



PREVENTION, PREPAREDNESS AND RESPONSE TO NATURAL AND MAN-MADE DISASTERS IN THE SOUTHERN NEIGHBORHOOD (PPRD SOUTH 3)

## Regional Guidelines document on Civil Protection Planning

PPRD South 3 Guidelines document to support partner countries in the preparation of Civil Protection Emergency Plans

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#### **INTRODUCTION**



It is essential to know the characteristics of the territory and the risks that affect it, and to determine the value exposed. This is understood as being a set of human groups - cities, towns, villages, and the productive activities linked to the livelihood of individual countries.

The value exposed will clearly increase based on the complexity of the man-made fabric, the historical and cultural stratification of the residential and non-residential settlements (buildings for civil habitation, cultural heritage, places of worship), with the diversification of activities carried out there. This is regardless of whether they serve man (hospitals, nursing homes, cultural centres, etc.) or support him (agricultural, industrial, commercial activities, etc.).

This document describes the main elements of the civil protection plan. These elements are of a general nature and take into account the experience of the Italian Civil Protection System. Depending on the organisation of individual countries, they must then be adapted to the specific individual contexts of each nation.

## GENERAL DEFINITION AND OBJECTIVES



Civil protection planning is a systemic activity that must be carried out jointly by all administrations at the different territorial levels for the preparation and management of activities, in both "ordinary times" and in times of emergency. This must be completed in accordance with the principles of subsidiarity, differentiation and adequacy.

Similarly, the plan is a tool that serves to develop risk awareness in "ordinary times", to organise the pooling of resources, to 'build' skills and professionalism, and to guarantee the link between different administrations and authorities. A plan is therefore not only a set of operational intervention procedures, but also a tool through which to define the organisation of the inter-institutional structure needed to complete civil protection activities. These activities can range from forecasting to prevention, from emergency management to overcoming the emergency when it arises.

The plan must be continuously updated, and evolve in relation to the development of land use planning and changes in expected risk scenarios, and must be sufficiently flexible to be used in all emergencies, including unforeseen ones. In order to be effective, it is crucial to ensure continuous and constant coordination between the plan itself and the various emergency plans pertaining to the administrations in the area.

#### The planning levels are:

<sup>1</sup> In this document the pillars of planning at a national level will be analysed.

#### **National level**

At the national level, in the case of particularly serious events that require the intervention of both local and national resources, in accordance with the principle of subsidiarity, the provisions at the national level apply. According to such provisions, the national civil protection body is responsible for drawing up and coordinating the implementation of national plans for specific risk scenarios that are of national importance and national rescue programmes, which contain the national organisational structure and the cognitive elements of the territory in order to organise the operational response in the event of or in view of catastrophic events of national importance.

With regard to national planning, this refers to specific risk scenarios, the occurrence of which may lead to the need to mobilise and coordinate the intervention of the entire National Civil Protection System. The national plan, in addition to describing the potentially affected territory, also identifies the necessary measures to be implemented as well as the corresponding operational procedures aimed at guaranteeing interventions to safeguard the population.

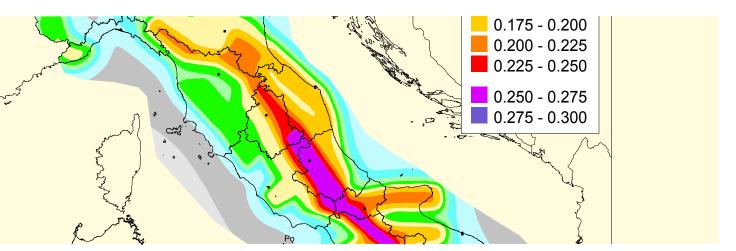
#### Supranational level<sup>2</sup>

In addition to national planning, all actions aimed at ensuring the response in case of an emergency event in cross-border areas can be outlined. In this case, bilateral agreements between two or more countries will be signed at the planning stage to define the intervention model and the chain of command and control.

<sup>2</sup> The aim of the PPRD SOUTH III project is to add a fourth type of planning to the classic levels: the supranational level, which allows to standardise the intervention methodology used in the event of a disaster.

## | 1. The contents of the plan

# 1.1 INTRODUCTION



The introductory part of the civil protection plan shows the date of approval and update of the document with the citation of the relevant measure and a summary of the main contents.

### 1.2

#### **MAPPING OUT THE LAND**

This part of the plan must contain the main information on the characteristics of the territory's physical layout, the weather and climate regime, the human settlement and infrastructural endowment, and the main natural and human risks affecting it.

The territorial description must ensure consistency between the different planning instruments, citing in the bibliography the planning documents from which the information is drawn:

- administrative and demographic framework;
- orographic, hydrographic, weather and climate framework;
- indication of relevant buildings and infrastructure works;
- configuration of elements useful for the emergency management of infrastructure networks and essential services with direction from their operators (road, rail, ports, airports, power plants, electricity, gas, water and telephone networks). More of these elements include the location of landfill sites and other useful elements (landfill facilities, inert recovery facilities, storage facilities and areas where it is possible to equip temporary storage sites; as well as inactive quarries, chemical, physical, biological treatment plants, end-of-life vehicle treatment plants and purifiers);
- location of main production activities, including facilities at risk of major accidents;
- indication of existing land use planning (e.g. urban and landscape plans).

### 1.3

# IDENTIFICATION OF RISKS AND DEFINITION OF RELATED SCENARIOS



The identification and study of risk scenarios is the forecasting activity that is functional for both issuing alerts and for civil protection planning. It is carried out both because of the need to adapt, as far as possible, the operational response of a civil protection plan to the events as they evolve, and because of the technological and organisational possibility of using advance warning systems. These systems are to be used in probabilistic terms with instrumental remote monitoring as well as on-site surveillance of certain types of phenomena.

The primary objective for each risk scenario, within the framework of a plan, is to define and guide the decision-making activities aimed at implementing the strategic elements necessary for the execution of the plan itself, such as the identification of operational centres and emergency areas.

The risk scenario is the inbuilt product of a descriptive activity, accompanied by explanatory maps, and an evaluative activity concerning the effects that may be produced on humans, goods, settlements, animals and the environment, attributed to the evolution in space and time of an event linked to one or more types of risk, namely: seismic, volcanic, tsunamis, hydraulic, hydrogeological, adverse weather phenomena, water deficits and forest fires. These types of scenario can include avalanches, storm surges and potential events linked to dams.

Where possible, scenarios should be associated with predefined probabilities of occurrence over a fixed observation period, or to a return period or frequency as defined in reference standards, where issued, and as defined by historical events.

In the definition of risk scenarios, the contribution provided by the collection of direct evidence and the dynamic observation of the territory can be of particular importance, thanks to which it is possible to achieve a scale of detail and a wealth of information that is not compatible with the sole use of higher level thematic maps. In fact, as a result of this observation, critical points or areas can be identified (such as, for example, hydraulic risk, subways, topographically depressed areas and/or areas with particular drainage difficulties, sections of embankment with known or evident critical points).

In regards to hydrogeological, hydraulic and adverse weather phenomena risks, and also for the purpose of a more effective alert being issued, it is necessary to describe the phenomena that may occur in the examined territory. This should define their intensity, the areas involved, the lines along which the trigger points can be expected to develop and other useful information, in order to understand the essential characteristics of the phenomena themselves. In order to define the scenario, it is necessary to refer mainly to the hazard areas reported in the territorial and/or landscape plans, if any, in the flood risk management plans.

With regard to seismic hazard scenarios, reference is made to expected peak accelerations on hard ground with a return period of 475 years, which is equivalent to the probability that it will exceed 10% in 50 years.

For volcanic risk scenarios, reference should be made, where possible, to the national guidelines, operational indications and plans issued for the specific volcano. The hazard scenario at the scale of the volcano must take into account both the expected primary and secondary phenomena, and the relative impact on the territory in view of its eruptive history. For each of them, where possible, the probability of occurrence should be defined in a predetermined observation period (return period or frequency) or, failing that, through a multi-disciplinary analysis of scientific and historical evidence.

In a volcanic eruption, one or more primary phenomena may occur, such as the emission and fallout of volcanic products (bombs, lapilli and ash), gaseous emissions, pyroclastic flows and lava flows. Volcanic phenomena can in turn generate further significant phenomena, such as earthquakes, fires, landslides and tsunamis.

The drafting of the civil protection plan includes the listing of maps and information data concerning the risks present in the area, pre-existing documentation (maps of seismic hazards for different return periods, seismic micro-zoning studies, hydrogeological and hydraulic risk maps, etc.), and maps contained within other existing civil protection plans.

It is important to highlight how, as the territorial extension and the evolutionary complexity of the type of risk for which the planning is developed increases, especially for those for which early warning and alert systems are operative or foreseeable, the levels of uncertainty connected to the risk scenarios also increase in parallel. These levels should be appropriately highlighted in order to assess how they can be used for decision-making purposes.

More detail can be defined for elements such as villages and groups of villages, neighbour-hoods, small towns, schools or universities, sports complexes, production centres, busy shopping centres, specific transport routes, in order to characterise the relevant intervention model.

In particular, scenarios referring to individual structures/buildings or to very restricted areas are only recommended in cases where information and analysis methods are available that justify and allow for such levels of detail.

For each type of risk covered by the plan, a defined 'macro-scenario' table must be drawn up for the entire area in question, integrating and summarising each of the defined relative risk scenarios.

### When defining scenarios for each type of risk, different levels of information must be provided for the purpose of defining dangerousness, such as:

- delimitation of areas potentially affected by the phenomenon;
- identification of critical points;

#### for the purpose of identifying exposed ones:

- a list of residential settlements potentially affected by the phenomena;
- census of the resident population and estimate of the floating population;
- estimation of the number of socially fragile and disabled people (according to data provided by the Health Service);
- census of the strategic hospital and healthcare facilities (e.g. hospitals, nursing homes, clinics, health agencies), the headquarters of central and regional administrations, prefectures, provinces, town halls and barracks;
- census of relevant settings such as public buildings, public and private nurseries and schools of all levels, houses of worship, sports facilities and prisons;
- census of cultural heritage, museum centres, places of culture such as museums, archives and libraries;
- location of production and commercial facilities, with particular reference to shopping centres and medium to large production activities, farms and livestock farms, as well as kennels and catteries;
- location of facilities at risk of major accidents;
- location of dams;
- identification of mobility infrastructures and essential services (electricity, water, telephone, ports, airports, road network);
- delimitation of historical centres and aggregates;
- delimitation of green, wooded and protected areas.

Emergency and/or security internal planning of cultural sites (museums, libraries, archives), museum centres and UNESCO sites, companies at risk of major accidents, airports, railway stations, health and social care facilities must take civil protection planning into account at all levels.

### 1.4

#### THE INTERVENTION MODEL

Civil protection planning must be aimed at defining the operational strategies and the intervention model, which incorporates the organisation of structures responsible for carrying out the civil protection activities and the operational response for the management of planned or ongoing catastrophic events, guaranteeing the effectiveness of the functions to be carried out, in a coordinated manner.

#### THE INTERVENTION PLANNING MODEL AT THE VARIOUS TERRITORIAL LEVELS CONSISTS OF -

- the organisation of the civil protection structure, which must guarantee that the civil protection function is articulated at a territorial level in order to ensure that activities are carried out effectively;
- the strategic operational elements of civil protection planning, which represent the background for the implementation of the intervention model;
- the operational procedures, which consist of defining the actions that those involved in the management of the emergency across the various levels of coordination must take to deal with it, in accordance with the regional organisational and regulatory model.

#### 1.4.1 The organisation of the civil protection structure

The civil protection planning reports the organisation and functioning of the structure of the territorial level to which it refers, which exercises the civil protection function, with direction from the relevant offices, both central and peripheral, and from the operational coordination centres managed by the territorial authority responsible for planning.

The civil protection Authority must ensure the involvement of the Authority's other offices/departments in "ordinary times" and in times of emergency, in order to guarantee the involvement and collaboration between all the offices/departments in carrying out civil protection activities.

The civil protection structure must also guarantee the link and coordination of activities with external authorities and administrations.

The different territorial levels must plan the organisational structure that will guarantee the activation of the intervention model, in the event of an emergency. This organisation, which makes up the civil protection structure, must have staff who are properly trained in civil protection activities.

#### 1.4.2 The strategic operational elements of civil protection planning

The strategic operational elements of civil protection planning represent the organisational aspects and physical components necessary for the application of the intervention model.

These elements, listed below, are of a general nature and, unless specified, affect all territorial levels. Further specific strategies, more in line with the requirements outlined in the intervention, especially at a local level, can be identified in the civil protection plan, for which it is necessary to specify the supporting subjects/authorities/offices in charge of their implementation.

#### a. The alert system —

The civil protection plan, within the framework of foreseeable risks, defines the alert issuing methods in terms of a communication flow that is appropriately coded in compliance with the national and regional directives in force.

The alert is related to foreseeable events that are likely to happen, with an advance warning, for which there is an alert system that issues the alert levels necessary for the activation of the civil protection system at the different levels of coordination.

Following the issuing of alerts, the structures across the various territorial levels activate the operational phases used for emergency management in accordance with the provisions of the relevant civil protection plans.

The planning specifies the contacts responsible for receiving the alerts and the actions to be taken in the different operational phases.

For the various alert systems, reference is made to the regulations issued for the different types of risk.

#### b. Operational coordination centres and operational rooms \_\_

The operational coordination centres represent one of the fundamental strategic elements of civil protection planning for emergency management, through the timely monitoring of the situation and resources. The civil protection plan for each administration/territorial authority therefore indicates the location and organisation of its own operational coordination centre, structured in support functions, as well as any peripheral operational centres related to it.

In the event of foreseeable events, the organisational set-up of the different levels of coordination involves the gradual activation of the relevant operational coordination centre and support functions, according to specific operational phases.

Support functions represent specific areas of activity for emergency management, and are named as follows:

- Coordination unit.
- Representatives of the Operational Structures.
- Assistance to the population.
- Health and social care.
- Logistics.
- Emergency telecommunications.
- Accessibility and mobility.
- Essential services.
- Aerial and maritime activities.
- Technical and assessment services.
- Damage and accessibility assessment.
- Volunteering.
- Representation of cultural heritage.
- Press and communication.
- Administrative and financial support.
- Administrative continuity.

The functions are defined in the civil protection plan on the basis of the planned activities and can be merged, reduced or implemented according to the actual resources of appropriately trained personnel; a contact person is allocated to each of these functions.

In the event of a foreseeable event, the operational coordination centre is activated in the configuration provided for in the civil protection plan, also in a modular and/or progressive manner according to how the event scenario evolves.

The planning reports, even without any given indication of name but just as given title within the authorities' structure, the contact persons and components of the support functions, to guarantee the flow of communications within the coordination centre, and with the other activated operational coordination centres. This thereby guarantees communication and information links between the structures and the civil protection components across the different territorial levels.

#### c. Telecommunications -

For the management of emergencies across the various territorial levels, it is necessary to have a telecommunications system that allows connections between the coordination structures and operators in the area, as well as being able to communicate with alternative telecommunications systems, in the event that the ordinary communication routes are interrupted (fixed, mobile and data telephony).

The plans across all territorial levels indicate which telecommunication systems are used in ordinary and emergency situations (e.g.: vhf/uhf/hf radio systems or satellite voice and data systems), specifying the authority to which they belong (e.g. radio networks of volunteers and/or Operational Structures). In addition, the civil protection plan should contains the block diagram on the flow of alternative emergency communications implemented between the various operational coordination centres and the structures in the area. Where possible, with the involvement of the managing authorities, any critical points linked to the vulnerability of the main mobile, fixed and data telephony infrastructures (e.g. critical infrastructures in areas subject to flooding, or seismically inadequate), which could compromise ordinary telecommunications routes, are indicated.

#### d. Accessibility —

The civil protection plan, for all territorial levels, includes an assessment of possible disruptions to the mobility system caused by events that limit the accessibility of the land transport network.

The primary objective is to identify the most effective measures to facilitate the movement of and access to vehicles needed to ensure rescue and assistance to the population, as well as the most effective means of removing the population exposed to risk.

The civil protection plan, as far as the competence of each territorial level is concerned, provides for the definition of the means of access, traffic regulation measures and, where applicable, the actions of prompt restoration in case of interruption or damage of the road network identified as strategic in agreement with all the managers concerned, reporting these measures on a common map. In the aspects related to traffic management measures, the description of rail, air and sea accessibility is also reported with the identification, also with the involvement of the managing authorities, of the main vulnerabilities and possible induced risks, where possible.

#### e. Local presidium \_

Local presidium consists of monitoring the area by the civil protection structures across the various territorial levels, through direct and real time observation of the onset precursor phenomena that are potentially dangerous for public and private safety and the development of the phenomena in progress.

Local coverage activity concerns certain points in particular or specific areas such as:

- critical points or critical areas where, following the event, situations of danger to public and private safety occur (e.g.: floodable subways, confluences of watercourses that could affect transport infrastructures in the event of flooding, bridges with poor lighting, manmade areas affected by landslides). At these critical points, on-site or remote control and monitoring activities should be provided for, and, if the situation requires it, urgent action when an event is planned or ongoing (e.g. closure of traffic and access in general, precautionary evacuation, temporary hydraulic and landslide defence works);
- the observation points where controls can be carried out under safe conditions (e.g. hydrometers, pluviometers or other visual control points of the phenomenon).

On the basis of specific agreements, in the event where particular levels of risk arise, local presidium may be carried out by teams from the Fire Brigade Service.

#### f. Operational structures \_\_\_\_\_

For all planning levels, the authority responsible for drawing up the civil protection plan asks the regions, prefectures - territorial Government offices, the provinces/metropolitan cities, the municipalities and all other authorities in the National Civil Protection System for the consistency, dislocation and organisation of their respective operational structures (state, regional and local).

The activation of regional and state operational structures can be arranged by the regions or by the prefectures - territorial Government offices respectively, unless otherwise agreed between the parties.

#### g. Volunteering \_\_\_\_\_

In order to guarantee the effective coordination of the organised civil protection voluntary organisations present in the area, both for prevention and emergency activities, it is necessary to define the procedure for the formal activation and use by the competent territorial authorities, with reference to what is foreseen for local events and interventions. The voluntary organisations involved must also be trained in advance for the specific type of intervention and the use of the equipment provided.

#### h. Rescue organisation \_\_\_\_\_

Civil protection planning provides for the adoption of the necessary measures to ensure the first relief measures for the population, in conjunction with the structures responsible for urgent technical rescue and healthcare assistance.

In order to guarantee optimal conditions for rescue activity operations, civil protection planning across the various territorial levels must take into account certain strategic elements, in particular:

- the identification of operational coordination centres with the definition of operational capabilities for the different intervention scenarios;
- the ways in which logistical and voluntary resources are activated;
- the information on specific memorandum of understanding and/or agreements with the Fire Brigade Service, public and private authorities in place, for the optimisation of emergency interventions.

The potential support of organised civil protection volunteering in carrying out technical rescue operations that cannot be postponed and are urgent, whose management and responsibility is in the hands of the Fire Brigade Service, must be requested from the competent administrations.

#### i. Logistics \_\_\_\_

In civil protection planning across the various territorial levels, it is essential to identify and define the management of logistical centres/warehouses for goods for immediate use, necessary for assisting the population with the activation methods for their distribution to the emergency areas.

#### CIVIL PROTECTION PLANNING INCLUDES:——

- the identification of logistic centres in the area, also represented by means of maps;
- the organisation and activation procedures, in accordance with the regional organisational model, of the regional mobile civil protection column, the logistical centres/warehouses, as well as the census of available resources and means;
- the information on specific memorandum of understanding and/or agreements with public authorities and contracts in place, for the optimisation of emergency interventions.

With regard to the activity of securing the area in emergencies, it is necessary to plan the methods of acquiring materials through consultation with the public and private authorities responsible for this activity, as well as the regional or interregional directorates of fire brigades with territorial jurisdiction.

#### j. The operation of essential service networks -

In order to optimise verification and restoration of essential service networks' functionality, planning provides for the presence of network managers' representatives (for water, electricity, gas and telephone services) at the operational coordination centres at a regional and provincial level. At a municipal level, it is advisable to have at least one link with a representative of the above-

mentioned operators. Activities should be coordinated in the presence of or in liaison with road operators, to ensure or facilitate accessibility to sites for the restoration of essential service networks. These activities provide information about the disruptions, the measures planned to mitigate the inconvenience and time needed for reconstruction to be shared across the different territorial levels.

#### k. Environmental protection \_

Particular attention should be paid to all environmental matrices that may be affected by emergency events and altered, polluted or destroyed also as a result of induced risks in the medium to long term. There is often an urgent need to remove and treat the waste produced by the event as quickly as possible, (although generally after the rescue and assistance phase) such as: rubble, bulky waste, end-of-life vehicles, alluvial materials, volcanic ash, beached hydrocarbons. It is therefore necessary that the activities of waste management in emergencies are planned in advance, identifying institutional and private actors, suitable locations and procedures that allow for rapid intervention.

#### I. The damage assessment -

The main damage assessment activities across the different territorial levels useful for the definition of damages following catastrophic events of various types are listed below. Particular emphasis is placed on the damage assessment following seismic events in view of the seriousness of the effects resulting from such phenomena.

The plans provide procedures and tools to verify and detect damage quicly, as well as the basic needs for urgent interventions and measures, including through inspections.

In order to assess the post-earthquake damage of buildings and other structures (ordinary public and private buildings, architectural and historical-artistic heritage, essential services, public infrastructures, productive activities), it is necessary that an organisational structure be organised at a regional level during the planning phase, in agreement and coherence with the existing information. This must allow the coordination of teams of technicians for the damage assessment, in particular of buildings. This assessment must be carried out in a short time in order to allow the population to return to their homes and to resume activities quickly. In ordinary times, this structure's role will be of impulse and active participation - also linking the representatives on the area belonging to the Fire Brigade Service and other operational structures and components that can contribute to the activity - in training activities, exercises, technical, informative and instrumental organisation of the work. In particular, it is necessary to update the basic map organised in groups and structural units, in order to allow for a correct and effective inspection campaign during the emergency event.

This structure, in the earthquake emergency phase, is constituted as a damage assessment support function in which representatives of the other authorities and administrations involved at regional level also participate. It must also effectively provide a close link with the national level of coordination, if established, and, as is evident, it must support the coordination of local operational centres in terms of organising the activities assigned to them, as scheduled and organised within the planning framework. Specifically, the support function's activity

includes the quantification and involvement of expert and specially trained technicians' teams to be activating in quick checks, also providing specific methods of employment, updating, dislocation on the area and organisation, in relation to the emergency situation in place.

#### 1.4.3 Operational procedures

Operational procedures consist of determining the actions to be taken by those involved in the management of the emergency across the various territorial levels of coordination in order to deal with it when it arises.

Operational procedures are therefore the means by which the above strategic elements are activated in the event of an expected or ongoing emergency. Such procedures must be defined within the relevant planning framework, planning the actions of the different actors involved and of the support functions.

In addition, in the case of foreseeable events with a likely advance warning, the supporting subjects/functions and their actions must be associated with the operational phases (attention, early warning and warning), as established by the relevant measures adopted for the different types of risk. The transition from an operational phase to a higher or lower phase is decided by the person in charge of the civil protection activity, also on the basis of operational assessments and communications from the alert system.

Upon the occurrence of events of various kinds, sudden, unforeseen, or for which there is no type of alert, the plan provides for the actions to be carried out relating to the maximum operational configuration of the civil protection structure, in the shortest time possible.

### 1.5

#### **UPDATING AND REVISION**

In view of the dynamic nature of the civil protection plan, in order to ensure the effectiveness and operability of the measures provided for therein, the competent authority shall constantly update it and review it periodically, by taking into account the changes in the territorial system, as well as any further in-depth studies and research on the risks identified, the organisation of the civil protection structure and the intervention model, and the civil protection exercise results.

Updating and revision are carried out at the times and in the ways described below:

- constant updating of rapidly changing data (e.g. address book, heads of administration, available resources, roles);
- periodic review every three years at the most for structural aspects of the plan (e.g. risk scenarios, intervention model, political and administrative set-up, ways of involving the population in the development of the plan and informing them of the risks).

#### **METEO-HYDRO ALERT**

#### THE OPERATIONAL PHASES

When there is an alert, the Regions and Municipalities evaluate, based on their own organization and on their own territory, which operational phase of the Civil Protection Plan to activate: ATTENTION, PRE-ALARM, ALARM. In the event of a red alert, at least the pre-alarm phase is activated.

#### WHAT DOES THE MUNICIPALITY DO?

#### **ATTENTION**

It prepares to respond to a possible emergency by activating resources and procedures

#### PRE-ALARM

Ressources are mobilized to prevent or reduce possible damage to people, animals and things

#### **ALARM**

It is fully operational to cope with the actual or foreseen effects and impact

















#### **VERIFY**

- · the operational readiness of the own operational structure in coordination with the Region
- the Prefecture together with the availability of own staff and volunteers ...

#### **ACTIVATE**

- the Municipal Operational Center
- (COC) to coordinate the first interventions
- staff or volunteers for monitoring underpasses, embankments, bridges ...

#### **COORDINATES**

- · all activities of rescue and assistance to the population
- evacuation of areas at risk and rescue to citizens in difficulty ...



Inform the population about the operational phase activated and communicates the correct behaviors to be adopted, according to the modalities defined in the Civil Protection Plan.

# 1.6 MONITORING



States, while respecting their organisational autonomy, monitor the state of art of civil protection planning at a national level at least once a year.

# 1.7 INFORMATION AND COMMUNICATION

Civil protection planning defines the methods of preparing information activities for the population on the risks prevailing in the area and the conduct to follow before, during and after the occurrence of catastrophic events.

Such planning is only effective if it is known to the population and, therefore, must be combined with specific information activities for the population, through modalities designated to "ordinary times" and others for emergencies.

In "ordinary times", the main information to be communicated in a clear and detailed way, also by means of interactive maps, where possible, concerns:

- the risks present in the area;
- conduct to follow before, during and after an event;
- information points;
- useful numbers;
- emergency areas for assistance;
- the methods of issuing alerts, warning and preventive removal;
- escape routes and indications of alternative routes in case of emergency.

At a local level, in order to facilitate the population's understanding of the municipal civil protection plan, it is essential to provide a dedicated section on the institutional website's home page, with as much prominence as possible, with links to the information and documents pertaining to the civil protection plan.

In order to develop information strategies in "ordinary times", objectives and types of audience must be identified (young citizens, elderly population, people with disabilities, stakeholders, journalists) in order to define appropriate communication actions, also taking into account the resources that are actually available. All products must converge towards the same goal through an integrated communication process, with a precise definition of the time and resources involved.

In "ordinary times", information sharing may also include the use of social media and messaging services managed through institutional channels, as well as useful numbers dedicated to informing citizens, which represent powerful and flexible communication tools capable of conveying information in a widespread and timely manner. Social media, messaging and useful numbers, if used correctly and integrated into an overall communication plan, can be an important resource in prevention work.

## | 2. Civil protection exercises



Civil protection exercises aim to verify what is written in the civil protection planning across the different territorial levels, to test the validity of the organisational and intervention models, as well as to promote the knowledge of the plans contents being spread by all those involved, particularly the population.

The exercise process is to be understood as the organisation and planning of activities aimed at reaching not only the civil protection exercise stage but all the initiatives that are part of the process, including operational actions, training, spreading of knowledge, evaluation and implementation of results.

The exercise activities are developed on the basis of a document called the 'exercise project document'.

# 2.1 CIVIL PROTECTION EXERCISES TYPES



In order to test what has been developed in national or supranational planning, civil protection exercises are planned, involving not only civil protection workers but also the population.

Depending on the type of emergency event and the participating authorities, civil protection exercises are classified as follows:

- international exercises, namely activities that involve the components and operational structures within the National Civil Protection System, from the national coordination level to the local level, with the participation of one or more nations within the framework of community projects and initiatives or cross-border agreements. They are planned and organised by the civil protection authority of the proposing state, in agreement with the territory where the activities will take place;
- national exercises, in which the National Civil Protection System is involved on the basis

of scenarios determining the commitment and mobilisation of the National System itself with the real or simulated use of extraordinary resources. The national exercises provide for the verification of plans, information and measures for prevention and response at a national level, and are planned and organised by the national civil protection authority, in agreement with the territory where they are to be held;

In addition, depending on whether or not the planned activities are actually carried out, the exercises are divided into:

- exercises for command posts (Command Post Exercise CPX): the exercise takes place between operational centres at different levels, simulating, for example, the movement of resources, with the aim of verifying relations and communications between the various centres, testing the decision-making process, the activation timing of the coordination system and intervention procedures. These exercises do not therefore provide for any real action on the ground other than guarding the operational centres that are activated;
- field exercises (Field Exercise FX): the phases of activation, mobilisation and operational deployment of training modules or teams are simulated, with real actions in the area, and the activation of operational centres and/or interaction with territorial subjects and authorities useful to test specific aspects or achieve certain learning objectives. This typology is similar to rescue tests;
- full scale exercises (Full Scale Exercise FSX): different civil protection activities are simulated, ranging from prevention and issuing alerts to emergency management within the simulated scenario. In addition to activating the operational centres across all the territorial levels involved and the communication network, real actions are carried out on the ground, from the deployment of resources to the involvement of the population;
- table top exercises (Table Top Exercise TTX): an artificial environment is simulated to reproduce all or part of event scenarios to test decision-making processes that refer to existing civil protection plans or intervention models. A TTX can be used to test and/or develop operational plans and procedures. Together, participants examine or discuss how they intend to handle various types of problems or tasks assigned to them in the predefined time frame of a few hours or a day. TTXs also require the participants to manage and produce documentation;
- assessment/discussion-based exercises (Discussion-based exercise DBX): similar to CPX, DBXs are specifically aimed at assessing and discussing specific procedures and activities. Therefore, this exercise consists of a joint discussion and comparison activity between the participants in the simulation.

For all the above-mentioned types of exercise, an "exercise project document" has to be drawn up, which is forwarded to the competent territorial authorities and which provides, among other information, the reference scenario, the subjects and authorities involved, the objectives and activities timetable.

# 2.2 THE EXERCISE PROCESS



The organisation of a civil protection exercise requires a complex level of coordination, given the strong interdependence between various activities in a system composed of numerous operators belonging to different administrations and authorities.

The exercise process consists of an orderly sequence of planning activities, beginning with the creation of objectives and ending with the implementation of the lessons learned, through the phases of planning, conducting and evaluating the exercise programme.

# | 3. Coordination of territorial planning and programming with civil protection plans

Plans and programmes for territorial management, protection and redevelopment, as well as urban and territorial planning must be coordinated with civil protection plans, in order to ensure consistency with risk scenarios and operational strategies contained therein.

The aforementioned coordination with urban and territorial planning is carried out with regard to cognitive frameworks, analytical apparatuses and urban forecasts, taking into account in particular the aspects related to risks and climate change. Civil protection planning, as a mandatory planning tool, able to provide a multi-risk representation of the area under the jurisdiction of an authority, can be considered as the base of analysis for potential impacts and, by virtue of this, supports urban and territorial planning with the contained risk scenarios.

The coordination of the various urban and territorial plans with the civil protection plans is aimed at two main objectives: the first is to integrate the risk scenarios into the urban and territorial plans, and the second is to make the plans' forecasts consistent with them.

#### -THE FOLLOWING ELEMENTS ARE CONSIDERED: -

- the types of risk present in the area, and therefore the hazard areas on a local scale in relation to vulnerability and exposure, as defined in the risk scenarios identified in civil protection planning;
- equipped areas and infrastructures intended for the safety and relief of the population in the event of disasters, as well as areas to be used for temporary settlements. In this case, with the aim of simplifying the identification of such areas within the urban zoning and pursuing the principles of sustainability and reduction of land consumption, equipped areas and infrastructures can be identified within the urban standards in the form of temporary uses, meanwhile areas to be used for temporary settlements can be identified within the residual plan;
- strategic buildings and their relative jurisdiction, for subdivision rescues purposes;
- the elements derived from seismic micro-zoning, which represent important information to be taken into account in order to facilitate risk assessment and subsequent risk reduction.

## | 4. Training



Civil protection planning, at all territorial levels, is configured as a cycle of activities characterised by the variety, specificity and sometimes high specialisation of the actors involved, by the close interconnection with other strategic areas of territorial government and life protection, and by the highly complex governance of the process.

These considerations highlight how the quality of the new planning documents produced will be strongly conditioned by the skills of the operators and actors called upon to produce them. It is therefore crucial that all levels of government, and in particular the state and regional levels, promptly design and implement open and integrated training programmes specifically aimed at public officials belonging to components of the National Civil Protection System, at those belonging to the operational structures and representatives of the scientific community.

These training programmes include the fields of knowledge listed below, with the possibility for the organisers to add others:

- The National Civil Protection System and the relevant legislation.
- The processing, map representation and narrative exposition of risk scenarios.
- Alert systems and operational tools.
- Intervention models for emergency management.
- The activation, animation and management of a local social system that is representative of the area subject to planning.
- Consistency with territorial management plans and programmes.
- Methodologies for the dissemination of civil protection plans, differentiated by types of users.
- The planning and management of exercise activities, for different types of users.

# **CHECK LIST**CONTENTS OF THE PLAN

#### · A PLAN, AT DIFFERENT TERRITORIAL LEVELS, MUST INCLUDE -

- O **territorial overview:** this involves highlighting the main information on the characteristics and physical structure of the territory, the existing infrastructure, the human presence as well as the primary natural and man-made risks;
- orisk scenarios identified for the plan: define the expected damage on the basis of the phenomenon in question, around which civil protection plans its response actions;
- the intervention model, containing the organisation of the civil protection structure, the strategic elements to include and the operational procedures needed. In summary, this section must define the operational strategies that enable the structure to organise civil protection activities, the modalities of guaranteeing the activation and information sharing between the various actors of the National System of Civil Protection and the defining of communication flows, the modalities of periodic updates and reviews of the plan and those on how information gets to the population, even during an event;
- alert systems and the civil protection response. For foreseeable events, such as floods, the plan must also include the system of alerting the structure and, depending on the alerts issued, foresee increasing activations for the civil protection structure built around the operational phases of warning, pre-alarm and alarm, provided for and defined in the civil protection plan across different territorial levels. In particular, in each operational phase, a certain degree of activation of the civil protection structure is foreseen, in order to implement the necessary measures and actions defined in the plan itself;
- information and communication. The population must always be informed of the contents of the plan by the means considered most appropriate. The plan will specify the means which will be used to reach individual citizens, including the fragile population;
- **verification of the plan.** In order to test the effectiveness of a plan, civil protection exercises are organised: simulations aimed at testing the alert, activation and intervention procedures within the emergency coordination and management system, but also to familiarise the population with both the risk to which it is exposed and the intervention measures provided for in the planning.

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PREVENTION, PREPAREDNESS AND RESPONSE TO NATURAL AND MAN-MADE DISASTERS IN THE SOUTHERN NEIGHBORHOOD (PPRD SOUTH 3)

ACTION IMPLEMENTED BY

IN PARTNERSHIP WITH











