so that the strategy is developed and adopted also at the local level.
- Analysis and Planning: does the system include Emergency Response Procedures? Does the contingency plan include a set of documented, approved and updated procedures to define the disaster/crisis response and transition to the recovery process?
- Operational capacity: Is the management of the staff and volunteers functioning properly and allowing for effective recruitment, supervision, support and encouragement?
- Coordination: how does the coordination within the Civil Protection system work during emergencies? How does it work between the different Operational Structures (stakeholders)? Are CSOs involved? If so, how?

As far as the PPRD concerns, the priority areas are:

- 1. Knowledge Transfer including institutional set up and training audience, quality management and of course knowledge transfer
- 2. Civil Society Integration and Volunteerism -including inclusiveness and coordination, and all different sub-priorities (i.e. EMT, RFL, recovery, mapping of capacity, safety & security volunteers management, cash transfer, funding..)
- 3. Emergency Preparedness and Response Planning including about forty different priority topics
- 4. Regional Exercise and HNS With the response system as priority divided in exercise and Host Nation Support
- 5. Early Warning system and 24/7 Operation Rooms where the documents are on prevention, preparedness, EWEA and emergency planning
- 6. Multi-Risk Assessment where the priority is the Risk Management System and all that it includes.

Therefore, it will be necessary to create different working groups to work on these many important topics.

0.1.1 COMPILATION AND SCORE

The compilation of the annex tools takes place online, through a questionnaire. Each question must be answered with a score between 0 and 5, where

- 0 No steps are made towards the benchmark
- 1 Only first steps are made towards the benchmark
- 2 Does not meet the benchmark
- 3 Meet the benchmark with significant deviations
- 4 Meet the benchmark with minor deviations
- 5 Fully meet the benchmark

The choice not to insert an intermediate value obliges the compiler to take either a decision either on a negative or a positive score.

The score between 0 and 2 will not request to identify and attach a supporting document in the plan, while the score between 4 and 5, will request to upload the reference document.

Each question leaves the possibility of inserting a free, explanatory, non-mandatory text field. When filling out the questionnaire, it is suggested that you work as a team: only in group mode can the analysis being carried out bring real benefits.

0.2 THE COLLECTION OF INFORMATION

The goal is to create a picture of the actual Civil Protection system, or the current reality of a specific operational structure or organisation, and to gather a complete assessment that can be used to build or update the strategy, and therefore proposes major improvements or enhancements. Once the results have been obtained, it will be possible to categorise the information using the tool of the SWOT analysis to support strategic planning, and proceed structuring the coverage of the identified gaps.

Having an analysis' tool to guide towards a "starting point", could be very useful to further develop capacity and strengthen the system. This tool can as well support the understanding of the preparation level, improvement and growth, and a standardised planning process throughout the whole country or specific organisation.

Annex: PPRD Assessment tool STEP 0



STEP 1 Response Plan

Step 1 of the emergency planning process aims to facilitate the development of the response plan. This phase of the emergency plan focuses on the Civil Protection's capacity to prepare for and respond to disasters or crises. It encompasses a comprehensive list of operational capabilities, including resources such as equipment, materials, and human personnel, as well as the structure of the activation cascade and the assets of the operational response modules. The document is primarily based on the collection of essential data required to construct a robust emergency plan. It considers the territorial framework of reference (national, regional, provincial/district, and territorial scope) and serves as a guide for compiling all the necessary information to be included in the document.

Another objective is to **support the updated census** of various recognized Operational Structures (actors/stakeholders) and subsequently identify which of these structures could potentially be at risk. For instance, in the event of earthquakes, floods, landslides, fires, etc., warehouses or Emergency Operational Centers may become involved and partially or entirely inoperable. The inclusion of this information within the plan is of fundamental importance as it can significantly impact the response capacity and overall operational organisation. For example, a truck can be utilised in various scenarios such as flooding, earthquakes, or to support operations during an epidemic. However, if the truck catches fire, becomes flooded, or breaks down, it will no longer be a viable part of our capacity. Therefore, an updated census ensures that it accurately reflects the actual capacity.

The response plan serves as a preliminary tool that addresses known risks in general, rather than being tailored to specific scenarios. It is only in the third step of the planning process that the plan will be customised to specific identified scenarios.

The annex document that the compiler must fill in, consists in a list of items representing the type of information that needs to be collected for each territorial framework of reference for which the information is requested.

- National National HQ D National Emergency Operations Center
- Regional Regional Coordinating Centers

 Regional Emergency Operations Center
- Municipal Local Coordination Centers 🗆 Local Emergency Emergency Operations Centre

It will be the responsibility of the compiler to fill in exclusively the specific level of competence.

1.1 TERRITORIAL FRAMEWORK OF REFERENCE

The response plan must be structured on different territorial levels, as a non-exhaustive example:

- National Level: This involves identifying the number of branches, offices, and staff and/or volunteers with specific expertise at the national level. Additionally, it is important to assess the geographic extent of the country, including affiliated Regions, municipalities, and the total population;
- Regional Level: At the regional level, it is necessary to determine the number of branches, offices, staff and/or volunteers with specialised expertise. The evaluation should also include the geographic extension of the region, affiliated municipalities, and the total population residing within the region. Additionally, identifying regional response capacity (including engageable response modules) at this level is important.
- Territorial Level: The administrative elements that define the territory, including the extension of the municipality, the number of inhabitants (accounting for seasonal variations), and the affiliated branches, offices, staff, and/or volunteers with specific expertise, should be considered. Additionally, identifying the number of response modules by type at this level is important.

By structuring the response plan based on these territorial levels, civil protection organisations can develop a comprehensive framework that takes into account the administrative elements, expertise, and resources at each level.

Please note, that further differentiated territorial levels can be taken in consideration in case of need to subdivide a very big area.

1.2 THE ELEMENTS:

All the information requested in the Annex Model pertains exclusively to the Civil Protection system (or to a specific organisation within the Civil Protection system), and is intended to serve as a comprehensive list of all capacities. The National Headquarters will distribute this file to all branches across all territorial levels to ensure that they collect the same information at their respective levels of competence. The following elements, which will be detailed in the document, should be taken into consideration in order to obtain an updated overall assessment of the capacity, whether it is for the Civil Protection system as a whole or for a specific organisation:

- 1. Legal framework and mandate
- 2. Administrative and geographic framework
- 3. Components and Operational Structures
- 4. Strategic buildings and infrastructure
- 5. Other relevant Infrastructures
- 6. Activation cascade
- 6.1 Identification of the Configuration Status
- 6.2 The phases of the INSARAG cycle
- 6.3 The Activators
- 6.4 The Activated
- 6.5 Activation and Emergency Operations Centers
 - 7. Civil Protection Response Modules
 - 8. Standard Operating Procedures

1.2.1 LEGAL FRAMEWORK AND MANDATE

In this section, it is important to explicitly state the applicable legal framework that governs the civil protection structure responsible for developing the response plan. This section encompasses the identification and delineation of the various authorities involved in the structuring of the response plan, along with their respective roles, mandates, and responsibilities. This encompasses their involvement in risk assessment and mitigation, as well as their engagement in preparedness, response, recovery, and rehabilitation efforts. Additionally, if mandated by law, it is important to outline any general timing requirements associated with these activities. To further aid in understanding these aspects, please refer to the provided annex for additional support and information.

1.2.2 ADMINISTRATIVE AND GEOGRAPHIC FRAMEWORK

The territorial and administrative dimensions of a plan pertain to its organisation and structure based on the territorial and administrative units involved in its implementation. This implies that the plan is developed while considering the specific characteristics of the territory and the different administrative entities participating in its execution.

In the context of civil protection, plans can be formulated at various levels of administration, such as national, regional, or municipal, depending on the administrative subdivisions of the country. Consequently, the plan takes into account the distinct administrative entities involved, such as local authorities, regional or provincial agencies, police forces, health services, among others. These entities may contribute to the plan's development process, its implementation, and overall emergency management.

The territorial and administrative dimensions of a plan are essential for ensuring an adequate and coordinated response to emergencies. By considering territorial and administrative specificities, the plan can be tailored to local needs and resources, fostering stakeholder engagement and facilitating collaboration among the various entities involved in emergency management.

To summarise, the territorial and administrative dimensions of a plan entail its adaptation to the specific characteristics of the territory and the inclusion of the various administrative entities, aiming to ensure effective emergency management and the protection of the population.

As such, the response plan should be structured according to different administrative levels, and each plan must clearly specify the applicable administrative level, providing suitable descriptive references and incorporating cartographic elements to illustrate the precise scope of authority. For example, if a plan is regional, it should explicitly list the different municipalities (or the lowest civil protection or emergencies and crisis management coordination level) covered within the region, and an annexed map can be included to facilitate visualisation.

1.2.3. COMPONENTS AND OPERATIONAL STRUCTURES

The civil protection system encompasses various components and Operational Structures that collaborate to ensure efficient emergency management and population

protection. The following are key components and structures of the civil protection system, along with their specific responsibilities:

- Competent Authorities: These government entities, operating at the national, regional, or local level, bear the responsibility for emergency management. Their tasks include coordinating and supervising civil protection activities, making strategic decisions, activating emergency plans, and ensuring the implementation of protective measures.
- Coordination and Command Centers: These structures coordinate and manage emergency activities during critical events. They can be established at different administrative levels, such as municipal, regional, or national operations centres. The coordination and command centres engage in tasks such as information gathering and evaluation, resource coordination, communications management, and decision support.
- Civil Protection Responders or Organizations (so called "Operational Structures"): These specialised groups comprise professionals who perform specific duties during emergencies. Emergency teams may include firefighters, law enforcement personnel, medical staff, search and rescue workers, civil defence experts, volunteers, and others. Each team is assigned specific tasks, such as rescue operations, evacuation management, provision of medical assistance, or logistical support.

 \rightarrow it includes Civil Protection Volunteer-based Organisations: These individuals voluntarily offer their services to perform tasks and functions during emergencies. Is it better to have Civil Protection volunteers organised into voluntary associations or recognised groups to be certified by the CP System, ensure training and quality of the intervention, as well as to have a coordinated and structured way for activation and deployment. It is fundamental that the CP Volunteers have to be recognized by the Civil Protection system in order to operate.

- Emergency Infrastructures: These structures and facilities provide operational support during emergencies. Examples include hospitals, shelters, distribution centres for essential supplies, command and control centres, communication stations, and other critical infrastructure necessary for effective emergency management.
- The scientific community, civil protection-related research centres, and warning and communication services: these play crucial roles in addressing and mitigating various risks and hazards to society. These communication systems and

networks are employed for issuing warnings, disseminating emergency information, and facilitating communication among various structures and actors. Here's an overview of each of these components:

- Scientific Community: it consists of researchers, scientists, academics, and experts from various fields of study who work together to advance knowledge, conduct research, and provide evidence-based solutions to complex problems. In the context of civil protection, the scientific community contributes in several ways:

a. Hazard Assessment: Scientists assess and analyse natural and man-made hazards, such as earthquakes, floods, wildfires, pandemics, and industrial accidents, to understand their potential impacts on communities.

b. Risk Analysis: They conduct risk assessments to evaluate the probability and consequences of different hazards, helping policymakers and civil protection agencies prioritise mitigation efforts.

c. Technology and Innovation: Scientists develop and improve technologies and methods for early warning systems, monitoring, and disaster response.

d. Policy Recommendations: They provide valuable input and recommendations to governments and agencies on disaster preparedness, response strategies, and resilience-building measures.

- Civil Protection-Related Research Centers: they are specialised institutions that focus on studying and addressing issues related to disaster risk reduction, emergency management, and public safety. These centres often collaborate with the scientific community, government agencies, and other stakeholders. Their functions include:

a. Research and Development: Conducting research to understand the causes and consequences of various hazards, as well as developing new technologies and approaches to enhance disaster preparedness and response.

b. Training and Education: Providing training programs and educational resources for emergency responders, government officials, and the public to improve their understanding of risks and response procedures.

c. Testing and Evaluation: Testing emergency response plans, equipment, and technologies to ensure their effectiveness during real-world disasters.

d. Knowledge Dissemination: Sharing research findings and best practices with relevant stakeholders to foster better decision-making and improve community resilience.

- Warning and Communication Services: these are vital components of any civil protection system. These services are responsible for timely and accurate dissemination of information to everyone in the public, government agencies, and other stakeholders to help them respond effectively to potential threats. Key aspects include:

a. Early Warning Systems: Implementing and managing early warning systems for various hazards, such as severe weather events, tsunamis, and industrial accidents.

b. Public Alerts: Issuing alerts through various communication channels, such as mobile apps, sirens, broadcast media, and social media, radio systems, online platforms, and other communication channels to inform the public about imminent hazards and provide safety instructions. The choice of channels should be based on how to reach all segments of the society.

c. Coordination: Coordinating communication efforts among different agencies and organisations involved in disaster management to ensure a unified and coherent message.

d. Community Engagement: Engaging with communities to raise awareness about risks, preparedness measures, and response actions, fostering a culture of safety and resilience. Community engagement must be inclusive of the whole community.

The collaboration and coordination between the scientific community, civil protectionrelated research centres, and warning and communication services are crucial in building resilient communities and reducing the impact of disasters and emergencies.

These represent only a selection of the components and Operational Structures within the civil protection system. The specific organisation of the system may vary based on local regulations and requirements. Nevertheless, the overarching objective remains the same: to ensure a coordinated, timely, and effective response during emergencies while safeguarding the population and the environment.

A possible output of this section can be a simple chart for each territorial level analysed, or a broader stakeholders' map for each of the phases of the emergency management (including of course prevention, and specifically Early Warning System, and Early Warning to Early Action explained later on in the guidelines) that clarifies the role and responsibilities of each stakeholders as well as the communication flow across stakeholders.

Stakeholder analysis should be an ongoing process as the stakeholder landscape can change over time, with stakeholders' interests and influences evolving.

An example of operational structure⁴s include:

⁴ Art.13 of the Italian Civil Protection Code, introduced by Legislative Decree No. 1 of January 2, 2018

- Firefighters;
- Armed Forces;
- Police Forces;
- National-level research institutes and organisations with civil protection purposes, including Centers of Competence;
- Institutions dealing with Geophysics and Volcanology;
- National Health Service facilities;
- Organised voluntary civil protection groups;
- Red Cross and Red Crescent Societies;
- Specific technical rescue organisations (e.g., USAR);
- Environmental Protection Agencies;
- Weather service management structures.

1.2.4. STRATEGIC BUILDINGS AND INFRASTRUCTURE

Strategic buildings and infrastructures are those that play an operational role and perform crucial functions during emergency management phases. These structures are identified as particularly relevant and important in terms of supporting emergency and civil protection activities.

These buildings may include, but are not limited to:

- Coordination and command centres: These structures are designated to coordinate and manage emergency activities, such as operations centres or command and control centres. They can serve as headquarters for civil protection authorities or organisations involved in emergency response.
- Rescue and assistance facilities: These include hospitals, clinics, outpatient clinics, first aid centres, and other healthcare buildings that provide medical assistance during emergencies. These facilities may be equipped for casualty treatment, contagious disease isolation, or other healthcare needs.
- Evacuation and temporary shelter centres: These consist of buildings such as schools, gymnasiums, sports centres, or other spaces that can provide a safe haven during emergencies, and can be equipped with basic services such as food, water, and temporary housing.
- Response Infrastructure: Buildings housing critical infrastructure, such as police stations, fire stations, or other vital installations, can be considered strategic. Their functionality is essential for emergency management and continuity of operations.
- Communication Centers and networks: Identifying radio and satellite infrastructure is vital for Operational Structures at all territorial levels. It's crucial

to specify their geographic locations and responsible management. At national, regional, and municipal levels, reliable radio and satellite infrastructure enable seamless communication during emergencies. Documenting this infrastructure and networks ensures proper maintenance, availability, and functionality. It facilitates efficient resource utilisation and coordination between Operational Structures and responsible entities. This includes radio networks, transmitters, receivers, and antennas for effective voice-based communication. Satellite systems provide wide coverage, especially in areas with limited terrestrial networks.

It is important to note that strategic buildings can vary depending on the context and specific needs of each emergency situation. Competent authorities and regional regulations often provide a specific definition of strategic buildings within their respective jurisdictions, so it is advisable to refer to those sources for an accurate and up-to-date definition.

Therefore, for each administrative level and response plan, it will be necessary to collect detailed descriptive data on these structures, as well as precise locations supported by coordinates. Ideally, this exercise should result in a structured database that can be translated into information products such as maps.

1.2.5. OTHER RELEVANT INFRASTRUCTURES

Unlike the buildings and infrastructures of strategic value, relevant infrastructures are significant structures that are part of the Civil Protection System but do not significantly impact the response capacity if they are not operational or damaged.

Here is a non-exhaustive list of relevant structures:

- The offices of the different Operational Structures,
- CSOs offices,
- Mayor's office,
- Offices of all the departments,
- and other important locations that do not hinder the response even if they are not usable.

Therefore, for each administrative level and response plan, it will be necessary to collect detailed descriptive data on these structures, as well as precise locations supported by coordinates. Ideally, this exercise should result in a structured database that can be translated into information products such as maps.

1.3. ACTIVATION CASCADE

The activation of Civil Protection refers to the process by which relevant authorities and Civil Protection Organizations initiate their disaster response plans and take necessary actions to address a potential or actual emergency or disaster. It involves collaboration among different actors, including government bodies, law enforcement agencies, health services, voluntary organisations, the private sector, and the community itself. Its primary objective is to protect human life, minimise damage, and provide assistance in managing and recovering from emergency situations. In this context, "activation" refers to the mobilisation and organisation of all resources and structures dedicated to emergency management when a coordinated specific response is required.

If a structured Early Warning System is existing, the activation of Civil Protection will start with Early Warning, in the opposite situation, the activation of Civil Protection will start with a warning or a response to an event that necessitates a coordinated effort to safeguard the population, mitigate damages, and restore normalcy. This activation process can be initiated at the local, regional, or national level, depending on the severity and scope of the emergency.

The typical phases of Civil Protection activation encompass:

- 1. Preparedness: with a constant warning active for the hazards that can be monitored, competent authorities can issue alerts and commence further monitoring when a potential emergency is detected. Various warning systems, such as public notices, sirens, or text messages, are employed to inform the population and prepare them for the impending event.
- 2. Mobilisation: Resources required to address the emergency are mobilised during this phase. This may involve activating emergency teams, medical personnel, police forces, firefighters, and other rescue services. Evacuation plans are formulated, and temporary reception centres are established to accommodate displaced individuals.
- 3. Operations: Civil Protection coordinates emergency operations involving various agencies and organisations participating in the response. This coordination entails field rescue management, resource allocation, communication oversight, and logistical support to ensure an effective emergency response, recovery and support initial rehabilitation.
- 4. Demobilization: All organisations participating in the response began withdrawing, and coordinated their departure to go back to their base.
- 5. Post-mission: Recovery and Restoration of deployed resources (people, vehicles, and equipment) to ensure availability for future events.

Some specific actions that may encompass mobilising rescue units, communicating with and alerting the population, coordinating emergency services and available resources, managing reception and assistance centres, organising evacuations, implementing security and control measures, and conducting other activities aimed at ensuring the safety and support of citizens affected by the emergency. Some of these actions may fall under specific "support functions." The system can categorise needs into different sections known as "functions," which can be activated with flexibility, i.e., only when the event presents certain requirements, to avoid unnecessary strain on the system. For further information, please refer to the Annex "Support Functions."

To ensure an efficient emergency planning process, it is essential to thoroughly analyse decision-making structures, Operational Structures, stakeholders, and other relevant actors that can be integrated into the emergency plan. This analysis aims to establish a clear activation flow that can be quickly utilised during emergencies. Developing an accurate and precise list of all actors to be activated during different emergency phases is critical. This requires a clear delineation of their functions and common mandates, which would support the creation of specific intervention protocols and related Standard Operating Procedures.

1.3.1 IDENTIFICATION OF THE CONFIGURATION STATUS

Activation is based on the Configuration State in which the emergency is categorised. The transition between states serves as the catalyst for subsequent steps and communications. The accurate identification of the appropriate Configuration State must be a pre-established process. IDENTIFICATION OF THE \rightarrow COMMUNICATION OF \rightarrow ORGANIZE THE ACTIVITY

Following a chart that explains a possible definition of the different Configuration states:

CONFIGURATION STATUS

S.O	ORDINARY	Normal situation with ordinary activities. There are no calamitous or disastrous events in progress or foreseen in the short term.			
S.1	MONITORING	Disastrous or calamitous event foreseen in the short term for which it is necessary to maintain a monitoring function			
\$.2	ALARM	Disastrous or calamitous event expected in the short term for which the presence of the operational structures may be required as part of the management of operations in a short time. By keeping the first response personnel on site, the Response Center reduces the times for intervention, activation and reaching the site.			
S.3	EMERGENCY	Disastrous or calamitous event in progress with an active response from the operating structures			
S. GE	.GE PLANNED Planned events (i.e. major sporting events, concerts, meetings) for which the intervention by the operating structures is required				
EX.	EXERCISE	Activities such as workshops, discussion-based exercises, simulated exercises, aimed to testing plans, scenarios, procedures or processes			



Configuration status are "internal scenarios" to which general and specific procedures are linked (i.e., opening the Emergency Operations Centre, recalling the On-call Personnel...); they indicate the activities carried out by the Operational Structure, not necessarily based on the alert situation (i.e., during an orange hydraulic alert, the organisation may be in S1 to monitor in case there is no action within its competence to be carried out). For each change of Configuration State, there will be corresponding alterations in the situation, actions, activities, and instructions. The Emergency Operations Centre, plays a central and indispensable role by bridging the Governance and Strategic lines through a national focal point responsible for sharing strategic indications and information relevant to operational planning.

For this system to function effectively, the identification of the configuration status must be clearly listed and acknowledged by all stakeholders. This can be achieved by incorporating them, along with the corresponding triggered actions, into a document, regulation, or an annex to the Emergency Plan.

When compiling a request for activation, the requester must provide specific information, including the territorial level, the type of activator (automatic or structural), the type of request (order or request), the configuration state (SO, S1, S2, S3, EX), and the activation requirements (personnel, modules, or functions). Additionally, details about the activator, such as name, surname, region, province, municipality, work address, email, phone number, and role, must be included.

1.3.2 THE PHASES OF THE INSARAG CYCLE

Having a distribution of activities divided into the different phases of preparedness, mobilisation, operations, demobilisation, and post-mission will facilitate the organisation of actions while ensuring a fair allocation of resources. Each of these phases corresponds to specific actions for staff and volunteers, which can be categorised as follows:

Phase	Description	Actions
Preparedness	During this stage, preparatory steps are taken to ensure that assets are fully prepared for deployment at the highest possible level. Emergency response teams (ERT) will engage in comprehensive training and exercises, analyse and integrate insights from past experiences, update and refine Standard Operating Procedures (SOPs), and strategize for forthcoming responses.	 training disclosure awareness-raising planning acquisitions monitoring
Mobilisation	The mobilisation phase is the immediate period following the occurrence of a disaster. During this phase, response teams make preparations to deploy and extend assistance to the affected area.	 activation cascade handling up to the operating area
Operations	The operational phase is the period in which the teams are operational in the field. It starts with a team arriving at the coordination centre and registering at the local command post, updating	• Activities in area of operations

	their focal point of their Operational Structure or organisation. The phase ends when the demobilisation phase starts (with some overlapping).	
Demobilisation	The demobilisation phase is the period after operations ceased, began withdrawing, and coordinated their departure to go back to their base.	1
Post-mission phase is the p immediately after returning back: all team took part in the operations are requir complete and submit a post-mission repor conduct a lesson learned review to im overall effectiveness and efficiency for disaster response.		 defusing reinstatement

It's advisable to insert the different Configuration Status within the phases, please see the e.g.

				time		
PREPAREDNESS	MOBILIZATION	OPERATIONS	DEMOBILIZATION	POST-MISSION		
S.O Ordinary			S.O Ordinary			
	S.1 Monitoring					
	S.2 Alarm (with presence	e of operators in the area)				
	S.3 Emergency (Active coordination and Response Activity)					
	S.GE Planned Events of 0	Celbrations				

Each actor involved, should internally identify all the connected procedures and list all the actions corresponding to the different phases. These should be added to the model document.

1.3.3 THE ACTIVATORS

Activation can occur at different levels: local, regional, national, international, with each level corresponding to different activators which can be endogenous or exogenous.

- Endogenous activators refer to all Authorities and Operational Structures inherent to the civil protection system, which are directly involved in the planning process.
- Exogenous activators encompass other Authorities or Operational Structures, institutions, advanced command posts, coordination centres, criticality bulletins,

and even individual citizens. It is worth noting that activators can manifest as tools, structures, or individuals.

The activators, according to a well-defined coordination hierarchy, are responsible for initiating the mobilisation of resources, materials, structures, modules, and necessary personnel. Clearly defining these roles is crucial, as it ensures that everyone involved knows who to approach in case of an emergency.

The response plan identifies the key figures who are responsible for organising and managing emergency preparation and response activities. These figures are incorporated into the official and shared organisational chart.

For instance, when establishing an Inter-Agency Emergency Operations Center (EOC), careful consideration should be given to determining which Operational Structures will be present in the EOC and their respective roles. This ensures the optimal functioning and coordination within the EOC.

By clearly defining activators and their roles, and by structuring the activation process and EOC functions, the civil protection system can effectively respond to emergencies and ensure the smooth operation of emergency management activities.

1.3.4 THE ACTIVATED

All potentially usable resources, including vehicles, materials, structures, modules, and personnel, should only be activated at the various levels of emergency coordination upon an official activation or activation order. The assessment of available resources, the preparation and organisation of response modules, and the training of personnel who will manage them during activation should take place when no emergency is ongoing, based on territorial strategic needs or decisions.

The responsibilities and mandate of each Operational Structure must be clearly defined in the national planning to enable them to identify their immediate actions and the actions they need to perform within the first 12 to 24 to 48 hours. This ensures that everyone involved has a clear understanding of their roles, responsibilities, timing, and procedures.

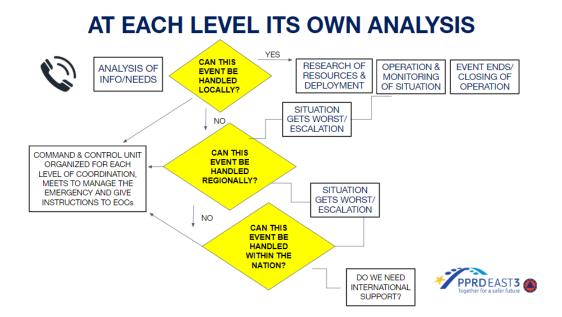
A possible output of this element can be a chart including actions each stakeholder is expected to perform before the event, within 12/24/48 hours from occurrence of the event, and should include actions for post events.

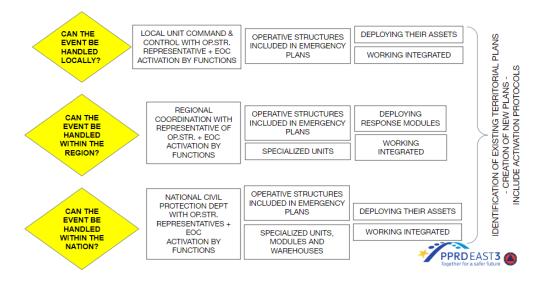
In this regard, particular attention can be given to the inclusion of Civil Society Organizations (CSOs) and volunteers to enhance the capacity, particularly at the local level. Local authorities can establish a pool of volunteers who receive training starting from basic levels and progressing to more specific and advanced levels. All trained volunteers can be registered, and their availability, expertise, and previous field experiences can be taken into account when activating them in support of the Civil Protection system during emergencies. For more information about, please refer to the annex "Inclusion and Integration of Civil Society Organizations".

1.3.5 ACTIVATION AND EMERGENCY OPERATIONS CENTRES

The activation system operates on the principle of territorial jurisdiction, meaning that depending on the type of event, the appropriate local, regional, or national resources will be activated. This ensures that the response is coordinated and tailored to the specific needs and scale of the event.

The activation process is carried out through the EOCs at all levels, which remain operational 24/7. These EOCs serve as central command centres for managing and coordinating the response efforts. Whether it is a local, regional, or national event, the respective EOCs will be responsible for overseeing the response activities, communication, resource allocation, and decision-making. This ensures a coordinated and efficient response to the emergency situation.





If there is a balance between the needs and response capacity, the higher level of coordination will not be activated. However, it should stay informed through reports and communications to be prepared for any potential changes in the situation or configuration. It also acts as a filtering mechanism towards the higher level of coordination.

In cases where the needs exceed the response capacity, the higher level of coordination will be requested to provide support. This request will be made through the Operation Rooms, which will communicate updated information and requirements. The higher level of operations will then be engaged to address all necessary activities, including monitoring, preparation, and response.

This ensures that the appropriate level of coordination and resources are deployed to effectively address the emergency situation based on the available capacities and needs at each level.

A central role in the activation process is played by the "coordinators" who establish the management of operations coordination before events take place, following the guidelines of the Emergency Management Regulation and the defined Plan.

Once a report of an event is received (via reporting form, email, phone call, etc.), the process of assessing the situation begins. To optimise timing, resources, and effectively manage the event at the appropriate level of coordination, it is essential to fully understand and integrate the request into the system. It is important that all participants within the Civil Protection system have access to the same information. These guidelines are designed to support standardised operations and ensure consistent procedures throughout the response process.

Wherever there is a structured and differentiated warning system, it will be possible to structure a system connected to the different configuration status.

It is important to define the minimum warning (for example the passage from level 0 to level 1) and organise the different configuration status, and following actions, based on the foreseen impact and scenario. It will be necessary therefore to structure the configuration status and what each status will alert and activate.

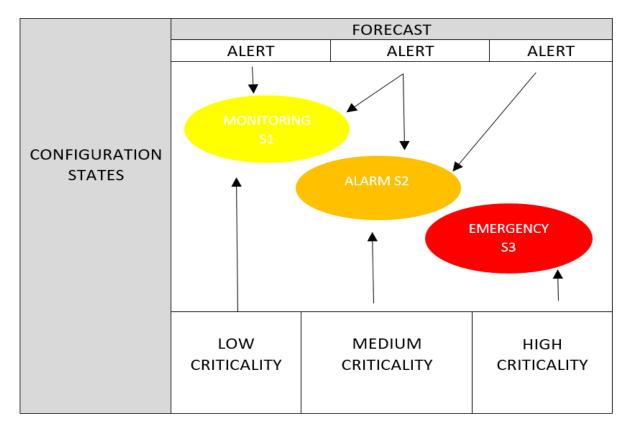
S.0 and S.1 configurations is made up of the Operators in turn who insure the general management of information flows and the application of predetermined Standard Operating Procedures (SOPs), for the purposes of managing ongoing activities and supporting all territorial levels; S.2, S.3 or S.GE configuration adds to the ordinary component a Situation Room divided into Functions, as identified by the Incident Command System and according to the specific operating modes, organised according to the operation in progress.

Practically speaking, what does each status mean for the operators within the EOC and on the field?

While in status S.0 - ordinary situation, the EOC at National level maintains overall situational awareness but is not active, therefore the minimum personnel will be present to keep the EOC active; in status S.1 the alert mood changes, and a series of actions will be carried out, like for example: the transmission of the warning, the Region interested from the bulletin will be contacted in order to make sure they received it and are aware of the situation, etc.. This will allow for both National and Regional level to be in contact and to follow how the situation could evolve. The Regional EOC will have its own protocol to follow, in order to inform all local levels that could be involved in the event until eventually the status will switch to S.2. Status S.2 activates the territorial presidium, and a request for availability of operators in order to start organising the first necessary capacity. In the National EOC a personnel rotation will be planned in order to ensure coverage on the 24 hours if needed. At this point it is also important to inform the Civil Protection focal point, and to start getting ready all protocols and procedural manuals that could be needed in a short time. If the situation keeps evolving and worsening, the status will switch to S3. This status means that the event started and there is a need to start operations and all operational protocols will be activated.

Always to keep in consideration is that the plan is an operations tool based on real situations, and if it contains all the necessary info in regards to the scenario, for example, it also becomes a prevention tool, and must therefore contain the elements useful for managing the risk and sharing with the other actors those forecasting and prevention data owned by the different organisations within the Civil Protection System. For this to happen effectively, it is necessary to start anticipating the importance of the Early Warning System (focus of the next Step).

In case the EWS is in place, the activation of a municipality could follow the different phases as shown in the following scheme:



Forecasted/assessed impact: instrumental monitoring and operators on the field.

*Definition of indicators and early actions (monitoring, territorial presence, when the need for physical presence is triggered /change status from remote presence)

Configuration Status →	MONITODING	ALARM S3			ENERGENOV
Commission representatives↓	MONITORING S1	LOW CRITICALITY	MEDIUM CRITICALITY	HIGH CRITICALITY	EMERGENCY S3
Emergency Coordinator	Present during working hours	Present during working hours	Presence required	Presence required	Presence required
Civil Protection focal point in the municipality	Present during working hours	Present during working hours	Presence required	Presence required	Presence required
IT focal point	Present during working hours	Present during working hours	Presence required	Presence required	Presence required
Public Works focal point	Available	Present during working hours	Presence required	Presence required	Presence required

Following, a matching practical example of the activation procedure for the operators:

Police focal point	Available	Present during working hours	Presence required	Presence required	Presence required
CP Volunteers representative	Available	Available	Presence required	Presence required	Presence required
Red Cross/ Red Crescent representative	Available	Available	Available	Available	Presence required
Person in charge of Population Assistance	Available	Available	Available	Available	Presence required

*composition of the local commission for emergencies and main operations of the EOC in the various operational phases in situations of risk

This is only an introduction of very important topics that will be addressed later in step 3 of the guidelines.

1.4 CIVIL PROTECTION RESPONSE MODULES

The establishment of "intervention modules" aims to enhance the response capacity to natural and man-made disasters across the country and within the region. The EU Civil Protection mechanism has developed a technical framework to categorise different modules, ensuring coverage for various needs such as water pumping and purification, aerial firefighting using planes and helicopters, urban search and rescue (both heavy and medium), medical assistance including medical evacuation with advanced medical posts, field hospitals, and aerial evacuation, emergency shelter, CBRN (Chemical, Biological, Radiological, and Nuclear) detection and sampling, and search and rescue in CBRN conditions.

Categorising the modules allows for better structuring in the database and enables the identification of specific assets within the response modules. The tasks, capacities, main components, and deployment times are defined, and the provisions provide further details about the concepts of self-sufficiency and interoperability.

By establishing clear categories and specifications for the intervention modules, it ensures that the response efforts are well-organised, efficient, and able to address a wide range of disaster scenarios. This framework promotes coordination, cooperation, and effective utilisation of resources in disaster response operations.

The modules:

- Have to be composed of mobile resources
- must work independently as well as together with other modules and provide assistance inside and/or outside the country;
- They must be self-sufficient, interoperable and can be dispatched at very short notice (generally within 12 hours following a request of assistance);
- must be equipped, trained and be able to operate in accordance with the acknowledged national guidelines.

The concept of mobile response modules exploits three fundamental elements: territorial presence and capillarity, compatibility and common training, operativity during all phases of the emergency management cycle.

The mobile response modules are created to enhance capacity and analysed within the overall capabilities, and the development of the Response Plan. It is important for the Civil Protection System to have an updated tool which allows the identification of the response modules throughout the country, their composition, and their location. Equally important is that the classification methodology and the information related to the operational modules of intervention follow precise and uniformed standards, so that they can be used anywhere by anyone.

The Emergency activities are therefore organised with response modules to be used individually or jointly according to the specific scenario. The response modules represent a structure ready to move at any time when an event occurs.

It will be necessary to define the objectives of the individual components - not the materials - and their primary standardisation and interface (i.e. type of electrical sockets, hydraulic connections, single type of fuel, basic operator equipment...) in order for them to possibly be integrated.

In order to be in line with what has been described above, the compilers are invited to fill in the "Response Modules" section which will identify the modules and their composition. This will complete the Step 1 of the planning process, and will allow us to have all the information needed to develop the response plan. Each compiler will have to enter the missing data in the cells for which he is responsible: how many modules, where they are, times and requirements for their use.

For each Intervention/response module, the main questions to answer in order to create an identification process are the following:

- What is its main purpose / main duty or necessity / main function to cover?
- How it is organised during
 - Preparedness
 - Mobilisation
 - Operations
 - Closing activities
 - Post-mission
- ✤ Tier

Following a list of required detailed description for each module:

- 1. Name or identification code, symbol and image: Each module should be identified by a unique name or code to facilitate identification. It is also useful to associate a symbol or representative icon to a module, and include an image or photo showing it.
- 2. Category: Indicate the category to which the module belongs. For example, modules could be classified according to the specific operational functions they perform, such as rescue, healthcare, communications, logistics, coordination, etc.
- 3. Objectives and metrics: Specify the objectives that the module aims to achieve during activation. For example, if the module is aimed at managing communications, the goal could be to ensure efficient communication between different business units. Furthermore, it is important to establish metrics or indicators that allow you to evaluate the achievement of the objectives set.
- 4. Type: Indicate the type of module based on its characteristics and functionality. For example, a module could be mobile, such as an equipped vehicle, or fixed such as a permanent structure.
- 5. Level: Specify the module's level of importance or priority within the civil protection system. This can be established based on the criticality of the activity performed by the module during an emergency.
- 6. Similarity with UCPM modules: If the module has similarities or correspondences with the modules of the European Union Civil Protection Mechanism (UCPM), it is useful to mention them. This facilitates the comparison and harmonisation of resources and capabilities with other systems and organisations at European level.

- 7. Certifications: Indicate any certifications required to activate and use the module. For example, personnel working in the module may require specific skills or certified training.
- 8. Components: List the different components or parts that make up the module. For example, a communication module could include radio equipment, antennas, recording devices, specific software, etc.
- 9. Location: Specify the location where the module is usually stationed or where it can be activated. This helps plan the allocation and usage of the module based on the needs of the emergency.
- 10. Availability and activation times: Indicate the availability of the module and the time required for its full activation. This makes it possible to evaluate the timeliness with which the module can be deployed in response to an emergency.
- 11. Special Activation Requirements: Describe any special requirements for activating the module. This could include specific environmental conditions, additional required resources, or other logistical considerations.
- 12. Restrictions and specific agreements: If the module is subject to restrictions or requires specific agreements for its activation, it is important to indicate them clearly. For example, there may be legal restrictions, required permissions, or requirements to partner with other entities.
- 13. Number of resources available: Specify the number of resources or units available for each module. This helps determine the module's operational capability and plan resources based on emergency needs.

This detailed information on each section can contribute to a correct identification, planning and use of the modules in the context of the civil protection system.

Also important is to clearly identify the tier, which is the level for which the asset had been designed and for which it can be activated:

- 1. International
- 2. National
- 3. Regional
- 4. Local

5. Local - Specific for local needs (e.g. bilingual units able to speak very local dialects)

It is important to underline that, after entering the requested data, it would be advisable to proceed with an assessment of what it's actually accountable in the different warehouses or storage places in order to verify that the operational intervention modules are actually present, functioning and that they comply with the minimum standard required. These minimum standards can be identified at national level, and they can include the possibility of modules created jointly by different organisations.

In order to simplify the division, and the use of the dashboard or the platform that can be used to register all modules, it is suggested to create identification icons.

1.5 STANDARD OPERATING PROCEDURES

Consider the example of the Italian Red Cross: it is a widespread organisation throughout the country, it involves over 160,000 Volunteers in ordinary and extraordinary activities, the management of over 600 territorial branches, 10 National Operational Centers with different skills and specialties and, inevitably, a high turnover of resources.

The turnover is then even more accentuated during national emergencies when, having observed the limited periods of employment of the Volunteer staff, the operators change shifts on a weekly or bi-weekly basis.

Having Standard Operating Procedures makes it possible to guarantee continuity as well as the uniqueness of intervention practices. The Standard Operating Procedure (SOP) defines in a simple but complete way how to deal with a specific situation to achieve a specific result.

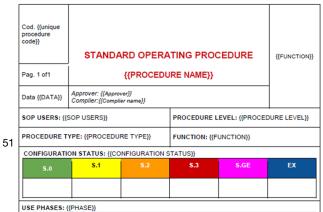
They contain simple, step-by-step instructions to standardise a specific process and help actors perform routine and emergency operations, such as deploying an asset or module (multiple assets).

All the operators involved must be able to respond to an emergency, and the procedures have the purpose of allowing anyone, with a little practice, to replicate a certain action and can differ according to the territorial level of the operation or the final purpose.

1.5.1 DIFFERENT OPERATING PROCEDURES FOR DIFFERENT PURPOSES

To carry out the actions normally connected with the institutional and operational activities, such an organisation like the Italian Red Cross, identified the following categories of SOPs:

• Alerting SOPs - those procedures are



necessary to define the process for alerting, activation and deployment

• SOPs for Intervention - this set of

procedures defines the response to

pre-established scenarios

• SOPs for Maintenance of Operational

Capacity - for each SOP for intervention,

as well as for each prevention activity,

recovery SOPs must be defined

• Technical SOPs - define the actions to

be carried out for the execution of a specific

technical action (e.g. setting up a tent, setting up the kitchens..)

• SOPs for Management, Administrative and Financial purposes - indicate the activities to be carried out to manage the different structures.

All the SOPs are also classified according to the geographical dimension of competence.

To learn more about how to write a SOP and obtain further useful information, you can consult the additional annex document "Guidelines for Drafting Standard Operating Procedures (SOPs)" and the related template.

While drafting the SOPs, always keep the following suggestions in mind:

- ♦ Make sure the SOPs cannot give multiple interpretations;
- Show the procedure to someone who is not familiar with it and ask them what they think it means;
- Remember to involve stakeholders whenever possible so that the SOP becomes realistic;
- ♦ Use diagrams and pictures to make the SOP easier to understand;
- Ask a few people to review the SOP together before approving it;
- ♦ Use simple words to describe the steps to follow;

Be sure to document any and all changes and eventual problems encountered in the After this Step is completed, it is advisable to proceed with Step 2 of these Guidelines.



STEP 2 Analysis of information on risk and scenarios

Emergency planning requires a careful consideration of all the risks that are present in a given area or location, with a specific focus on those tied to natural phenomena. Each emergency plan must contain a dedicated section addressing the identified risks. These risks must comprehend both natural and human-induced factors, with a specific emphasis on the likelihood of each hazard, the exposure of the elements that constitute the territory and the vulnerability of these elements.

In order to ensure effective management of prevention, preparedness, response, and reconstruction activities it is crucial to gather relevant data on potential risks. This data gathering plays a vital role in the planning process, as it helps assess the level of risk and danger associated with the territory, enabling the establishment of appropriate response structures within the Plan.

The objective of this step is to integrate the Disaster Risk Assessment as well as the territorial and environmental information of a given area in its emergency plan. Independently of the geographic area that is covered by a Disaster Risk Assessment, the methodology that is used to quantify risk can be the same. This section of the plan therefore describes the territorial and environmental characteristics surrounding the Civil Protection System and should give a holistic and detailed understanding of the risks to all the stakeholders involved in the risk assessment process.

The guidelines in step 2 cover the following topics:

- Stakeholder analysis
- Risk identification and analysis
- Risk evaluation
- Early warning systems
- Disaster risk scenarios

and must be therefore integrated with the results of the other Guidelines provided by the PPRD EAST 3 project:

- Regional Disaster Risk Assessment Technical Guidelines
- Preliminary Risk Scenario and Full Risk Scenario templates
- Guidelines for the institutions of a National WildFire EWS and establishment of EWEA strategies

2.1 STAKEHOLDERS ANALYSIS

Effective stakeholder analysis is crucial also to a comprehensive and inclusive disaster risk assessment. It supports the identification of needs and interests, improves communication, and fosters cooperation in managing disaster risks. By understanding the roles and interests of all relevant parties, it is possible to promote resilience and shared responsibility in disaster risk management.

To ensure inclusive disaster risk assessment, it is important to involve a broad representation of stakeholders and groups in the population in the processes, including government actors, civil society organisations and research institutions that holds expertise in gender, human rights and environment and climate change issues, and organisations representing women, girls, boys, men, youth, the elderly, people with disabilities and other minority groups.

In regards to Emergency Planning, following the deep and broad analysis included in Step 1, at this point it is possible to review it in regards to disaster risk assessment and in case some new or different relevant stakeholders are identified, it is advisable to go back to integrate them in the final outcome of previous Step and further complete the model.

If the country, for example, didn't have a structured Early Warning System and Early Warning to Early Action, it is possible that the identified capacity could not be enough to cover all the necessary action and activities they bring, therefore it will be necessary to look for additional capacity and eventually, additional stakeholders to engage. Following the next elements of this Step, it will be possible to have a clear and comprehensive view of all the needs to be covered, and this will support the identification of the stakeholders who will have the capacity to do it. Please refer to the result of the Regional DRA technical Guidelines provided by the project.

Putting together the results of Step 1 and the results of the Regional DRA Guidelines should allow you to have a complete picture in regards to the stakeholders involved in the different phases. Since some stakeholders are essential for data gathering for example, but they don't have the capacity to perform territorial activities, it is advisable to complete the analysis to eventually make further specific additions in order to cover possible gaps or newly identified needs.

For example, when the Regional DRA Technical Guidelines speak about "Adequate resources for NDRA development" at pag.21, in part it means exactly this, amongst other things.

Stakeholder analysis in fact, should be an ongoing process as the stakeholder landscape can change over time, with stakeholders' interests and influences evolving.

When it comes to Emergency Planning, a possible output of this step can be a stakeholders map for each of the steps of disaster risk assessment (risk identification and analysis, risk scenarios and early warning systems) that clarifies the role and responsibilities of each stakeholders as well as the communication flow across stakeholders. Please see the annex "Model".

2.2 RISK IDENTIFICATION AND ANALYSIS

Risk identification and analysis relies on a detailed and accurate estimation of the likelihood of events linked to hazards as well as the analysis of the vulnerability and exposure of the elements that are present in the geographic area that is being analysed. For the definitions of a hazard, likelihood, vulnerability and exposure and concrete examples refer to the Regional Disaster Risk Assessment, Technical Guidelines provided by the PPRD EAST 3 project⁵.

2.2.1 DEFINING THE SCOPE

Start by defining the area, community, or system that the risk assessment will cover. This could be a city, a region, a country.

2.2.2 DEFINITION OF HAZARD

Once the scope of the assessment has been determined, identify all potential hazards that could affect the area or system being studied.

This process can be structured using the Disaster Risk Assessment Technical Guidelines, page 26 and following, attached to this document.

2.2.3 LIKELIHOOD ESTIMATION

The likelihood estimation is an evaluation of the probability of occurrence of a particular hazard event within a specified period. It is a crucial component of disaster risk assessment as it aids in prioritising risks and allocating resources accordingly.

This process can be structured using the Disaster Risk Assessment Technical Guidelines, pages 35 to 46

⁵ Regional Disaster Risk Assessment, Technical Guidelines, Prevention, Preparedness and Response to natural and man-made disasters in Eastern Partnership countries - phase 3 (PPRD East 3), November 2022

2.2.4 ASSESS EXPOSURE AND VULNERABILITY

This section will guide you through an evaluation that emphasises the role of the Civil Protection System in assisting and supporting the population affected or potentially affected by a disaster.

Exposure analysis is the process of identifying and quantifying the people, property, systems, or other elements present in hazard zones that are thereby subject to potential losses. Vulnerability, on the other hand, refers to the susceptibility of these exposed elements to suffer damage when a disaster occurs. The key to an effective exposure and vulnerability analysis is to have a comprehensive understanding of what's at stake in a given area when a disaster occurs.

This process can be structured as follows, as defined in the INFORM analysis framework:

- 1. Identify Exposed Elements: Create an exhaustive inventory of elements at risk within the defined area. These might include:
 - People: Consider total population, as well as vulnerable subgroups, such as women, girls and boys, elderly, people with disabilities, ethnic, religious and sexual minority groups, or economically disadvantaged individuals. As a minimum, it is recommended that population data is disaggregated by sex, age, disability and income level. This is key to allow for analysis to understand if different groups in the population may be exposed and vulnerable to hazards in different ways.
 - Property: Include residential, commercial, and industrial buildings, as well as valuable possessions contained within these structures.
 - Infrastructure: Account for critical infrastructure such as roads, bridges, airports, rail systems, utility systems, hospitals and primary health care centres, schools, and emergency facilities.
 - Economic Activities: Consider industries, businesses, and services that could be disrupted.
 - Environment: Identify natural resources, ecosystems, and biodiversity that could be affected.
- 2. Identify Vulnerable Elements: Recognize which of the exposed elements are most susceptible to damage from the identified hazards. For instance, are there buildings not designed to withstand the expected hazards? Are there population groups that lack the resources to effectively respond to and recover from disasters?
- 3. Assess Vulnerability Factors: Evaluate the factors that contribute to the vulnerability of each element. For people, this could include sex, age, disability, health, socioeconomic status, and sexual orientation and gender identity. For

buildings and infrastructure, factors could include design, construction, maintenance, and age. For economic activities, it might be the level of dependence on vulnerable infrastructure or location. For the environment, vulnerability can relate to the fragility of ecosystems, their resilience, and their capacity to recover.

- 4. Vulnerability Indicators: Develop or use existing vulnerability indicators to quantify the susceptibility of each element. These indicators should reflect the key vulnerability factors for each element.
- 5. Collect Detailed Information: Gather data on the location, extent, value, and characteristics of the exposed elements. Use a variety of sources, including demographic data (disaggregated by sex, age, disability and income level), property records, infrastructure maps, economic statistics, and environmental studies.
- 6. Use Geographic Information Systems (GIS): Use GIS tools to visualise and analyse the spatial distribution of exposed elements. This can help identify areas of high exposure and understand their relation to hazard zones.
- 7. Community Engagement: Engage with local communities to understand their perceptions of vulnerability and exposure. Ensure that all groups in the community are engaged, including women, girls, boys and men, youth, elderly, people with disabilities, and other ethnic, religious and sexual minority groups. This can provide valuable insights into local capacities, coping strategies, and unmet needs.
- 8. Update Regularly: Keep in mind that exposure and vulnerability can change over time due to factors such as population growth, urban development, economic changes, and environmental transformations. Therefore, regularly updating the exposure analysis is crucial.

Some examples of vulnerability indicators include:

- Social Vulnerability Indicators:
 - Gender inequality: Emergencies exacerbate pre-existing gender inequalities and women may be disproportionately impacted due to their lack of access to resources, decision-making and freedom of movement.
 - Violence: Incidences of gender-based violence (GBV), violence against children and trafficking in human beings often increase during and after emergencies.
 - Population density: High population density can increase vulnerability, particularly in urban areas prone to hazards like earthquakes or floods.

- Age: The proportion of elderly or young people can indicate vulnerability as these groups may have limited ability to respond to disasters.
- People with disabilities: make up 16% of the world's population. Due to challenges such as lack of resources and mobility constraints, people with disabilities experience higher risk of death, injury and loss of property in disasters, and greater difficulty with evacuation and sheltering.
- Health: Rates of chronic illness or disability can indicate higher vulnerability.
- Poverty: The percentage of the population living below the poverty line can indicate economic vulnerability.
- Education: Low levels of education can hinder understanding of risk information and reduce the effectiveness of warnings.
- Household composition: Single-parent households or households with many dependents can face greater challenges during disasters, and especially female single-headed households
- Protection, Gender and Inclusion (PGI): Emergencies exacerbate existing gender inequalities, and the incidence of sexual and gender-based violence (SGBV), violence against children and trafficking in human beings often increase during and after emergencies.
- Infrastructure Vulnerability Indicators:
 - Building materials: The prevalence of structures built with non-durable materials can indicate vulnerability to hazards like earthquakes or storms.
 - Age of infrastructure: Older infrastructure may be more susceptible to damage.
 - Accessibility: The proximity of communities to major roads or transportation networks can influence their ability to evacuate or receive assistance during a disaster.
- Environmental Vulnerability Indicators:
 - Land degradation: Areas experiencing deforestation, soil erosion, or other forms of degradation may be more vulnerable to landslides, floods, or other hazards.
 - Proximity to hazards: The closeness of populations or assets to hazardprone areas (e.g., flood plains, fault lines, etc.) can indicate vulnerability.
 - Loss of biodiversity: Areas with reduced biodiversity may be more vulnerable to ecological disturbances.
- Economic Vulnerability Indicators:
 - Unemployment rate: High unemployment can indicate a lower capacity to recover from disasters.

- Dependence on a single industry: Economies heavily reliant on one sector (e.g., tourism, agriculture) can be severely affected if a disaster disrupts that sector.
- Insurance coverage: Low levels of insurance coverage can hinder recovery from disaster losses.

The exposure and vulnerability analysis ultimately leads to an analysis and classification of the overall impact of a hazard. If the impact is expressed as a function of vulnerability and exposure it is possible to create impact classes for each hazard and a given geographic area that is being assessed.

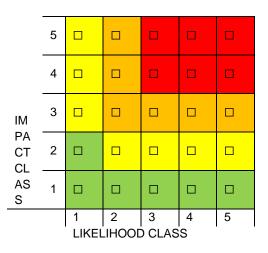
A possible output of this step could be a detailed database or map of the area of analysis classified into different impact and severity classes as defined by the Disaster Risk Assessment guidelines.

The outcome of the exposure and vulnerability analysis feeds directly into the risk estimation. It informs the potential impacts of hazards and guides the development of risk reduction strategies. The analysis is also critical in emergency planning, helping to ensure that response efforts are appropriately targeted to protect the most vulnerable.

2.2.5 RISK EVALUATION AND RISK CLASSES HAZARD AND RISK MAPS

Considering that the risk is a function of the likelihood of a hazard and the impact of such hazard on a given geographic area, once the likelihood has been estimated and the exposure and vulnerability have been evaluated, it is possible to also evaluate the risk. As defined in the DRA Guidelines, a simple and straightforward way of evaluation risk as a function of impact and likelihood is to use a risk matrix with 4 risk classes:

- R4 (red): very high risk, loss of life and serious injury to people, serious damage to buildings, infrastructure and environmental heritage, destruction of socio-economic activities are possible.
- R3 (orange): high risk, problems are possible for the safety of people, functional damage to buildings and infrastructure resulting in uninhabitable buildings, disruption of functionality of socio-economic activities, and damage related to environmental heritage;
- R2 (yellow): medium risk, minor damage to buildings, infrastructure, and environmental heritage that does not affect the safety of people, the serviceability of buildings, and the functionality of economic activities is possible;
- R1 (green): moderate or no risk, there is negligible or no social, economic and environmental heritage damage.



An output of this step can be a gradient map with the assessed area coloured based on the type of risk and the results of the risk matrix or a database with the assessed area subdivided into risk areas.

(Citation of the text and the matrix from the 'NDRA Guidelines'.)

2.3 EARLY WARNING SYSTEMS

The Early Warning System (EWS) encompasses the entire process, starting from risk analysis and leading up to the issuance of alerts. The primary objective of limiting consequences of harmful events involves the collection of information, enabling the activation cascade and having the Emergency Operational Centers (EOC) effectively monitoring hazards and incidents nationwide. This comprehensive monitoring aims to enhance the safety and protection of citizens. A system of thresholds and measures is established to ensure the implementation of specific procedural protocols when approaching, reaching, or surpassing identified thresholds. Examples of these measures include criticality bulletins or alerts. The hazards under constant monitoring include earthquakes, tsunamis, tropical cyclones, volcanoes, droughts, floods, and forest fires. Disasters can arise from extreme weather conditions or man-made causes, presenting risks at any time and location. However, through effective planning, continuous monitoring, and early warning systems, the extent of damage can be reduced.

- Legal framework (if existing) with all different phases (pag. 32)
- Mandate: should explain all the actions covered by the system (communication, monitoring etc.), what actions by what stakeholders?
- Definition of thresholds
- Definition and enabling of anticipatory Actions

Every early warning system should consist of a system of procedures, tools, methods and responsibilities for the activities of risk forecasting and alerting to the structures responsible for the activation of prevention measures and emergency management phases. Early warning systems can be set up at local, regional and national level and they

should aim at including all the relevant stakeholders involved in the prevention, preparedness and response phases of disaster management (emergency management services, civil society organisations, local populations, technical and expert teams such as hydrometeorological centres, forestry agencies, municipalities, firefighters, etc.).

Any early warning system should include:

- a forecasting phase (assessment of the expected meteorological and geomorphological conditions expected in the event of an hazard; assessment of the effects and impact that the hazard may have on life, property, settlements and the environment);
- a monitoring and surveillance phase (qualitative and quantitative, direct and instrumental observation of the ongoing meteorological and geomorphological conditions of the event; short-term forecasting of its effects through now-casting and/or inflow-deflow models initialised from measurements collected in real time);
- a risk prevention phase (actions including contacting the event; urgent interventions including those with a technical dimension);
- the emergency management phases, in implementation of regional, provincial and municipal Emergency Plans.

Early warning systems vary according to the type of hazard, the area that needs to be monitored, the technology available, the resources available to collect data and the scientific knowledge, but most early warning systems need to go through these steps to be functional:

- 1. Risk Identification: Identify the types of hazards that the region or community is most vulnerable to.
- 2. Technical Monitoring and Forecasting: Set up systems for hazard monitoring and forecasting. These could be meteorological observations for storms, seismographs for earthquakes, or stream gauges for floods. Ensure that these systems are reliable, accurate, and can forecast hazards in advance.
- 3. Warning Services: Establish a protocol for issuing warnings. This involves defining the trigger conditions for warnings, creating a clear and concise message format, and setting up a process for warning approval and dissemination.
- 4. Dissemination and Communication: Define communication channels to ensure that warnings reach all people at risk. This could be through text messages, TV or radio broadcasts, sirens, social media, etc. It's important to consider backup communication channels in case the primary channels fail.
- 5. Community Response Procedures: Develop a clear set of actions that individuals, communities, and authorities should take in response to a warning. This could include evacuation plans, shelter-in-place instructions, or first aid procedures.

- 6. Integration into Emergency Plans: Integrate the early warning system into broader emergency plans. Ensure that all stakeholders understand the system and know their roles and responsibilities when a warning is issued.
- 7. Training and Education: Conduct regular training and public education campaigns to ensure that everyone in the community understands the warning signals and knows how to respond. This could involve drills, workshops, school programs, or community meetings.
- 8. Review and Improvement: Regularly review and test the system, and use feedback to make improvements. This could involve evaluating the timing and accuracy of warnings, the effectiveness of communication channels, or the appropriateness of the community response.

In order to learn more about early warning systems connected to wildfires' hazard, it is possible to refer to the Guidelines for the institution of a national wildfire EWS and establishment of EWEA strategies of the PPRD East 3 project⁶.

2.4 DISASTER RISK SCENARIOS

A disaster risk scenario is a hypothetical situation that describes and predicts the potential impact of a specific hazard. They are a set of events combined with their consequences. Scenarios combine hazard, exposure, and vulnerability information to predict potential impacts and to facilitate planning and preparedness measures. They question whether organisations or communities can adapt to future changes, and stress their existing capabilities to respond.

Disaster risk scenarios serve both to preliminary assess the possible consequences of a calamitous event and to identify the best strategies in intervention and rescue operations, and are used to guide emergency planning, inform mitigation strategies, facilitate training and exercises, and educate the public about disaster risks. They also support decision-making in land use planning, infrastructure development, and policy formulation. A scenario can focus on a single hazard or it can be a multi-hazard scenario for geographic areas that can be affected by multiple hazardous events simultaneously. For detailed guidelines on the creation of risk scenarios, refer to the Chapter 3.2 Disaster Risk Scenarios of the Regional Disaster Risk Assessment, Technical Guidelines provided by the PPRD EAST 3 project.

The creation of scenarios can be structured as follows:

1. Risk scenario description: this part should include the types of hazards considered, the reasons why the scenario has been chosen (is it a most probable scenario or a worst case scenario?) and a brief description of the scenario.

⁶ Guidelines for the institution of a national wildfire EWS and establishment of EWEA strategies of the PPRD East 3 project, Prevention, Preparedness and Response to natural and man-made disasters in Eastern Partnership countries - phase 3 (PPRD East 3)

- 2. Context of risk scenario: here the location should be specified as well as the boundaries, the morphological characteristics (type of land, land use, etc.), the critical infrastructure that is present in the area of the scenario, the type of environment or livelihood zone (rural or urban etc.?), the population groups affected (number of women and men, households, population density and additional demographic information such as age groups, people with disabilities and other vulnerable population groups). In addition to the perimeter of the areas at risk and the strategic and vulnerable infrastructures (to be assessed scenario by scenario), some essential operational indications for emergency management must also be reported on the scenario maps, such as escape routes, gates and checkpoints, block, buildings to be evacuated.
- 3. Event details: this part should contain information on the meteorological conditions and seasonal patterns that exist during the event as they can affect the response (temperature, humidity, winter vs summer, etc.), the type of day (work day or weekend) and time of the day where the event occurs, the potential speed of onset and the probable duration of the event.
- 4. Causes and triggers: describe the causes of the as well as some aggravating factors or secondary events that can be triggered by the hazard due to cascade effects.
- 5. Preparedness, response and recovery: assess the coping resources (local and national), elaborate on the early warning systems that should be used, the warning times, how information flows from the stakeholders to the population, the implemented preventive measures, the implemented preparedness measures, the implemented response measures and the time necessary for recovery.
- 6. Impact and consequences: here the severity of the impact should be quantified and classified (human, economic, political and social, environmental) with accurate numbers, and consider if different groups in the population may be impacted in different ways.
- 7. Likelihood: evaluate the likelihood and the event and forecast its frequency, describe the methodology used to estimate the likelihood and elaborate on the uncertainty.
- 8. Risk evaluation: assign a risk category to the scenario based on likelihood and impact analysis as well as response capacities.
- 9. Estimate Potential Impacts: Using the hazard, exposure, and vulnerability information, estimate the potential impacts of each hazard event. This could include the number of casualties, extent of property damage, disruption to services, environmental damage, and economic losses.
- 10. Consider Variations: For each hazard, consider different variations of the scenario e.g., best-case, worst-case, and most likely scenarios. This helps in capturing the full range of potential outcomes.

The output of this step is a series of scenarios drafted using the Preliminary Risk Scenario or the Full Risk Scenario templates of the Regional Disaster Risk Assessment, Technical Guidelines provided by the PPRD EAST 3 project

Particular elements to be considered within the Disaster Risk Scenario, and in order for the Emergency Planning to be inclusive of the possible impacts they could bring or add during an emergency, are the following:

- Main production activities, including factories at risk of major accidents List of all production and commercial structures with particular reference to factories or warehouses containing dangerous products (e.g. chemicals). Specific plans for those structures have to be defined and integrated with the CP plan, and should include all the internal and external hazards and threats the factory should face, the standard operating procedures and processes adopted for both risk mitigation and response, as well as the internal capacity for responding to those emergencies. The plans should also include Early Warning and Warning systems specifically designed for properly alerting the surrounding community in case of an internal event impacting the surrounding territory (e.g. chemical spill). Particular attention should be paid to facilities containing dangerous forces (e.g. water basins and dams): there is the need to establish authoritative processes in case the internal emergency procedures that should be adopted to mitigate a major damage, can affect the environment or the surrounding communities (e.g. emergency discharge of water causing floods)
- Cultural Heritage

Location of museums or artistic resources, and cultural assets, places of culture such as museums, archives and libraries... or other locations that should be particularly protected.

- Protective, commercial, agricultural, livestock structures, kennels and catches Location of productive, commercial (with particular reference to shopping centres), agricultural and zootechnical activities at risk in certain portions of the municipal area, including kennels and catteries. For example, a reference can be made to locations which carry out horse therapy activities and which therefore have stables.
- Environment Identification of any park, green, forested and protected areas

Protection



Specific contingency plans are needed to prepare the structures of the Civil Protection Department to face and manage an emergency. They identify the objectives to be achieved in order to organise an adequate response by the Civil Protection Department when the event occurs.

The knowledge base for sizing the resources to be put in place consists in the scenarios, and it makes it possible to obtain a territorial overview of the area involved in the event, thus providing important information, such as the location and extension of the most affected area, the functionality of the transport networks, communication routes and distribution lines, as well as the expected losses in terms of human lives injured and homeless, collapsed and damaged buildings and the corresponding economic damage, with obvious repercussions on the Civil Protection activities, both in planning and of emergency management. In the first case, the information makes it possible to identify and describe the reference event/s in order to size the human resources, the materials to be used and their allocation to be foreseen in the plan.

But even if the best and most comprehensive scenarios are created, they won't be useful if there is no following allocation of the capacity to respond to them. So, Step 2 has been concluded with the creation of one or more scenarios - by using the Disaster Risk Scenarios of the Regional Disaster Risk Assessment, Technical Guidelines provided by the PPRD EAST 3 project - now it is time to adapt the response plan to these scenarios.

The action of adapting the response plan to the scenarios is the last essential part. This action intersects the capacity of the Civil Protection system, the intervention model (including the response modules and all the different assets) in the area of competence of the Plan, and the risks - individual or a combination of them depending on whether one is operating for simple or multi-risk scenarios. The action requested by the STEP 3 is to add, to each scenario defined during the STEP 2, additional specific information, divided in the different emergency phases, including preparedness.



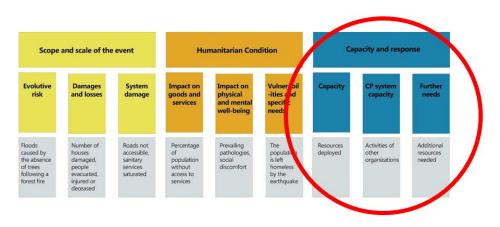
On this last segment we consider the two further and necessary transformations:

- The identification of community-based activities and the development of the risk management plan that focuses on disaster risk prevention and reduction.
- The re-evaluation of the activities carried out in the initial phase and their reorganisation based on the new data collected during the second phase.

Data entry, always via specific forms, refers to the above mentioned segments, however separating the action of the single operational structures and of the CP system based on the configuration status. This determines, for each scenario, the necessary actions to be taken in different scenarios, such as ordinary, monitoring, alarm, emergency.

The scenario analysis framework utilised, is fully compatible with the MIRA framework, the INFORM, and the IFRC emergency analysis framework, thus allowing for an agile exchange of communications and easier staff training when needed. The compatibility with different analysis frameworks is fundamental for supporting interagency coordination and interoperability.

While Step 2 analyses hazards, exposure and vulnerability, Step 3 is focused on mitigation of possible effects of the different identified scenarios, therefore it is focused on specific capacity and coping capacity for both prevention and response



The part coloured in blue, is the part Step 3 takes in consideration in order to organise the capacities and the response in regards to a specific scenario.

The document "Adapting the Response Plan to the scenarios" presents a comprehensive list of elements that must be collected.

The comprehensive list of elements facilitates a systematic approach to gathering relevant data at different territorial levels, ensuring that all necessary information is obtained, allowing for a thorough assessment of the crisis and its potential impact.

By considering various factors, including drivers, aggravating factors, damages, losses, and system disruptions, the response plan gains a comprehensive understanding of the situation. This is vital for devising effective strategies and allocating appropriate resources to address the identified challenges.

Furthermore, evaluating the impact on humanitarian conditions enables a focused response to address specific needs of the affected populations. By assessing accessibility, availability, quality, utilisation, and awareness of goods and services, as well as physical and mental well-being, vulnerable groups that may need extra attention and support, and other needs, the response plan can prioritise and deliver targeted assistance where it is most needed. Assessing national capacities and response, including the capacity of the civil protection system, allows for optimal resource allocation and coordination.

Understanding the available resources and identifying any gaps or additional needs ensures an efficient and effective response effort.

3.1 ADAPTING THE ELEMENTS OF THE RESPONSE PLAN TO THE SCENARIOS

Below you find a list of elements to consider in adapting the response plan to each individual scenario resulting from STEP 2.

- 1. The alerting system
- 2. The organisation of the CP structure based on the identified scenarios
- 3. Emergency Emergency Operations Centres (EOCs)
- 4. Emergency Areas and Structures
- 5. Telecommunications
- 6. Accessibility
- 7. Territorial presidium
- 8. Health service and assistance to fragile people and protection of minors
- 9. The operational structures
- 10. Logistics
- 11. The operation of networks of essential services
- 12. Environmental protection
- 13. Damage Assessment
- 14. The emergency boundary condition (CLE) where available
- 15. Administrative continuity

3.1.1 THE ALERTING SYSTEM and the PREVENTIVE ACTIONS

In order to enhance preparedness, it is necessary to move the focus of the Civil Protection System to what can be done before in order to prevent the event or to mitigate its impact.

Alerting and monitoring in regards to certain hazards, at least, can save time and lives, therefore it is extremely important to create the legal framework and the system working around the correct stakeholders and tools.

For example at Regional level, the different necessary specific surveillance activities, instrumental monitoring, alarm devices, methods of transmission of bulletting and notices to municipalities, and correspondent activation procedures can be defined for the identified stakeholders to be engaged.

At the local level, it will be important to define the methods of acquiring the bulletins and notices, to structure a functional information flow with the coordination Centre, and all specific activities different stakeholders must carry out.

It is important for the compilers to consider that the Alerting process can differ based on different scenarios, as well as the stakeholders involved and the triggered actions.

**Considering the example of the Italian Red Cross: hazard monitoring is not necessarily their responsibility, however thanks to the widespread distribution of many hundreds branches and Offices throughout the country, it is possible to trace updated and easily verifiable data in case an alert is emitted. Therefore, the organisation became a very important recognized stakeholder, to be involved in the transmission of the alert in order to trigger some specific monitoring activities. If before the Italian Red Cross was able to act in the following sectors between many others - assessment, initial evaluation and coordination, search and rescue, urgent healthcare, outpatient healthcare, social welfare, assistance to the population, reception, census and aid distribution, support logistics (including telecommunications), asset acquisition, storage, relocation, field facility erection and maintenance - now they also organised at all levels in order to be part of the prevention and preparedness phases.

Below is an illustrative and non-exhaustive list of example of preventive actions related to various risks:

- Regular removal of dry vegetation and flammable debris;
- Continuous monitoring of river levels and weather alerts;
- Adoption of adequate safety measures, such as installation of fire suppression systems, sprinklers, and smoke detectors in industrial facilities;
- Ongoing monitoring of weather forecasts to promptly detect any adverse weather conditions;
- Strengthening of vulnerable infrastructure, such as bridges and buildings, to withstand strong winds or heavy rainfall.

If you consider the result of this analysis to be effective and efficient in relation to the scenario, proceed with the next one. If the result shows deficiencies or is inadequate, carry out a new analysis with the aim of making it effective and efficient for the scenario under consideration.

3.1.2 THE ORGANISATION OF THE CIVIL PROTECTION STRUCTURE BASED ON THE IDENTIFIES SCENARIO/S

As previously seen during Step 1, to ensure effective intervention during emergency conditions, it is crucial to have a well-organised command system and properly allocate available resources. This includes accurately outlining the roles and responsibilities of each civil protection operator involved at this point, customised on the identified scenario. At all territorial levels, it is fundamental that each operator completes the necessary information for their respective competence. This ensures that the response plan is comprehensive and accounts for the specific capabilities and resources available at each level. This information will also enable smooth communication, efficient resource allocation, and effective collaboration among all civil protection operators involved in the response effort.

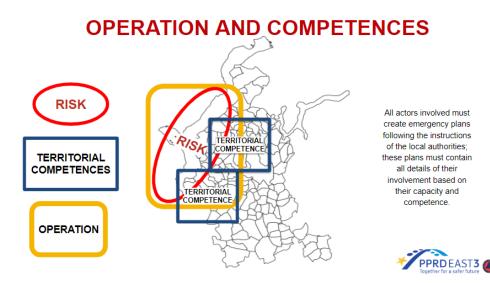
3.1.3 EMERGENCY OPERATIONS CENTRES

As mentioned in Step 1, the Emergency Operations Centres must always remain functional, regardless of the scenario. For each specific situation, it is essential to locate them at different places, ensuring they are sufficiently distant from the event to avoid potential damage.

Therefore at all levels, it is crucial to identify safe locations and organise the coordinating operations centre based on the varying scenarios. It is highly recommended to maintain lists of alternative locations that can be used if the primary one becomes inoperable. These alternative sites can also house additional local coordination centres if the event affects multiple municipalities.

For example, in order to enhance the capacity of the Emergency Operations Centres or facilities, including mobile units, it might be beneficial to focus on medium to large municipalities with populations exceeding 100,000 inhabitants.

Considering the below illustrations, for events covering very vast areas, alternatively it is also advisable to reason about additional emergency coordination centres, where to eventually direct coordinators coming in support from the Region, or where to handle coordination at a medium level between local and regional or between local and national level, if needed and in order to be more effective. This approach will ensure adequate resources and capabilities to effectively manage various emergency situations.



Furthermore, it is essential to establish clear contact lists of people in charge, and define the Operational Structure responsible for all the support functions involved in a specific operation.

Therefore, for a proper completion of the attachment in STEP 3, it is recommended to proceed with the classification of the Emergency Emergency Operations Centres involved in the specific scenario, visualise them on a map, and generate a table that includes essential data such as the organisation to which the EOC belongs, location, role and responsibilities, type of information managed, and contact list.

Additional tip: In order for the system to be more efficient, the Emergency Emergency Operations Centres can divide the necessities in specific sections called "functions" in order to separate the needed actions and activities and stress the system only for what is the real need. For more information regarding the "functions" please refer to "Annex - Support functions" included in Step 1

3.1.4 EMERGENCY AREAS AND STRUCTURES

This section should contain the emergency areas and structures based on the specific identified scenario/s. At all levels it will be necessary to identify specific areas for operations only for rescuers and resources.

While at local level, in all different municipalities, it will be necessary to identify

- waiting areas/safe zones for the population;
- areas to use for population assistance (i.e. fields to settle camps, assistance centres, other available accommodation facilities..);
- rescue and resource gathering areas;
- evacuation routes;
- emergency landing zones;
- semi-permanent settlements;
- infrastructure and environmental services for emergency waste management.

In the identification of emergency areas and structures that will be used by populations, consider the different needs of women, girls, boys and men, youth, elderly, people with disabilities, and other ethnic, religious and sexual minority groups in the population. This is key to ensure all groups will feel safe and can access response services.

Once again, these can be different based on specific scenario/s taken in consideration.

In regards to the census of accommodation facilities for population assistance, any structure already used, or that could be used, for population assistance, including:

- schools of all ages;
- hotels;
- soccer fields;
- large parking lots;
- associations that host people or that could be able to do it because of their capacity;
- shopping centres;
- metro stations.

It is advisable to perform a specific analysis regarding the suitability to certain vulnerable categories (e.g. accessibility, toilets for the disabled) can be inserted in a list to be used at necessity. Compilers can use existing information, and gather updated ones in order for the list to be more comprehensive, and to respect the different problems different scenarios can bring.

It is important for the compilers at all levels to understand that they might be different based on the scenario/s taken in consideration: a good example can be considering a field to use for population accommodation that will be placed in different areas in case we are considering an emergency of flooding, earthquake or a forest fire.

3.1.5 TELECOMMUNICATIONS

Effective emergency management cannot overlook the necessity of having an appropriate telecommunications system that allows seamless communication between the coordinating body and the teams operating in the field, even during critical situations.

To achieve this, we may utilise existing radio networks within the territory, both institutional and those operated by amateur radio volunteers. Detailed communication protocols will be established to prevent redundancies or gaps in the command and control system.

TLC Systems and Alternative Communications:

• Cellular Networks: Utilising standard mobile networks for communication can provide a reliable means of transmitting information, especially for non-urgent updates or coordination between teams.

- Satellite Communications: Satellite-based systems offer a robust and independent communication channel, ensuring connectivity even in remote areas or when terrestrial infrastructure is damaged.
- Internet-based Communication: Platforms like email, instant messaging, or video conferencing can be used for non-real-time communications and information dissemination between the coordinating body and response teams.
- Public Address Systems: In urban settings or crowded areas, using loudspeakers or public address systems can efficiently convey important messages to the public during emergencies.
- GIS-based Communication: Geographic Information Systems (GIS) can be employed to share critical location-based data and facilitate decision-making during rescue and relief operations.
- Social Media and Apps: Social media platforms and dedicated apps can serve as communication channels to disseminate emergency alerts, updates, and instructions to the general public.
- Two-way Radios: Apart from amateur radio networks, dedicated two-way radios can provide direct and instant communication between team members in the field and the coordinating body.
- Public Broadcasters: Collaborating with local radio and television stations can help reach a wider audience and broadcast emergency information to the public effectively.
- Wireless Emergency Alerts (WEA): Leveraging WEA systems allows authorities to send geographically targeted emergency alerts directly to compatible mobile devices within specific regions.
- Emergency Hotlines: Establishing dedicated emergency hotlines ensures that the public can quickly access information, seek assistance, and report incidents during critical situations.

By diversifying the telecommunications systems and adopting alternative communication channels, the emergency management authorities can significantly enhance their capacity to respond to emergencies promptly, effectively coordinate resources, and disseminate vital information to safeguard lives and property.

3.1.6 ACCESSIBILITY

One common challenge faced by municipalities is having multiple evacuation routes. While this may seem advantageous, it is crucial to recognize that each route might be susceptible to different risks. For instance, during flooding, certain routes might become compromised, posing a significant threat to the safety of evacuating residents or impossible to cross with emergency vehicles.

To address this, local authorities must proactively assess potential vulnerabilities and develop contingency plans for each scenario.

Strengthening the existing evacuation routes, particularly those that remain relatively safe during various emergencies, or implementing improvements, such as reinforcing infrastructure or establishing designated safe areas along the routes, can enhance the overall evacuation process.

Consider that different groups in the population, including women, girls, boys and men, youth, elderly, people with disabilities, and other minority groups, may experience different risks and have different needs during evacuation. For example, women and girls are at higher risk of sexual violence and people with disabilities may need extra support in order to evacuate safely.

Moreover, it is essential to consider the possibility of a multi-risk scenario, where multiple hazards converge, compounding the challenges. In such cases, having an additional evacuation route that is strategically designed to avoid areas prone to various risks becomes imperative.

It is suggested to define the accessible roads, the traffic regulation measures, and the actions to restore the interruptions of the strategic road network. Description of rail, air and sea accessibility. This action must be completed at all territorial levels, each operator will fill in the empty fields for his level of competence and based on the specific scenario.

3.1.7 THE TERRITORIAL PRESIDIUM

In the context of specific scenarios, municipalities can establish a Territorial Presidium, which comprises a physical infrastructure and trained personnel, including staff members and volunteers from the community.

The primary purpose of the Territorial Presidium is to carry out various activities, such as monitoring and updating the evolution of events, in order to ensure effective risk management and emergency response.

To facilitate this process, it is essential to analyse potential risks and their impact on different territorial control activities, including surveillance, monitoring, patrolling, and implementing security measures.

This analysis enables the identification and classification of these activities, allowing for the effective allocation of resources and personnel based on the level of risk and criticality. By adopting a systematic and coordinated approach to territorial control, overall preparedness and response capabilities can be enhanced in the face of potential risks.

For instance, the hydraulic territorial presidium is responsible for monitoring and managing flood events in a designated area, performing regular water level checks, inspecting embankments, and undertaking emergency plumbing interventions.

The activation and response of this presidium are contingent upon the level of criticality in flood situations. Similarly, the hydrogeological territorial presidium monitors and manages geological risks, identifying signs of landslides and conducting periodic readings of monitoring instruments.

Finally, the forest fire risk prevention presidium is dedicated to proactive forest fire management, encompassing early detection, fuel management, public awareness, emergency response coordination, and capacity building. These presidiums play vital roles in ensuring safety and efficient responses to emergencies.

Considering the possibility of diverse manifestations of risk scenarios, the dynamics of events must be continually monitored and supervised through territorial supervision, which focuses on controlling critical points.

A territorial presidium is an activity or strategy aimed at maintaining a constant presence in a given geographical area to effectively monitor, prevent, or respond to emergency situations.

These presidiums are identified by the municipality with the assistance of the competent authority and may involve municipal technicians, state or territorial operational structures, and volunteers.

To this end, mixed teams can be organised, with personnel from municipal technical offices, as well as various operational structures present in the area, such as the Forestry Corps, Fire Brigade, and local volunteers. These teams can be responsible for monitoring critical points, areas at risk, escape route feasibility, and emergency area functionality.

When developing a territorial presidium, several key points should be considered:

1. Context assessment: evaluate the specific characteristics of the area in which the territorial protection will be implemented, including the identification of critical points, circumscribed critical areas, and observation points.

2. Identification of objectives: establish the objectives to be achieved with the territorial presidium, such as increasing community safety perception, preventing acts of terrorism, or protecting strategic assets.

3. Allocation of resources: determine the resources required for the effective implementation of the territorial presidium, including personnel, equipment, surveillance technology, vehicles, and funding.

4. Collaboration and coordination: involve local authorities, law enforcement, security agencies, volunteers, and other stakeholders in the planning and implementation of the territorial presidium to maximise its effectiveness, including organisations representing all different groups in the communities.

5. Monitoring and evaluation: establish a monitoring and evaluation system to measure the impact of the territorial presence in achieving set objectives. Use key performance indicators and statistical data to make necessary improvements.

6. Community involvement: actively involve the local community in territorial coverage, including women, girls, boys and men, youth, elderly, people with disabilities, and ethnic, religious and sexual minority groups. Encourage reporting and cooperation between the community and competent authorities to foster a sense of shared responsibility for homeland security.

7. Adaptability and flexibility: ensure the territorial presidium can adapt to changing contexts and emerging threats over time. Maintain a flexible approach to continuously improve the territorial presence.

A territorial presidium can encompass various activities and actions, including:

- Surveillance and Patrol: conduct regular surveillance and patrols to detect and prevent dangerous behaviour or emergency situations.
- Emergency response: maintain resources and trained personnel for rapid responses to emergencies, such as fires or natural disasters.
- Collaboration with other agencies: collaborate with other civil protection bodies or local organisations to address the challenges and needs of the territory in an integrated way.
- Following an event, the unit assesses the affected area, evaluates residual risks, and takes stock of the damage.

It is crucial to note that the organisation and specific competences of a territorial presidium may vary according to the context, regulations, and specific security or management needs of the territory. Implementation of a territorial presidium requires a thorough analysis of the local context and meticulous planning. Always consult local regulations and collaborate with relevant authorities to ensure compliance with applicable laws and policies.

The completion of all territorial levels requires each operator to fill in the relevant information pertaining to their level of competence.

3.1.8 THE HEALTHCARE SERVICE AND ASSISTANCE FOR VULNERABLE GROUPS

In case of emergencies, all individuals are affected, but certain groups face greater vulnerabilities due to pre-existing conditions: these are the people belonging to vulnerable groups. Organising and structuring the emergency response system to address the specific needs of these vulnerable groups becomes crucial.

Conducting a thorough census of the vulnerable groups can help the system organise its capacity and identify potential areas for improvement. By recognizing the diverse vulnerabilities, we can ensure that the emergency response is comprehensive and leaves no one behind. Here is a list of vulnerable categories in case of a disaster:

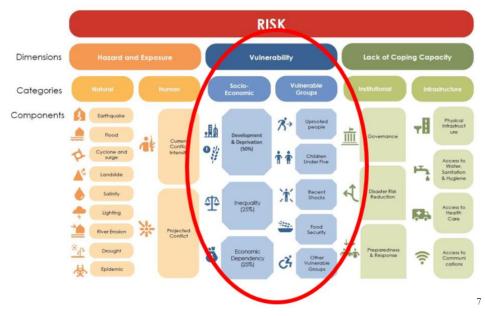
- 1. Women and girls: Emergencies exacerbate pre-existing gender inequalities and women and girls may be disproportionately impacted due to their lack of access to resources, decision-making and freedom of movement. Incidences of gender-based violence (GBV), violence against children and trafficking in human beings often increase during and after emergencies. Pregnant women require special attention during a disaster as they may need medical care, rest, adequate support for their health and the well-being of the baby.
- 2. Children: Children are particularly vulnerable in a disaster as they may be unable to fully understand the situation or take care of themselves independently.
- 3. Elderly: The elderly often have increased physical vulnerability and may have difficulty moving or obtaining assistance during a disaster.
- 4. People with disabilities: People with disabilities may have specific needs during a disaster, such as access to accessible facilities, medical devices, or support for mobility.

- 5. People with mental health issues: People with mental health issues may be more affected by the trauma associated with a disaster and require support to cope with the situation.
- 6. People with chronic illnesses: People with chronic illnesses may require regular medical care and access to medications during a disaster. Lack of access to such services can put their health and well-being at risk.
- 7. Sexual minorities (LGBTQI+ persons): are often marginalised by society and have unique needs and priorities in disasters. The discrimination and rights violations they face in most societies are frequently amplified during disasters and they face challenges in accessing response services.
- 8. Ethnic and religious minorities: may face discrimination and marginalisation before a disaster. Typically, their situation gets worse if a disaster strikes and they may experience increased discrimination and violence.
- 9. Homeless individuals: Homeless people are extremely vulnerable during a disaster as they often lack a safe shelter to seek protection
- 10. People with low income: Individuals with low income may have limited resources to cope with a disaster, such as access to food, clean water, shelter, and medical care
- 11. Immigrants and refugees: Immigrants or refugees may face language barriers, lack of support networks, and obstacles in accessing emergency services during a disaster
- 12. Rural communities: Rural communities may have limited availability of emergency services and limited resources to cope with a disaster. Their distance from urban centres can further complicate recovery efforts
- 13. Individuals living alone: People who live alone and do not have a social support network may be more vulnerable in a disaster as they may have difficulty obtaining help and support.

To enhance response efforts, it is essential to recognize the diverse vulnerabilities and move beyond a focus solely on the elderly and people with disabilities. Regular updates and comprehensive analysis are necessary to identify categories that are hit harder by emergencies due to pre-existing social conditions and inequalities.

Identifying and categorising vulnerable groups based on factors such as sex, age, disability, socioeconomic status, and health conditions is crucial for developing tailored plans to address their specific needs during emergencies.

Engaging volunteers and providing them with proper training and recognition within the Civil Protection system can be valuable in this process. Volunteers can play a significant role in supporting vulnerable categories during emergencies and ensuring a more integrated and compassionate response.



Once the analysis is completed, the following points should be considered for more effective organisation:

- Coordination and Integration: Establish a collaborative framework between health services, civil protection, and other relevant entities to coordinate efforts effectively, including actors with gender and human rights expertise and organisations representing women, girls, boys and men, youth, elderly, people with disabilities, and ethnic, religious and sexual minority groupsIntegrate the insights gained from the analysis into the emergency response plan.
- Customised Interventions at the Municipal Level: Implement tailored interventions at the municipal level to address the unique challenges faced by vulnerable groups, including social assistance, support to people with disabilities and LGBTQI+ person, child protection and prevention and response to gender-based violence.
- Optimise Resource Allocation: Strategically allocate resources considering the diverse needs of vulnerable groups. Avoid duplication of efforts and ensure resources are directed where they are most needed.

⁷ INFORM - Global, open-source risk assessment for humanitarian crises and disasters (europa.eu)

• Foster a Well-Structured System: Create a well-structured and inclusive emergency response system that prioritises the well-being of all vulnerable groups. This system should facilitate swift and compassionate assistance during crises.

By following these guidelines, communities can build resilience and ensure that the needs of all vulnerable groups are prioritised during emergencies, leaving no one behind.

For example, in the event of flooding, immediate rescue efforts should prioritise providing assistance to people with disabilities living on the ground floor.

In this phase, it is essential to gather the following information regarding healthcare facilities relevant to the scenario under consideration. [The specific information to be gathered should be included here based on the context and requirements of the emergency scenario]

3.1.9 OPERATIONAL STRUCTURES

The census of operational structures, carried out at every territorial level, should be oriented towards the specific risk scenarios identified and analysed for each case. This involves considering different types of risks (such as hydrogeological, hydraulic, wildfires, etc.) and assessing the operational needs to manage each risk.

The census of operational structures allows for a comprehensive view of available resources at each territorial level to manage different risk situations. This process facilitates planning and implementation of preventive measures and timely interventions, ensuring the safety of the population and the territory in case of emergencies.

At this point, it is suggested to evaluate if and how the different scenarios can influence all the operational structures and their capacity and organise in order not to get negatively affected by it or by them.

It will also be necessary to classify all the operational structures (already identified in STEP 1 and including Civil Protection Volunteering Organizations) by defining their actions in regards to the identified scenarios:

1. Location;

2. Consistency - assessment of how well the structure aligns with the scenario;

As for the description of the operational structure, please provide some specific details such as the name, capacities, size, response modules and any other relevant information in regards to the specific scenarios identified.

3.1.10 LOGISTICS

The identification of logistical hubs/warehouses and the census of available resources and equipment are crucial steps in emergency management. It is important to establish specific protocols of agreement and/or conventions with both public and private entities to optimise emergency response interventions.

These actions must be conducted at every territorial level, ensuring a comprehensive and coordinated approach to emergency management. By identifying and designating logistical hubs or warehouses, it becomes possible to efficiently store and distribute essential resources and equipment during emergencies. Additionally, conducting a thorough census of available resources and equipment provides valuable information on the capabilities and assets that can be mobilised during emergency situations. This includes identifying personnel, vehicles, medical supplies, communication systems, and other essential resources necessary for effective response efforts.

Moreover, establishing protocols of agreement and/or conventions with public and private entities enhances collaboration and coordination between different stakeholders involved in emergency management. This ensures a streamlined and optimised response, leveraging the strengths and resources of all parties involved.

By implementing these measures at each territorial level, emergency management authorities can enhance preparedness, response, and recovery efforts. The systematic identification of logistical hubs, census of resources, and establishment of protocols of agreement foster a more efficient and coordinated approach to emergency interventions, ultimately enhancing the overall effectiveness of emergency management at all levels.

Efficient emergency resource management is essential for a well-coordinated response. These guidelines help us to optimise preparedness and interventions:

- Identify Strategic Logistical Hubs: Designate centralised locations as logistical hubs or warehouses to store and distribute essential resources and equipment during emergencies. Strategic placement ensures swift access and delivery.
- Conduct Comprehensive Resource Census: Perform a thorough inventory of available resources, and equipment (personnel, vehicles, medical supplies, communication systems, other critical assets). The census aids in understanding available capabilities with specific expertise or training spendable in specific scenarios.

- Establish Collaborative Protocols: Develop agreements and conventions with public and private entities. Enhance cooperation and coordination to leverage the strengths and resources of all stakeholders during emergency response.
- Implement Territorial-Level Actions: Ensure that these measures are executed at every territorial level. A uniform approach guarantees comprehensive resource management and fosters effective emergency interventions.
- Continuously Update: Regularly review and update the resource census to maintain accuracy. Keep protocols and agreements up-to-date to adapt to evolving scenarios.

By adhering to these guidelines, emergency management authorities can optimise resource allocation, enhance coordination, and improve overall response effectiveness. A well-structured resource management approach strengthens preparedness and contributes to safeguarding lives and property during times of crisis. Within this element, before all, it will be necessary to make a comprehensive list of all logistic capacity, including:

- which stakeholder has it or can make it available with an agreement;
- what kind of resource is it;
- where is it located (and if it is safe in regards to the scenario/s taken in consideration);
- who is the responsible contact person;
- availability;
- which kind of resources or assets it contains

Only after having gathered all the information, it'll be possible to insert them in the response plan.

3.1.11 OPERATION OF ESSENTIAL SERVICE NETWORKS

In emergency situations, various types of essential service providers play a critical role in ensuring the smooth functioning of vital infrastructure. These providers include telecommunications companies, gas utility companies, and power utility companies, among others. Telecommunications companies are essential for maintaining communication networks, enabling emergency calls, disseminating critical information, and coordinating response efforts. Gas utility companies provide essential fuel for heating, cooking, and other vital functions, while power utility companies ensure the provision of electricity for lighting, medical equipment, and powering critical facilities. To ensure an effective response to emergencies, it is advisable to develop conventions and/or direct agreements with these service providers.

By establishing such partnerships, authorities can streamline communication, ensure access to necessary resources, and facilitate a coordinated response. In this step, the focus is on classifying essential service providers based on their geographic locations, response capabilities, and existing agreements. This involves gathering information on the service providers' operational structures, including their physical locations and distribution networks, as well as their capacity to respond promptly and efficiently during emergencies.

Additionally, it is essential to assess the current agreements or arrangements in place with these providers. By understanding the scope and details of existing agreements, authorities can better leverage the resources and expertise of the service providers in emergency situations. By classifying essential service providers, their geographic positions, response capabilities, and existing agreements, emergency management authorities can effectively coordinate and collaborate with these providers in times of crisis. This proactive approach ensures a more robust and efficient response, minimising disruptions to essential services and enhancing overall emergency preparedness and resilience.

In emergency response, close collaboration with municipal companies and service providers (e.g., water, gas, energy) is crucial. This collaboration facilitates the seamless connection of their activities to ensure the continuity and security of essential services during crises.

Key aspects of this collaboration include:

- Efficiency of Distribution Networks: Regular updates and communication with service providers ensure an up-to-date assessment of distribution network efficiency. This proactive approach helps guarantee a continuous and reliable supply of water, gas, and energy to residents and emergency response areas.
- Ensuring Functionality in Emergency Areas: Working closely with service providers, municipalities ensure that services remain functional in emergency-affected areas. Prompt repairs and restoration efforts are undertaken to minimise disruptions in critical locations such as hospitals, shelters, and communication centres.
- Support for Strategic Structures: Municipalities collaborate with companies to identify and prioritise critical structures. Special attention is given to guaranteeing the uninterrupted functioning of services in strategic locations, such as emergency operations centres and vital infrastructure.

By fostering a strong partnership with municipal companies and service providers, municipalities enhance their overall emergency preparedness and response capabilities. This collaborative approach ensures the stability of essential services during crises, safeguarding the well-being and safety of communities.

3.1.12 ENVIRONMENTAL PROTECTION

In emergency situations, it is important to consider the location of landfill sites and other relevant elements for effective waste management. This includes identifying appropriate areas for waste collection and defining specific activities that need to be undertaken during emergencies. Competent entities, both public and private, play a crucial role in managing waste in such situations.

It is also important to recognize the potential environmental impact associated with emergency response operations. The deployment of resources, equipment, and personnel can have consequences on ecosystems, air quality, and water resources. Therefore, sustainable practices should be integrated into emergency operations to mitigate any negative environmental effects.

Identifying areas for improvement in the environmental sustainability of emergency operations is key. This involves assessing current practices and exploring alternative approaches that minimise environmental impacts. For instance, adopting greener technologies, optimising resource utilisation, and implementing proper waste disposal techniques can help reduce the ecological footprint of emergency response activities.

Furthermore, collaboration with environmental experts and organisations can provide valuable insights and guidance on sustainable emergency response strategies. By incorporating environmental considerations into planning, preparedness, and response efforts, authorities can enhance the overall sustainability of emergency operations while minimising adverse ecological consequences.

These are crucial steps towards more sustainable emergency management. By identifying areas for improvement and embracing environmentally friendly practices, authorities can mitigate environmental risks and promote a more resilient and sustainable approach to emergency response.

3.1.13 DAMAGE ASSESSMENT

The establishment of clear procedures for activating an operational structure is crucial to ensure effective coordination of technical assessment teams for damage assessment. This structure facilitates the efficient deployment of teams to conduct thorough and systematic surveys of the damages incurred. In addition, it is important to prepare appropriate forms and computerised systems for collecting damage reports from municipalities. These forms and systems streamline the data collection process and enable efficient documentation of the extent and nature of the damages experienced by affected areas.

Furthermore, defining methods of connection between government representatives and the operating structures present in coordination centres is essential. This ensures seamless communication and collaboration between key stakeholders, allowing for the exchange of vital information, updates, and decision-making processes.

By implementing these measures, authorities can establish a robust framework for coordinating damage assessment efforts, collecting accurate data, and fostering effective communication among relevant entities. This enables prompt and wellinformed decision-making for a comprehensive and efficient response to emergencies.

In emergency situations, effective coordination of technical assessment teams is vital for accurate damage assessment. To achieve this:

- Organisational Structure Activation: Establish clear procedures for activating an organisational structure responsible for coordinating assessment teams. This enables swift and efficient deployment to survey damages systematically.
- Thorough Damage Assessment: Facilitate comprehensive evaluations by technical teams to document the extent and nature of damages in affected areas.
- Streamlined Data Collection: Prepare appropriate forms and computerised systems for collecting damage reports from municipalities. Streamlining data collection ensures efficient documentation and accuracy in representing damages. Included demographic data should be disaggregated by sex, age, disability and income level.
- Seamless Communication Channels: Define methods of connection between government representatives and coordination centres. Seamless communication fosters collaboration, information exchange, and decision-making processes.

By implementing these measures, authorities can establish a robust framework for coordinating damage assessment efforts, collecting accurate data, and fostering effective communication among relevant entities. This enables a comprehensive and efficient response to emergencies, aiding in the rapid recovery and resiliencebuilding of affected communities.

3.1.14 THE EMERGENCY BOUNDARY CONDITION WHEN AVAILABLE

At the local level, it is essential to analyse all strategic bases for emergency operations, considering critical elements that could impact accessibility and connectivity. This includes:

- Identification of Strategic Buildings and Areas: Identify buildings and areas crucial for emergency response, such as command centres (EOCs), hospitals, fire stations, and evacuation centres.
- Accessibility and Connection Infrastructures: Assess the accessibility and connectivity of these strategic locations with the surrounding territorial context, including roads, bridges, and communication networks.
- Critical Elements Analysis: Evaluate potential critical elements that may hinder emergency response. For example, if the EOC is located in a flood-prone area or an old building vulnerable to earthquakes, alternative arrangements should be considered.
- Communication Challenges: Identify potential communication obstacles, such as mountainous terrain that could disrupt radio signals or lack of reliable communication networks.
- Infrastructure Adequacy: Ensure that the identified strategic bases have suitable facilities, tools, and necessary instruments for effective emergency response.

By conducting this analysis, municipalities can better understand their emergency infrastructure's strengths and weaknesses, allowing them to address vulnerabilities and make informed decisions to enhance emergency preparedness and response capabilities.

3.1.15 ADMINISTRATIVE CONTINUITY

During emergencies, it is crucial to establish procedures that ensure the administrative continuity of both national and local institutions. These procedures are essential to maintain essential services, decision-making processes, and effective governance during crisis situations.

For municipalities, for examples, some procedures for administrative continuity in case of emergencies include:

1. Developing emergency response plans that outline specific roles and responsibilities of municipal staff members during crises; it is vital to always consider that all actions must be identified in a certain resource and not on a specific person.

2. Establishing alternative communication channels and backup systems to ensure uninterrupted communication and information sharing,

3. Identifying backup facilities or temporary office spaces that can be used in case the primary municipal building is inaccessible or damaged,

4. Cross-training employees to ensure a broad knowledge base and the ability to fill in for essential roles in case of staff shortages,

5. Implementing remote work capabilities and flexible scheduling arrangements to maintain administrative functions during disruptions,

6. Establishing protocols for the delegation of decision-making authority to ensure timely and effective decision-making in the absence of key personnel,

7. Collaborating with neighbouring municipalities and relevant government agencies to share resources and support each other in maintaining administrative operations.

By implementing these procedures, municipalities can mitigate the impact of emergencies on administrative functions, maintain essential services, and ensure effective governance throughout the crisis period.

Annexes

Introduction

Annex "Practical Guidelines for integrating gender, human rights and environmental issues in DRM"

Step 0 Annex "PPRD Assessment tool"

Step 1

Annex "Response Plan Model" Annex "Guidelines for drafting SOPs" and template Annex "Support Functions" Annex "Inclusion and Integration of CSOs&Volunteer-based Organisations" Annex "Blueprint for supporting Civil Protection Organisations in developing Online Volunteers Activities"

Step 2

Annex "Model for Analysis of information on risk and scenarios" Please refer also to the following Guidelines provided by the PPRD EAST 3 project:

- Regional Disaster Risk Assessment Technical Guidelines
- Preliminary Risk Scenario and Full Risk Scenario templates
- Guidelines for the institutions of a National WildFire EWS and establishment of EWEA strategies

Step 3

Annex "Model for Adapting Response Plan to scenarios"