Safe Village
Safe People

Implementation Support Guide

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Safe Village, Safe People

Implementation Support Guide

What is the implementation support guide?

This guide is intended to provide those in charge at municipal level with some basic orientation in the form of suggestions and good practices. Local authorities should assess them and adopt them, or not, in light of their own realities and possibilities.

Its aim is to assist with the implementation, at local level, of a set of activities that could be performed with a view to ensuring the safety of people and property in cases where rural fires are imminent or already burning. Such activities would complement the Government's actions at national level.

The indications given in this document are based on the current legislation governing the protection of the forests against fire, and on national and international good practices in the fields of structural prevention, awareness-raising, notifications, shelter, refuge and evacuation.

Who is it for?

This guide is intended specifically for Municipal Councils (and, in particular, their Municipal Civil Protection Divisions and Forestry Offices) and for Civil Parish Councils, since they are the public bodies responsible for organising civil protection activities. It will also be of use to anyone involved in implementing initiatives aimed at the prevention of, and readiness for, the occurrence of rural fires.

What information does the guide contain?

The guide's contents are intended to provide practical guidelines for implementing measures aimed at making the population safer. As such, each chapter deals with a specific topic:

I. The protection of built-up areas through the management of buffer zones and the creation of self-protection mechanisms;

II. Prevention of risky behaviour that could lead to fires starting;

III. Raising the population's awareness and notifications;

IV. Evacuation of built-up areas;

V. Preparation of shelters and places of refuge.

In each chapter, some of the good practices considered to be most important will be highlighted. A schematic summary of the some of the self-protection measures to be used in contact with the population is provided at the end of the document.

Contents

Introduction

01

The extensive rural fires that occurred in mainland Portugal in the summer of 2017 led to the carrying out of studies containing recommendations that the Government took on board and acted on, in the form of resolutions by the Council of Ministers. This meant that the solutions proposed could be materialised, allowing action to be taken to prevent rural fires and mitigate their effects with immediate results. At the same time, it was intended that citizens should be encouraged to become more involved, fostering public participation and reinforcing the collective conscience that everyone is responsible for their own and everybody else's protection and safety. This goal can only be achieved if it is supported by the adoption of measures designed to effectively reduce the risks faced by built-up areas and the people who live there.

As a result of these premises, the **"Safe Village"** programme was instigated. Defined by Council of Ministers Resolution no. 157-A/2017, of 27 October, as a "Programme for the Protection of Population Clusters and Forest Protection" intended to establish *"structural measures for the protection of people and property, as well as buildings situated at the urban-forest interface, through the implementation and management of buffer zones to protect the clusters, and of strategic infrastructures, identifying critical points and places of refuge".*

The same Resolution also instigates the **"Safe People"** programme, intended to promote *"awareness-raising campaigns about risky behaviour, self-protection measures and the conducting of evacuation plan simulations, in liaison with the local councils".* It stipulates the creation of *"an automatic notification system to alert the public to days when there is a high risk of fire, with the aim of issuing warnings prohibiting the use of fire and other risky activities, as well as self-protection measures aimed at specific audiences".*

These programmes will require management by the central government, which will also develop awareness-raising campaigns and the warning systems at national level. However, given the proximity and the multiplier effect of the municipal and civil parish councils, the success of the programme depends on their involvement, both as proactive bodies in the

mobilisation of the public and as regards ensuring that the existing practical knowledge is assimilated by the local communities.

This process, which places particular importance on the municipal and civil parish councils in order to achieve a high level of social commitment to self-protection and to the necessary synergies at community level, can only be bought to fruition with **local leadership.** This is a process with no end date. Perseverance is vital insofar as the actions discussed here must become a continuous and never-ending feature of the communities' safety routines.

It is therefore important to establish guidelines that will assist local governments in developing and/or perfecting strategies aimed at protecting people and property, a goal which this Guide aspires to achieve.

Indeed, recognising that initiatives developed at local level help strengthen and fully implement the principle of subsidiarity that governs the Portuguese civil protection system, this guide actively seeks to engage the municipal and civil parish councils. The aim is to provide these local government bodies with the technical knowledge, teaching resources and support instruments needed to support them in promoting the resilience of the population, especially in respect of the following five aspects:

- **Protection of built-up areas and population clusters** – actions aimed at the management of buffer zones for such areas located on the urban-forest interface, in an effort to reduce the likelihood of rural fires affecting the buildings;

- **Prevention of risky behaviour** – awareness-raising campaigns aimed at reducing the number of fires caused by risky behaviour associated with the use of fire;

- **Awareness-raising and notification systems** – actions aimed at raising people's awareness and keeping them informed about the risk

status of rural fires and what they should do to protect themselves if a rural fire approaches;

- **Evacuation of built-up areas** – actions aimed at preparing and conducting a spontaneous or planned evacuation of a built-up area in response to an approaching rural fire;

- **Shelters and places of refuge** – actions aimed at selecting and preparing spaces or buildings in a particular built-up area for use as shelters (in enclosed spaces) or places of refuge (in open spaces) when a rural fire is passing through, in cases where this is either the most viable or the only possible option.

In order to maximise the population's resilience and the effectiveness and efficiency of the concerted action, whether to protect against rural fires or to safeguard people and property, it is important to implement strategies at local level in the five areas mentioned above.

To this end, the municipal and civil councils, as the governmental bodies in closest proximity to the population, must **mobilise the local communities,** identifying and preparing collective and individual players. This is the only way to ensure greater involvement on the part of the population, forge bonds of trust and encourage people to play an active role, bearing in mind that protection and safety are the responsibility of each and every one of us.

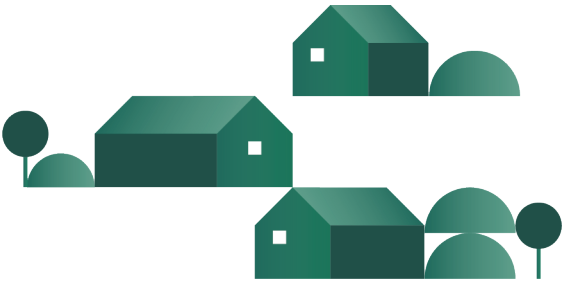
A particularly important role may be that of the **Local Safety Officer**[1] in each built-up area, who should be sufficiently familiar with the existing geographical, human and structural realities at local level.

[1] In accordance with the terminology provided for in the Single Directive for Prevention and Combat (attached to Council of Ministers Resolution no. 20/2018, of 1 March).

It is therefore important to ensure that said Official is a key element in the built-up area, ideally someone who lives there and who can voluntarily liaise between the municipal/civil parish council and the rest of the community's residents in the implementation of the different measures and in the dissemination of information.

As such, the following chapters describe some of the specific actions that can be taken by the municipal and civil parish councils to foster the implementation of the various aspects of the programmes. While they do have a common denominator, these descriptions should not be seen as a cast-iron recipe to be applied verbatim to every community; rather, they should be adapted to the size, characteristics, weaknesses and strengths of each individual community, civil parish or municipality.

Lastly, it should be mentioned that there is scope, under the National Strategy for Preventative Civil Defence and other programmes, for activities that jointly promote greater community resilience. Consequently, the actions and methodologies presented in this guide may be adapted in response to other types of risk.



Protection of Built-up Areas

02

In many municipalities there are population clusters and isolated buildings in rural settings that may justify a higher level of priority in the implementation of the Safe Village programme because they are more exposed to the potential consequences of a rural fire. It is therefore important that municipal councils adopt expeditious methods to **identify and prioritise such population clusters** (e.g. located in risk areas, close to areas of forest/scrubland, only one access road, buildings whose construction is not particularly fire-resistant or which are derelict or in ruins, etc.) **and isolated buildings that constitute critical points.**

Once the municipal councils have selected the priority clusters using the method just described, they should work in conjunction with the civil parishes, residents, forest producer organisations, forestry fire brigades and common land commissions, among others, to promote the implementation of the "Safe Village" programme.

The first step in implementing the programme is to ensure the existence of **defensible spaces** around hamlets and buildings. By keeping these areas clear of vegetation, people and property will be better protected and spaces located on the urban-forest interface (where built structures and vegetation coexist) will be better able to withstand the effects of a fire.

It is important to bear in mind that the flames do not actually have to reach a given structure for it to catch fire. This is why it is so important to keep the amount of fuel that could potentially feed a fire as low as possible in order to lower the risks arising from red-hot particles or sparks that can be carried for long distances by the wind.

The implementation of defensible spaces should be preceded by awareness-raising and question-and-answer sessions for the population to facilitate compliance with the existing legislation governing the clearing of forest spaces.

The message should be repeated again and again: perimeters kept clear of vegetation and good management of defensible spaces are property owners' most effective means of defence in the event of a rural fire.

Did you know?

Some municipal councils have been creating defensible spaces around villages (cutting down burnt trees, preparing the land, planting local species and installing watering systems) and complementing these actions by holding awareness-raising sessions to help residents understand the need to keep the land clear. Such initiatives are generally carried out with the cooperation of the local fire brigade, police and residents' associations.

Recommended methodology to assess critical points

1. Cross-reference the map showing the locations of population clusters and isolated buildings with the fire hazard map established in the Municipal Plan for the Protection of the Forest against Fire.

2. Identify the clusters located in the areas where the hazard level is highest and arrange for them to be georeferenced.

3. Analyse the characteristics of each population cluster identified:

    a. History of occurrences (in time and space);

    b. Distribution of the population by age group, physical mobility, state of health (hearing acuity, visual acuity, mental health) and nationality;

    c. The existence of any fluctuating seasonal population (e.g. emigrants, tourists, etc.);

    d. A description of the surrounding area (location [half-way up a hill, at the bottom of a valley, etc.], level of exposure to the direction most likely to be affected by a fire, extent of the interface between the built area and the forest/scrubland);

    e. Ease of access (number of access and evacuation routes and how usable they are – the fewer in number and the narrower the access routes are, the higher the risk will be);

f. Characteristics of the elements exposed to risk:

   i. Age and type of construction;

   ii. Type of occupancy (e.g. primary or secondary residence, farm storage, business, workshop, barn, etc.);

   iii. The presence of derelict or ruined buildings inside the population cluster;

   iv. The presence of uncultivated land or spaces, or areas of forest/scrubland inside the population cluster;

   v. How closely-packed the buildings are, or how widely scattered;

   vi. The number and distribution of dwellings where people who are bedridden or with reduced mobility live;

   vii. The width of the streets and turning points inside the clusters;

   viii. The location of fire hydrants, watering tanks and swimming pools;

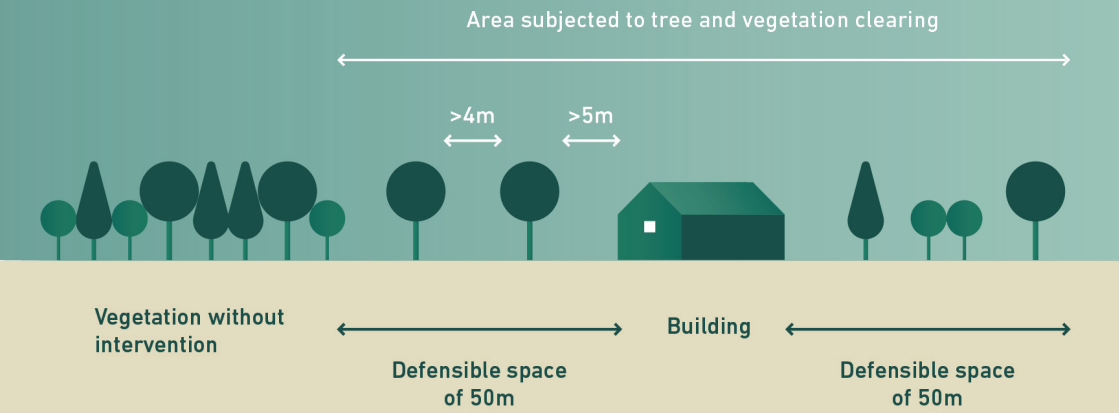
   ix. The extent of compliance with applicable legislation:

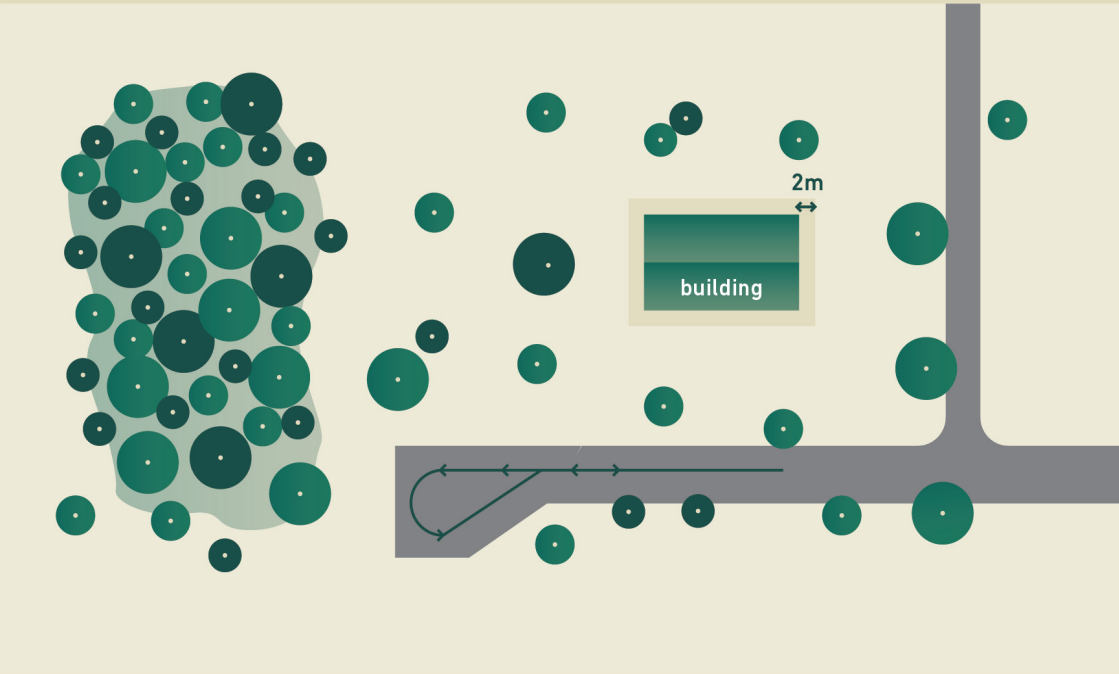
      A. The existence of a defensible space around the population cluster;

      B. The existence of a defensible space around the individual dwellings.

Defensible Spaces – Good Practices

- Create a defensible space measured from the exterior wall of the buildings and executed by the landholder. This space should extend for:
  - 50 metres when the terrain consists of woodland, scrubland or natural grazing land;
  - No less than 10 metres in rural spaces with other types of land cover.
- Inside the defensible space:
  - There must be a minimum of four metres between individual treetops, except for maritime pine and eucalyptus trees, where the distance must be no less than 10 metres;
  - To avoid vertical continuity, trees that are taller than eight metres must have their branches pruned to a height of at least four metres above the ground. Trees which are less than eight metres tall must have their branches pruned to the equivalent of 50% of their height;
  - Treetops and bushes must be at least five metres away from buildings and there must be no branches overhanging the roofs.
  - There must be no piles wood or other waste on porches or in spaces adjacent to buildings.





Source: Adapted from the Institute for the Conservation of Nature and the Forests

- The following are recommended:

  - Have a paved, non-inflammable space, between one and two metres in width, around buildings;

  - Avoid having vegetation that is very inflammable or which dries easily within a radius of 10 metres around buildings. The same applies to hedges made of species that accumulate a lot of woody material or fencing made of cane and dried heather.

  - Remove young trees and bushes growing beneath taller trees. This is an extremely dangerous situation because it allows flames to spread to the treetops;

  - Trees and bushes which can be planted in the defensible space include oak, poplar, willow, hazelnut and almond trees, which are less vulnerable to fire;

  - Remove or shred waste produced and left over during farming and forestry operations.

In order to help the population be better prepared and more involved in addressing the risk of rural fires, municipal councils should encourage communities to progressively adopt a concept of community-led prevention and self-protection of their villages. This concept puts into practice the idea that citizens should be the primary agents in civil defence (creating a first line of defence), which will help make people safer.

To this end, it is important to conduct a preliminary analysis of the **existing self-protection capabilities,** in particular:

- **The existence of water sources** which have an uninterrupted supply (tanks, deposits, ponds or weirs, preferably supplied by a gravity flow system) or which are constant (water courses);

- **The existence of operational self-protection/first-responder kits** (tanks, hoses, nozzles, motorised pumps and the respective heat-resistant extra fuel deposits);

- The existence of residents in the population cluster who are capable of **putting together a self-protection team** that can organise prevention and protection campaigns (i.e. residents who are able to operate the resources available in an emergency and who are extremely familiar with the localities, accesses and characteristics of the terrain).

If these capabilities exist, a **training programme** should be implemented and it should be adapted to the population in question and to the residents who are capable of intervening. The programme should be taught by the Municipal Civil Protection Division, the Fire Brigade and the forest firefighter teams, and should include annual refreshers.

The training programme should allow for the conducting of **periodic exercises** simulating specific aspects related to the hazards of rural fires, in order to give the population an opportunity to familiarise themselves with and try out the response procedures established for such situations.

These exercises are the ideal way to raise the population's awareness to the dangers of rural fires and simultaneously prepare them so that they will have a better understanding of how to react if they need to. The approach to these exercises should be based on the process of continual improvement: plan – execute – assess – improve.

The creation of community self-protection groups trained in self-protection and in the procedures to be adopted in emergencies should be part of a wider range of initiatives at local level, aimed at making the population more aware of the risk of rural fires.

Did you know?

Some municipalities have already started self-protection groups in built-up areas located in or adjacent to woodland. The groups have been provided with intervention kits (hoses, nozzles and motorised pumps, and water deposits), complemented by permanent fire hydrants. Group members receive training from the municipal councils, which are also responsible for ensuring that the equipment is kept in good working order. In some cases, these civil protection volunteer groups are provided with all-terrain vehicles so that they can move around in the more critical areas and conduct prevention and surveillance operations.

Additional campaigns promoting prevention and readiness can be developed at local level

Awareness-raising:

- Conduct awareness-raising campaigns to increase awareness of the risk of fire in the urban-forest interface. Said campaigns should particularly target the owners of houses and isolated storage facilities, as well as the temporary population (e.g. hikers, mountain bikers and climbers, etc., and the occupants of rural tourism properties);

- Conduct integrated campaigns for school pupils, taking advantage of and fostering the pedagogical action of the Civil Protection Clubs[2], in liaison with the Educating for Risk Guidelines[3], or other environmental or forestry groups. Take advantage of the pupils' knowledge as a means of persuading older family members;

Did you know?

When some municipal councils send out their water bills, they also include awareness-raising information about the procedures for clearing land and about self-protection measures that should be taken in the case of rural fires.

[2]Available at: http://www.prociv.pt/pt-pt/paginas/avisos.aspx?detailId=52.
[3]Available at: http://www.dge.mec.pt/sites/default/files/ECidadania/educacao_Risco/documentos/referencial_risco_outubro.pdf.

- Distribute educational materials on self-protection measures against the risk of rural fires, adapted to the specific reality of each municipality's territory, and to the different age groups, nationalities, ethnicities and characteristics of the population.

- Develop initiatives that enhance the visibility and proximity of the various civil defence agents in relation to the population, taking advantage of such events as Civil Protection Day (1 March), Tree Day (21 March) and Native Forest Day (23 November);

- Raise property owners' awareness in respect of taking out insurance;

- Put up information and signage in country villages located in areas where the risk of rural fires is highest.

Structural and intangible prevention:

- Built/rehabilitate forest trails and municipal roads in order to enable two-way traffic and equip them with places of refuge, road markings and traffic signs that will facilitate the circulation of vehicles even in very smoky conditions;

- Install/maintain water supply points and fire hydrants capable of supplying the additional water needed to fight fires, and conduct an inventory of irrigation tanks and swimming pools;

- Consider purchasing community chippers and shredders and stationing them in various villages to enable waste materials to be eliminated without resorting to burning them;

- Pay particular attention to the clearing of the interface between industrial areas and areas of forest and scrubland, as well as the clearing of vegetation growing spontaneously alongside municipal roads;

- Encourage property owners to adopt measures to manage combustibles in the areas around their livestock facilities (e.g. corrals, stables, chicken runs/aviaries, etc.), with the same characteristics used to protect buildings;

- Implement land management measures, such as encouraging the planting of low-flammability species in order to create conditions that will help prevent rural fires from spreading;

- Identify areas that people can use as collective shelters or refuges inside the village boundaries and define/implement mechanisms for the evacuation of villages;

- Assess/improve the public water supply system in order to ensure that it will keep working even when demand is at a peak;

- Encourage property owners to consider taking additional self-protection measures when building or expanding their infrastructures.

Did you know?

Some municipal councils penalise the abandonment of rural properties by increasing the IMI municipal tax.

Preparation:

- Set up and/or organise Local Civil Protection Units that report to the presidents of the civil parish councils;

- Set up a network of Local Safety Officers in the various villages, keeping their contact details (telephone, e-mail, address) in a database, in order to facilitate the dissemination of information relating to fire risk or other types of notification, especially in cases of severer weather;

- Encourage locals to volunteer to provide emergency support.

- Take stock of the location of situations of greater social vulnerability (e.g. residents with reduced mobility, young children, the elderly, etc.) that may require special attention during rural fires, especially in a context of evacuation or restricted movement;

- Take stock of periods when the floating population is at higher levels (e.g. due to popular festivities or an influx of returning emigrants, tourists, campers, cyclists or hikers, etc.);

- Identify resources (accommodation, clothing and emergency food supplies) to be used to provide aid, at civil parish level, to people who have been displaced because of rural fires;

- List and identify the means of transport to be used in the event that populations have to be evacuated;

- Organise exercises and simulations on a regular basis at local level to prepare responses to rural fires. These activities should involve civil protection agents, civic organisations, businesses and the local residents.

Did you know?

Some municipal councils have already set up Local Civil Protection Units (LCPUs) involving residents who are familiar with the terrain. Members of the LCPUs normally receive training from the Municipal Civil Protection Division, the fire brigade and the GNR.

Various municipal councils have local volunteer systems based on volunteer databases or youth volunteer programmes. These initiatives are used especially for prevention campaigns and forest vigilance during the critical period.

Prevention of Risky Behaviour

03

The management of combustible materials around built-up areas is one of the most effective ways of improving your safety when faced with the risk of forest fires. However, this effort should be complemented by awareness-raising and information campaigns aimed at mitigating and reducing the risky behaviour responsible for some of the most common causes of fire **attributable to negligence.**

As such, and in light of their knowledge of the local reality, municipal councils should identify the main types of risky behaviour to be avoided and develop appropriate awareness-raising activities aimed at specific groups of the population (e.g. farmers, forest producers, beekeepers, seasonal occupiers, etc.).

The key messages to be transmitted must focus on the need to change or eliminate risky behaviour associated with the use of fire. For example, the use of chippers and shredders should be recommended with the aim of ensuring that farm waste is destroyed by a means other than burning. It should be explained that the resulting residue can be scattered on the ground and that there are environmental and agricultural benefits.

The method employed must go beyond simply providing residents with information, since this in itself does not offer any guarantee that the information will be analysed, assimilated and acted upon. It will be crucial, therefore, to implement such programmes by establishing **direct and personalised contact with the people whom they are targeting** (which could be done either by holding awareness-raising group sessions or by door-to-door visits). The aim of this approach is to lower resistance to change and encourage the adoption of attitudes that will foster prevention and self-protection.

When contacting people, the language used must be plain and simple; it should be geared towards the typical target audience of the area in question and use should be made of easy-to-interpret images and diagrams.

The information should be **further stressed immediately before days (or periods) when the risk of fire is expected to be high, very high or at its highest,** when the use of fire is forbidden.

Did you know?

Various municipal councils conduct field campaigns to raise awareness about good practices in terms of clearing land or using fire safely (e.g. waste-burning and large-scale controlled burns). Normally these campaigns involve the GNR /SEPNA (Nature and Environment Protection Department), the fire brigade and forest producer organisations. Their target audience consists of shepherds and forest/farm producers.

Another common practice is to have parish priests and other religious leaders inform their congregations (during Sunday mass, for example) about risky behaviour, in particular the dangers of waste-burning. This strategy is very effective in rural communities, partly because the population is gathered together and partly because they are receptive to what is being said (this being a moment of respite from their day-to-day tasks).

Example of important messages

How can you ensure that extensive burning[4] is done safely?

- Obtain authorisation from the municipal or civil parish council and arrange for adequate technical monitoring by the fire brigade, forestry fire brigades or other suitably qualified people or bodies;
- Inform the fire brigade and the Municipal Civil Protection Division before and after the burning;
- Obey the restrictions in place during the critical period and on days outside the critical period when the risk is high, very high or at its peak;
- Choose damp, cloudy days. Do not go ahead with a burning if the weather is hot and dry or if there is a strong wind blowing. Doing so can heighten the risk of fire and reduce the ability to control it);
- Prepare the area where the burning will take place by clearing vegetation from a defensible space all around the burn site;
- Ensure that there is a space of at least 50 metres between any neighbouring buildings and the burn site;
- Do not burn large areas in one go as this will make it more difficult to control the fire;

[4]Burning of grazing land, stubble and cut waste which has not been piled up.

- Choose the burn site carefully in order not to put neighbouring land at risk;
- Have first response equipment at the site, i.e. water, spades, hoes and extinguishers in sufficient number to ensure the fire can be kept under control;
- Keep the whole area where the burn is taking place under close supervision. If the fire gets out of control call 112;
- When the burn is finished, make sure the fire is completely out before leaving the burn site. Make sure that the defensible space is clear and pour water on it if necessary.

Example of important messages

How can you ensure waste[5] is burned safely?

- Inform the fire brigade and the Municipal Civil Protection Division before the burning;
- Obey the restrictions in place during the critical period and on days when the risk is high, very high or at its peak;
- Opt to burn waste on damp and cloudy days;
- Do not burn waste if you are alone. Bring a mobile phone with you so you can raise the alarm if the fire gets out of control;
- Place the waste pile to be burned away from grazing land, woods, scrub-land and trees;
- Clear the vegetation from a defensible space all around the waste pile. Wet the defensible space before setting the waste alight;
- Pile the waste up into several small piles rather than one big one. Burn the waste bit by bit;

[5]Cut waste that has been properly piled up.

› Bring a recipient with water to the burn site;

› Keep the whole area where the burn is taking place under close supervision. If the fire gets out of control call 112;

› Keep the fire burning until there is only ash left. Turn the burnt waste over to make sure that it has been completely burned. Put the fire out with water or by smothering it with earth.

Awareness-raising and Notification Systems

04

With the conditions in place for the management of combustibles in the areas surrounding villages, and with the implementation of incisive awareness-raising aimed at keeping ignition under control, municipal and civil parish councils must invest in creating **preventative notification mechanisms**. The purpose of such mechanisms would be to pass on information relating to the level of risk of rural fires and to disseminate advice about the self-protection measures to be adopted in real time.

In addition to broadcasting fire risk information to the population using national platforms such as television, radio and the *MAI Mobile app,* created by the Ministry for Internal Affairs, the intention is to complement these by creating a system adapted to local realities. This would include an **information network** to notify people about the use of fire being prohibited, and about other prohibited activities or the need to adopt measures for self-protection.

For this approach to succeed, the communication channels will need to be chosen with great care. They will have to be incorporated into a **multi-channel notification** system and studies will have to be conducted to determine effective ways of taking advantage of the complementary nature of the various platforms. This particularly relates to the speed of transmission, the extent of coverage and the type of message permitted by each platform.

Potential channels for communicating notifications

The use of several different channels will be a crucial factor in ensuring that notifications (whether they are about fire risks or the need to take self-protection measures) reach as many people as possible.

To this end, notifications can be sent out to the population by various means (e.g. voice messages, sounds such as sirens, text messages or images). There are advantages and limitations to all of them so they should be chosen on a case-by-case basis, with preference being given to the ones best suited to local characteristics, since this will ensure maximum effectiveness.

Described below are some channels that could potentially be used to broadcast notifications:

Notification signs / Information panels

Use: These methods are used to communicate directly with the public in order to indicate areas or periods when risk exists, and to explain the protection procedures to be taken in the event of a rural fire. In areas visited by tourists, the messages on the signs could be written in various languages.

Advantages: They can be used as a complement to notifications if they are put in places where they can be easily seen. They can also be used as part of public awareness-raising campaigns, since the people who see them regularly can learn what they should do in imminent danger.

Disadvantages: They need to be maintained and replaced from time to time in order to ensure that the messages they contain remain legible, and the information needs to be updated daily. They are also limited insofar as they can only be used for preventative/informative awareness-raising as opposed to fostering an immediate proactive response.

Partners: Information panels about fire risk should be placed in strategic locations known to the public (e.g. in central areas or places where residents tend to gather) but also visible to anyone who happens to visit the village. The panels need to kept up-to-date and this task could be carried out by people from the municipal councils (SMPC and GTF), the civil parish councils, civil protection officers, members of voluntary organisations or (ideally) by the Local Safety Officers.

Door-to-door

Use: This method can be used in sparsely populated areas or places that are out of reach of other types of communication channels. In these situations, door-to-door visits may be an option worth exploring since it involves actual contact with the population.

Advantages: The big advantage of personal contact is that it is the most successful method in convincing people that risk does exist.

Disadvantages: This is a time-consuming and costly method, since it requires a large number of people to carry it out. To implement personal contact, a plan must be made in order to cover the entire area at risk, and the route must be rehearsed in order to calculate the time needed to contact all members of the population, as well as the means necessary to carry out the process.

Partners: Personal contact involves the use of civil protection agents (e.g. police forces) or other bodies (municipal councils, civil parish councils, parishes, scouts, social workers, volunteers, etc.) to ensure that the message is passed on. Getting Local Safety Officers involved in this task could be a very effective step.

Loudspeakers

Use: Loudspeakers are a type of equipment that can typically be fitted on to vehicles and can be heard by people in close proximity.

Advantages: They are useful for informing populations who cannot be contacted any other way. They are also a useful means of alerting the population at night when most people are asleep.

Disadvantages: The disadvantage of this method is that it can often be difficult for people to properly hear and understand the message being broadcast from a moving vehicle due to the acoustics of the location they are in.

Partners: Municipal councils can seek support from civil parish councils and police forces, which may have vehicles at their disposal which are suitable for this kind of purpose. It may also be worth considering providing Local Safety Officers with this type of equipment, if this could be viable.

Gas sirens

Use: Gas sirens can be used to alert the people in closest proximity or to "guide" people or emergency services to a particular locale in adverse conditions.

Advantages: Easy to use, these sirens are highly portable and can be heard from some distance. They could be a useful means of alerting the population at night when most people are asleep.

Disadvantages: They are fuelled by gas so their operating time is limited. People may not realise they are being used in connection with a civil defence event, so a prior awareness-raising campaign would be required.

Partners: It may also be worth considering providing Local Safety Officers or the "key people" identified by the community for the purpose, with this type of equipment, if this could be viable.

Sirens

Use: Sirens can emit powerful audible signals that carry over long distances and they are already used in Portugal as notification systems as part of the regulations associated with dam safety, so people are used to hearing them. The most modern siren systems allow voice messages to be alternated with the sound of the siren, thus making it possible to ensure that details of the risk or the actions to be taken are made known.

Advantages: Sirens are reasonably well-distributed throughout the territory and are used by various fire brigades to draw immediate attention to the need to step up readiness or to mobilise their personnel. Consequently, it would also be possible to use these sirens as notification systems.

Disadvantages: Some problems could affect the use of sirens, e.g. false alarms due to technical malfunctions, failings in the maintenance of the emergency equipment, bad weather resulting in fewer members of the population being able to be reached and the public's indifference to the sound of the sirens. There is also the problem of sirens possibly not being

audible inside people's homes or in other places where there is background noise. Another limitation of the sirens is the cost of installing them, depending on the solution, and the need to ensure that they can withstand severe weather and acts of vandalism.

Partners: Without prejudice to the installation of sirens by municipal councils, the use of sirens belonging to fire brigades, dam management bodies and factories or industries could be considered.

Church bells

Use: Various rural areas still maintain the tradition of ringing the church bells to alert residents to the main occurrences in the community. It should be possible, therefore, to work with the parishes to take advantage of this rural Portuguese custom and use the sound of the church bells as a notification mechanism. In some villages the fast and continuous pealing of just one of the bells is used to transmit a sense of urgency, resulting in the population gathering swiftly to address issues of protection and aid.

Advantages: Most villages have church bells so this is a fast-acting, low-cost system that is widely available.

Disadvantages: The information that can be transmitted is limited in scope; it is not possible to recommend different types of actions or behaviour

Partners: Apart from the collaboration of the parishes to enable the church bells to be used, a local network of people to actually ring the bells would have to be set up. Such a network could include Local Safety Officers or members of the local population ("key elements" in each village or hamlet).

Local radio stations

Use: Radio is one of the platforms most commonly used to broadcast information because a large number of people can be reached in a short space of time. The existence of notification plans and the use of standardised communications and instructions can further increase the speed at which information can be broadcast on radio.

Advantages: Local radio stations command reasonably-sized audiences in rural areas, making them an effective vehicle for the broadcasting of awareness-raising information and notification messages.

Disadvantages: They may not have the capacity to broadcast 24 hours a day.

Partners: Various municipal councils have arrangements with local radio stations to ensure that municipal information is broadcast at the request of the Municipal Civil Protection Division.

Web-TV

Use: Various municipalities have web TV at their disposal. This could be especially useful for broadcasting awareness-raising messages.

Advantages: This is a graphic platform that enables the broadcasting of images, maps, diagrams and even films explaining how people should behave and act.

Disadvantages: Web TV coverage is still very limited and there is the added disadvantage of it not being possible to broadcast a message just to one specific area.

Partners: Implementation would require partnerships to be set up with the managers of the web TV channels.

Landline telephone

Use: The sending of messages by means of landline telephones means that the information can be updated as necessary.

Advantages: They can be used to contact people in their homes even at night and in the early hours of the morning, and in places with poor or no mobile network coverage.

Disadvantages: There are no mechanisms for managing network congestion and it is also a rather costly system. Moreover, there has been a gradual decline in the use of landline telephones.

Partners: Implementation may require service contracts with the operators or voluntary registration on the part of the population.

SMS

Use: The sending of SMS *(Short Message Service)* messages is a fast method that enables information to be sent to mobile phones.

Advantages: This is a popular method in view of the large number of people who have mobile phones nowadays. Consequently, some municipal councils in Portugal are already making use of SMS listings to keep residents informed about risk situations.

Disadvantages: The success of the system depends on voluntary registration (people need to provide their contact details) and on the level of coverage that any given area has in terms of mobile networks.

Partners: For SMSs to be sent, there must be a communications contract between the operators and the local government. Nowadays, such contracts normally already exist.

Smartphone app

Use: With the appearance of smartphones and tablets, the typical functions of a mobile phone have been integrated through a set of applications ("apps") which can be installed by the users. Thanks to geolocation, the app can be a good option to use to keep the population informed.

Advantages: A huge number of Portuguese people have smartphones, making this an attractive solution for such things as risk and fire warnings.

Diadvantages: There needs to be good WiFi coverage or data transmission via GPS-R, which naturally involves costs for the users. Many elderly members of the community may not be able or know how to use them.

Partners: The app can be developed by the municipal council with support from external consultants if necessary. Notifications sent by app require the conducting of prior awareness-raising efforts among the population. These could involve the civil parish councils and representatives of the population with a view to ensuring people know that the app exists and encouraging them to download it to their devices.

Social media

Use: Municipal councils' social media channels (Facebook, Twitter, etc.) can also be exploited as a prime means of passing information on to residents, especially from the standpoint of awareness-raising. Municipal councils' own website could also feature a civil defence component enabling notifications and related information to be disseminated.

Advantages: Low cost. The possibility of complementing the message with visual supports.

Disadvantages: This method would be more appropriate as a means of raising awareness than sending out notifications. There would also need to be Wi-Fi or GPS-R coverage and there is the risk that many elderly members of the population might not be able or know how to use them.

Partners: Essentially, the civil parish council and representatives of the population from the point of view of promoting this system.

E-mail distribution list

Use: An e-mail distribution list can be a useful notification tool.

Advantages: Low cost. The possibility of complementing the message with visual supports.

Disadvantages: It requires technology such as smartphones or a PC, as well as an internet connection; additionally, it depends upon users actually checking and reading their e-mails. Elderly members of the community may not be able or know how to use them.

Partners: Essentially, the municipal and civil parish councils and representatives of the population, from the point of view of promoting this system.

Depending on the characteristics of the population and the territory, each municipal council will need to decide which notification mechanisms are the most adequate. In any event, priority should be given to taking the following actions, which complement each other:

- Work in conjunction with the civil parish councils to create **personalised door-to-door networks,** involving the Local Safety Officers or other members of the population of the built-up areas;

- Organisation of **liaison with the local radio stations** in order to ensure notifications are disseminated faster;

- Promotion of contacts with the **local parishes** so that the church bells can be used as a notification system or so that information can be passed on during religious services;

- Creation of mechanisms enabling the use of sirens.

Additionally, the following actions, requiring the support of technological systems, can also be considered:

- Development of the internet and social media component, with the creation of a mechanism permitting the rapid publication of notifications and related content;

- Creation of an app specifically for the purpose of disseminating warnings and associated information;

- Development of processes enabling the mass sending of SMSs.

These actions could be further complemented by **taking advantage of places where the public tend to gather** to broadcast awareness-raising messages. Such places could include cafés, mini-markets, hairdressers/barbers, post

offices, cobblers, itinerant salespeople (e.g. bread, gas, etc.), all of whom could be included in an **information distribution network** informing people about the most appropriate attitudes to avoid the risk of rural fires.

The network could also be used to pass on information relating to days when the risk of fire is high, very high or at its highest.

As far as the actual messages themselves are concerned, they should be practical and objective in order to promote the desired type of behaviour.

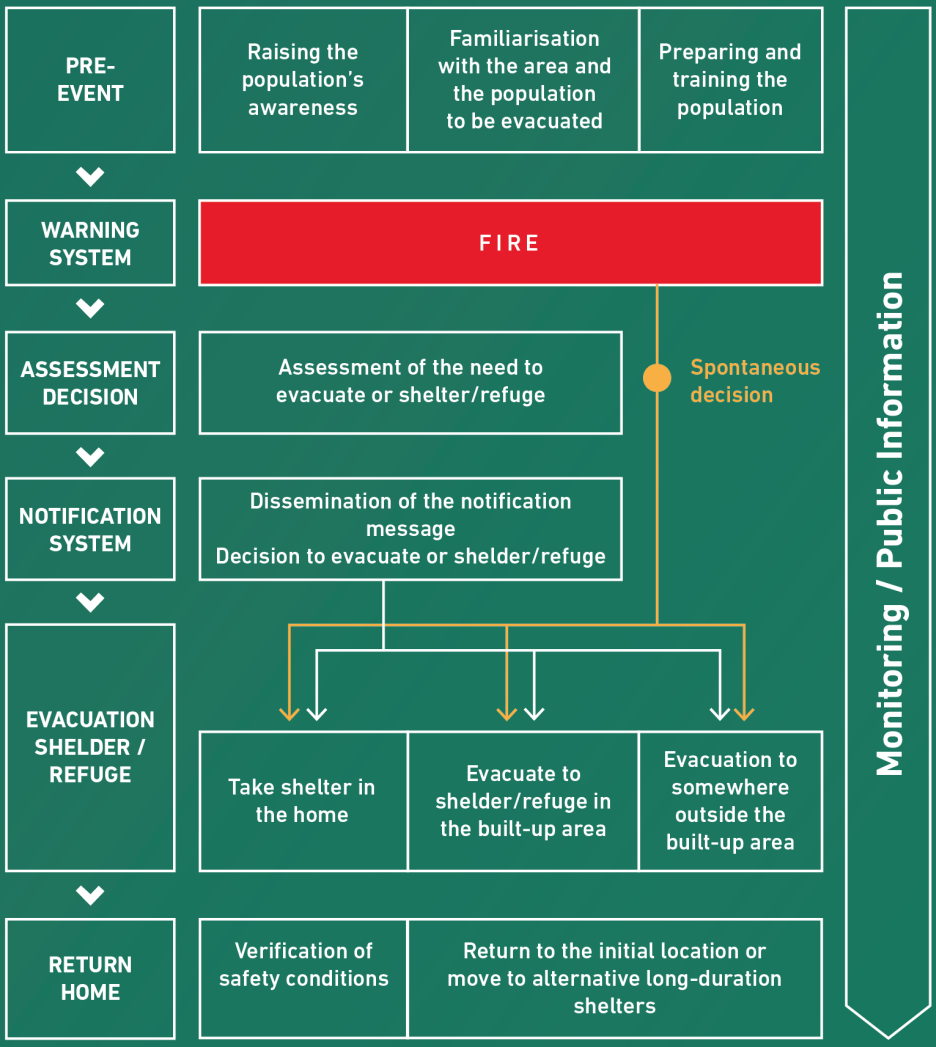
Evacuation of Built-up Areas

05

For those built-up areas where the risk of rural fires is greatest, strategies should be put in place to **systematise the set of actions needed to ensure any evacuation** is as safe and effective as possible, enabling people exposed to imminent danger to be moved to safer locations.

Planning is fundamental in order to mobilise and coordinate capacities and resources, and to safely manage the timely evacuation of people, ensuring that the necessary shelters and assistance are in place.

Such planning must involve a **preliminary study of the built-up area** and awareness-raising, preparation and training within the population. The possible scenarios of a spontaneous (with no formal plan) or mandatory evacuation of the residents (by order of the civil protection officers or department) should be envisaged. Another scenario that should be considered is that of it being preferable for the population to remain in the village (in safer buildings or spaces) rather than evacuating it – see Chapter Six.



Source: Adapted from "The MEND Guide - Comprehensive Guide for Planning Mass Evacuations in Natural Disasters"; published by "Global Camp Coordination and Camp Management Cluster" - IOM, UNHCR, IDMC; available on-line at http://www.globalcccmcluster.org/system/files/publications/MEND_download.pdf

Taking the provisions already set out in the Municipal Civil Protection Emergency Plans as a starting point, the municipal and civil parish councils, as the structures closest to the population, should develop the evacuation plans, ensuring the general protection of the people affected by the risk of rural fires. **There is no single evacuation "model" that can be applied to every situation,** so any plan must be based on the geographical reality (physical and human) of each village or hamlet, and then adapted in accordance with the specific circumstances.

Time will always be a critical factor in the evacuation process – fatalities occur more often in forest fires when people leave their homes too late and end up having their evacuation hampered by smoke and traffic jams, or find themselves surrounded by fire half-way along the evacuation route. This is why, whenever evacuation is deemed necessary, it should always been done with time to spare and not when the wall of fire is already bearing down on people. It is precisely under the latter circumstances that evacuations tend to become an uncontrolled free-for-all.

Priority should be given to **children, the elderly, people with reduced mobility** and those who are physically weak or bedridden, all of whom should be evacuated **well in advance.** In turn, this implies that work must be done beforehand to identify these most vulnerable fringes of the population.

Did you know?

Some municipal councils already have plans in place for evacuation and the control of forest perimeter access roads, and these plans pinpoint the locations of built-up areas within those perimeters.

Variables to consider when establishing the evacuation process

- Identify and profile people who may have to be moved (paying particular attention to those with reduced mobility, such as children, the elderly, the bedridden and the disabled), as well as residents who may be able to assist with an evacuation;

- The existence of areas popular with tourists (e.g. river beaches), areas that nationals of third countries occupy or frequent (possibly meaning the need to have public information systems in various languages) and areas with limited access;

- Transport capabilities (private and public transport vehicles) taking into account the number of people to be evacuated and the potential evacuation routes;

- The time needed for the evacuation, taking into account: the time needed for the evacuation order to be disseminated and accepted, resources to be mobilised, the safest evacuation routes to be chosen and the population to be moved out of the danger zone;

- Identification and selection of the players in the evacuation process (civil protection agents, volunteers from local organisations, Local Safety Officers, influential citizens, etc.);

- Identification of evacuation routes and signalling of places of shelter or refuge (for example, on a map of the built-up area/village, to be posted in strategic places);

- Identification of places where the surrounding area has been cleared of vegetation and where livestock can be brought to, if necessary, along with food and water, if possible.

A well-prepared population that is familiar with their **village's evacuation plan** can contribute even more to lowering the number of potential victims. As such, it is important that residents are involved in the planning and this is why the municipal civil protection division and the civil parish councils should strive to ensure their involvement.

This means that **the population will have a word to say about the way in which evacuations should be handled,** helping to identify solutions and resources, in particular to meet the needs of specific groups of residents. As a result, the residents will be more aware of the behaviour they should adopt and will be less likely to resist an evacuation order.

Municipal councils should **test their evacuation plans** by staging training sessions and exercises that will allow them to assess such aspects as: the functionality and understanding of the notification mechanisms, the time needed for the evacuation, the suitability of the intended evacuation routes, and the care required in terms of priority evacuees or those with specific needs.

The lessons learned from these exercises should translate into improvements to the evacuation plan.

Did you know?

Some pioneering initiatives are already underway in various Portuguese municipalities, with certain residents being classed as “trustees” (people who have earned the trust of their peers in the village) who will be entrusted with the keys of dwellings in situations of risk and/or evacuation. The aim is to streamline the evacuation process by involving people who are known to the residents and who are extremely familiar with the terrain, as well as by using vehicles that the residents recognise.

In some municipalities, simulated evacuations of built-up areas are carried out as part of test exercises for the Municipal Civil Protection Emergency Plan.

Model Evacuation Plan for a Built-up Area

1. Situation

- Brief description (2-3 paragraphs) of the situation (mentioning the risk of rural fire and the population potentially affected).

- Include a support map referring to the village or built-up area to be evacuated.

2. Entities Involved

- Based on the provisions of the Municipal Civil Protection Emergency Plan, indicate the entities/people who will be involved in the Evacuation Plan (e.g. GNR, Red Cross, Scouts, volunteers, Local Safety Officers, "key elements" residing in the village, etc.).

3. Warning Procedures

- Indicate the procedures to be adopted for the operational notification of all entities/people involved regarding the occurrence of a rural fire requiring the evacuation of the village.

- For example, decide in advance which mechanisms (direct telephone contacts, SMS or others) will be used by the Municipal Civil Protection Division to ensure the timely notification and readiness of the entities/people responsible for notifying residents, evacuation and temporary accommodation.

4. Notification Procedures

- Indicate the procedures to be adopted for the purpose of notifying the population of the village that they will have to evacuate.

- For example, decide if residents will be contacted directly by phone or if personnel from the Municipal Civil Protection Division, Civil Parish Council, GNR, Fire Brigade or local volunteer associations will be sent out to notify them in person.

5. Evacuation procedures

- Indicate the procedures to be adopted for the orderly evacuation of the village, evacuating people from their homes as a precautionary measure and directing them to a safe area (outside the village) or a refuge/shelter (inside the village), by referencing and signalling the corresponding evacuation routes (e.g. on an emergency map of the village).

- Prioritise the evacuation of children, the elderly, residents with reduced mobility and those with cardio-respiratory diseases.

- Designate meeting points from which evacuation to a space outside the village will begin, as well as the means of transport to be used to evacuate the population and the requirements for the protection of property in the evacuated areas.

- Ensure the involvement of the police in the fulfilment of the evacuation orders.

6. Shelter/refuge procedures

› Designate the places of shelter/refuge in the village that can be used if the village cannot be evacuated (See Chapter Six).

7. Temporary accommodation procedures

› Designate suitable temporary accommodation sites for the displaced population and arrange for them to be made ready (food supplies, blankets and warm clothing, medical assistance, social support, psychological support, etc.).

› Identify entities/people who are responsible for the support logistics (i.e. who supplies what).

Notwithstanding the planning undertaken by the municipal and civil parish councils in readiness for the evacuation of built-up areas, they should also **raise the populations' awareness** about the possibility of having to leave their homes. As such, an effort should be made to ensure that the residents are informed of the practical attitudes they should adopt if necessary.

Particular emphasis should be placed on informing residents of the potential evacuation routes and the locations where they can take refuge (see Chapter Six). These should be divulged through the **installation of specific signage** (an evacuation map), preferably at the entrances to the village and/or at strategic points that are easy to see and access.

If there are any tourist establishments in the area (e.g. local accommodation, guest houses, rural tourism properties, etc.), consideration should be given to providing guests staying there with a leaflet containing a map of the evacuation route.

Example of a Village Evacuation Map


Water Points
Occupied House
Unoccupied House
Roads
Dead End
Collective Shelter
Collective Refuge
House

Places of Shelter and Refuge

06

In many situations, a shelter or collective refuge (depending on whether it is in a closed or open space, respectively) in a safe place inside the village may be the most suitable option in light of an approaching rural fire. People will be able to be protected from the heat (or, at least, from direct exposure to the flames or radiation) and smoke, as well as from airborne objects.

In fact, newer buildings are generally a safe place as long as they and their surroundings are kept in good condition, clear of scrubland and with active management of combustibles in order to provide greater safety. The same applies to large spaces inside the villages, as long as they meet the same safety conditions.

To this end, the Municipal Civil Protection Divisions should, with the support of the civil parish councils and representatives of the population, **identify communal spaces** (e.g. sports halls and courts, churches, swimming pools, schools, multipurpose halls, community centres and public installations, etc.) **or easily-accessible residential buildings** inside the village, that **may be more fire-resistant** and which meet the conditions to function as a shelter. Such spaces need not be very big – in some small hamlets, for example, a house could be big enough for a limited number of people to take refuge for a period of up to one hour.

Similarly, potential **open-air refuges** should be sought out (e.g. football pitches, churchyards, large and centrally-located squares, fairgrounds, water tanks, wash houses and swimming pools, etc.); these should be located away from vegetation and be easily accessible.

In the case of medium-sized and larger built-up areas, or if the residents' mobility is limited, it would be preferable to identify more than one place of shelter or refuge in different areas of the cluster in order to have alternatives in an emergency.

Requirements for a shelter

A collective shelter must be a closed space where people will be safe before or during the passage of a fire. An existing building may be used as a shelter or one may be built from scratch.

The requirements detailed on the following pages should be considered as preferential when choosing a safe place for use as a collective shelter.

These requirements will also be valid for the **individual preparation of dwellings** by residents so that the buildings in question will be better able to provide shelter if it should be necessary to stay inside them.

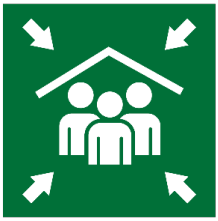
- Located on the outskirts of the built-up area (in denser urban hubs, a central space will always be preferable);
- Located outside the top of a hill or in a gully (unless there are other factors that guarantee the safety of the space);
- Located in a space that is easily identifiable and recognisable even when visibility is low because of smoke;
- Existence of a defensible space in the surrounding area (see Chapter Two) where combustibles have been properly managed;
- Existence of a break between the building and the forest, for example stone walls, patios, lawned areas or flower beds that will act as barriers to prevent the fire from spreading;
- No piles of wood stacked up against the building (on porches, for example);
- Preferably, existence of sprinklers or watering systems in the surrounding spaces;
- Roof made of non-combustible material, such as tiles, slate or cement, and fire-resistant insulation inside;
- Roofs, gutters, parapets and corners that contain no vegetable debris such as dry leaves, pine needles, branches or moss;
- Chimneys fitted with fine spark-retention nets;
- Exterior walls that are either fire-resistant or have a fire-resistant coating;
- As high a ceiling height as possible;

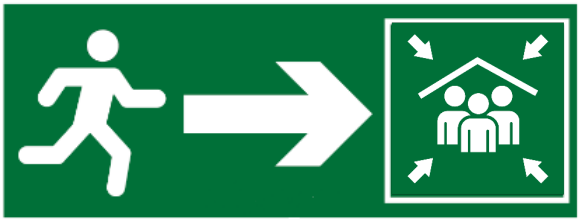
- Airtight doors and windows (but which can opened enough for ventilation), with fireproof frames and, in the case of the windows, protected by blinds or shutters;
- Double-glazing and tempered glass;
- At least two entrances/exits (on different façades), complemented by doors that reduce the passage of heat and smoke and that open outwards;
- No steep stairs or narrow or low doors that could hamper mobility (in shelters built from scratch there should be ramps, not doors, at the entrances);
- Accessible to wheelchairs and people with reduced mobility;
- Existence of a water point;
- No abandoned or ruined buildings in the surrounding area and no tufts of vegetation.

Places of shelter or collective refuge should be properly marked with specific signage to make them easily identifiable. Accesses should also be marked.

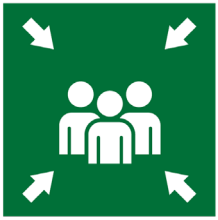
Examples of specific signage that may be used to identify collective shelters or places of refuge and the respective access routes

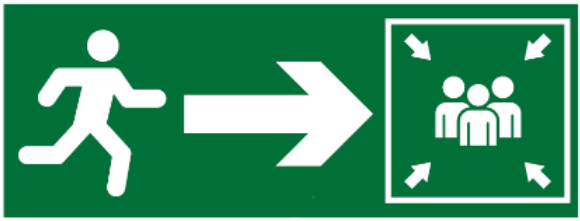
Plaques identifying Collective Shelters





Plaques identifying Collective Places of Refuge





On arrival at the shelter, people should have access to facilities that will satisfy their basic needs and safeguard their safety and well-being.

Consequently, these places must offer the basic conditions necessary for several dozen people to remain inside them while the fire passes (typically, the flames will pass in less than 30 minutes, although there are reports of longer time frames, in cases involving particularly dangerous surroundings). It is therefore important that they are equipped with a **shelter kit** containing certain basic items.

The municipal council should designate the entity/person who will be responsible for keeping said kit in good working order during the period when the fire risk is at its greatest. They will also be responsible for checking the conditions of the shelter and the surrounding area periodically (in May each year, for example).

Contents of the Collective Shelter Kit

The shelter kits, which should be packed in boxes or rucksacks, should ideally contain the following items:

- Bottled water (1 litre per person) and non-perishable foodstuffs (e.g. biscuits);
- A first-aid kit;
- A radio – powered either by batteries or by a dynamo;
- One or more torch(es) – with batteries (and spares) or a dynamo;
- Special items for infants, the elderly and the disabled;
- Toiletries;
- Particle-filtering face masks;
- Pet food and water;
- A whistle or other device that emits a loud noise, allowing others to detect the location in the dark or at times when visibility is poor.

As previously mentioned in respect of evacuations of built-up areas, it is important that **awareness-raising campaigns** are carried out (during which the population should be informed of the location of shelters or places of refuge), as well as training sessions and exercises. Doing this will make it possible to identify opportunities for improvement; for example, in terms of functionality and capacity, access conditions, distances to be covered, the existence and condition of signage and the operability of the shelter kit.

Similarly, it is important to make people aware of what they should do if the fire's progression makes it impossible for them to get to a collective shelter/place of refuge and the only option is to remain inside their homes.

Note that, irrespective of whether people go to a shelter or stay in their homes, **they must get out as soon as the fire has passed** (often buildings only begin to burn after the fire has passed). Residents who are physically and mentally strong enough to do so should assist others and make a visual assessment of the damage to the buildings. Special attention should be paid to any areas that are still burning around the shelters/places of refuge or houses in the village (e.g. roofs).

Did you know?

In some Municipalities, they have already implemented the practice of sheltering the population in places provided for this purpose, in the context of exercises to test the Municipal Civil Protection Emergency Plan.

Self-protection Measures

07

If you are near a fire:

- Call 112 immediately;
- If you are not in danger and if you have appropriate clothing (typically long sleeves, boots and gloves), try to put the fire out with spades, hoes or branches;
- Do not hamper the actions of the different fire-fighters or other emergency services and obey their instructions;
- Move your vehicle off the access routes to the fire;
- If you notice people behaving in a risky manner, inform the authorities;
- If the fire is close to your house, warn the neighbours, disconnect the gas and soak the walls of your house and the bushes surrounding it with copious amounts of water.

If a fire approaches your house:

- Warn the neighbours;
- Soak the walls, roof and an area of 10 metres around the house;
- Close doors, windows and other openings, and close blinds or shutters;
- If you have furniture, tarpaulins or wood near the house, move them;
- If it is safe for you to do so, disconnect gas bottles and move them to a safe place;

- Move anything that could burn away from the windows and put wet towels along the crevices;
- If you are not in danger, put out small fires with water, earth or green branches.

If you find yourself surrounded by fire:

- Go to a shelter or collective refuge. If there is no shelter nearby, look for an area that is preferably flat and has water or little vegetation;
- Breathe close to the ground, if possible through a wet cloth, to avoid inhaling the smoke;
- Cover your head and the rest of your body.
- Use a damp cloth to protect your face from the heat and smoke.

Be prepared to evacuate:

- Keep the most important household documents and pet health documents in a safe and easily accessible place (e.g. in a suitcase or bag), so that they can be transported quickly in the event of having to evacuate the built-up area. Consider keeping a copy of the documents at a relative's house or scan them and store them on a memory stick.

- Have an **evacuation kit** packed in readiness and containing essential items for use in an emergency:

  - ☑ A first-aid kit;
  - ☑ Your usual medication;
  - ☑ Water and non-perishable food;
  - ☑ Toiletries;
  - ☑ A change of clothes;
  - ☑ A radio, a torch and a whistle;
  - ☑ Money;
  - ☑ A list of family and friends' contact details.

- Prepare your home for a quick exit:

  - › Ensure that the exits from each room and from the building itself are clear, with nothing blocking the way;
  - › Ensure that all exit doors can be opened easily;
  - › Choose and pre-plan escape routes from each room (normally a door and a window);
  - › Designate meeting points and make sure everyone in the family is aware of them.

In the event of preventative evacuation, carried out in advance to the outside of the built-up area:

- Remain calm;

- Obey the evacuation orders given by the authorities. Do not go back;
- Assist children, the elderly or family members with reduced mobility;
- Take your evacuation kit. Do not waste time gathering unnecessary items;
- Take your pets with you;
- Close doors and windows behind you on your way out, as well as any other openings (e.g. ventilation grids) that may allow sparks to get inside;
- Leave the exterior lights switched on;
- If you have time and can do so safely:
  - Move any curtains and sofas away from the windows and remove garden furniture, tarpaulins and firewood that may be on porches or next to the house;
  - Disconnect gas bottles and move them to a safe place, e.g. immerse them in tanks to minimise the risk of explosion;
  - Soak the area all around the dwelling (especially the side facing the fire) and the roof;
- Use your mobile phone only when essential;
- Keep abreast of the instructions issued by the authorities through the media or other information channels.

In the event of sudden evacuation to a shelter or collective refuge within the built-up area:

- Protect your body from the flames and heat with suitable clothing (preferably trousers and something with long sleeves, gloves and a handkerchief to protect your face from the heat and smoke);
- Keep your clothes dry (water is very conductive so wet clothing heats up quickly, which may increase the severity of burns);
- Always choose the safest way out of the house (i.e. the one where there is the least amount of smoke and heat). If you absolutely must cross a smoke-filled space, do so by staying as close to the floor as possible;
- Go quickly to the closest designated shelter or collective place of refuge in the village. Do not go back until you receive the OK to do so.

In the event that you are unable to get out of the house and cannot escape to a shelter or collective refuge:

- Remain calm;
- Protect your body from the flames and heat with dry (preferably made of non-synthetic material) and suitable clothing (preferably trousers and something with long sleeves, gloves and a handkerchief to protect your face from the heat and smoke);
- Move any curtains and sofas away from the windows and remove garden furniture, tarpaulins and firewood that may be on porches or next to the house;

- If you can do so safely, disconnect gas bottles and move them to a safe place, e.g. immerse them in tanks to minimise the risk of explosion;
- If you can do so safely, soak the area all around the dwelling (especially the side facing the fire) and the roof;
- Close doors, windows and any other openings (e.g. ventilation grids) that may allow sparks to get inside;
- Put wet towels along the crevices of doors and windows;
- Stay away from the walls;
- Seek shelter in the rooms on the far side of the house from the approaching fire;
- Keep pets in a single room of the house and preferably accompanied. Never let them go outside;
- Use your mobile phone only when essential;
- Wait until the fire has passed and then check if there are any areas still burning around the house or on the roof.

Safe Village, Safe People

Appendix – Implementation Checklist

Available for printing at: www.prociv.pt

REPÚBLICA PORTUGUESA
ADMINISTRAÇÃO INTERNA

EMERGÊNCIA E PROTEÇÃO CIVIL
AUTORIDADE NACIONAL

To-do List

- ○ Identify and assess critical built-up areas
- ○ Protect the built-up areas by means of defensible spaces
- ○ Identify the Local Security Officer
- ○ Identify and create mechanisms to notify the population
- ○ Identify and prepare shelters and places of refuge
- ○ Get the shelter kit operational
- ○ Draw up the Evacuation Plan
- ○ Conduct training and exercises that will enable opportunities for improvement to be identified
- ○ Set up signage and make sure it is properly maintained

Protection of Built-up Areas

Assessment of critical points

- ○ Cross-reference the map showing the location of built-up areas with that showing the risk of fire
- ○ Identify built-up areas located in places where the risk is higher
- ○ Characterise selected built-up areas

Defensible spaces

- ○ Clear defensible spaces starting from the exterior wall of the buildings
- ○ Make sure there is sufficient distance between treetops
- ○ Avoid vertical continuity

Assess the built-up area's existing self-protection capacity

- ○ Water points
- ○ Operational self-protection/first responder kits
- ○ A resident capable of taking on the role of Local Safety Officer
- ○ Residents capable of making up a self-protection team – community self-protection group

Training programme

- ○ Conducting periodic exercises with the population
- ○ Training given by the Municipal Civil Protection Division, Fire Brigade, GNR police and Forestry Fire Brigade
- ○ Annual refresher courses

Prevention of Risky Behaviour

Identify main types of risky behaviour

- ◯ Burning of waste
- ◯ Extensive burning of grazing land, stubble

Develop targeted awareness-raising activities for specific groups

- ◯ Farmer
- ◯ Forest producers
- ◯ Beekeepers
- ◯ Seasonal occupants

Identify key messages to transmit

- ◯ Simple and easy-to-understand language
- ◯ Emphasis on the need to change or eliminate risky behaviour
- ◯ Reminders during the run-up to periods of greater fire risk (use of fire forbidden)

Implementation

- ◯ Group awareness-raising sessions
- ◯ Door-to-door awareness-raising

Awareness-raising and Notification Systems

Notifying people about the use of fire being prohibited

- ○ Information panels
- ○ Door-to-door
- ○ Local radio stations
- ○ Web TV
- ○ SMS
- ○ Smartphone app
- ○ Social media
- ○ E-mail distribution list

Real-time notifications about self-protection measures to adopt

- ○ Door-to-door
- ○ Loudspeakers
- ○ Sirens
- ○ Church bells
- ○ Local radio stations
- ○ Landline telephone

To-do List

- ○ Implement door-to-door notification networks with Local Safety Officers and other elements
- ○ Arrange liaison with local radio stations
- ○ Contact local parishes with a view to using their church bells
- ○ Define mechanisms enabling the use of sirens
- ○ Identify places people often go to and which can be used to disseminate information

Evacuation of Built-up Areas

Draw up Evacuation Plan

- ○ Get the population involved
- ○ See provisions of the Municipal Civil Protection Emergency Plans
- ○ Analyse the profile of potential evacuees
- ○ Analyse the existence of tourist areas (e.g. river beaches)
- ○ Identify transport capabilities (individual and collective)
- ○ Analyse the time available for evacuation
- ○ Designate the people to be involved in the evacuation process (agents, citizens, volunteers)
- ○ Identify routes

- ◯ Identify areas suitable for shelters/places of refuge
- ◯ Designate places that livestock can be moved to

Content of the Evacuation Plan

- ◯ Situation (include maps)
- ◯ Bodies involved (see Municipal Civil Protection Emergency Plan)
- ◯ Warning procedures (operational notification)
- ◯ Notification procedures
- ◯ Evacuation procedures
- ◯ Shelter/refuge procedures
- ◯ Temporary accommodation procedures

Evacuation procedures

- ◯ Indicate safe area (outside the built-up area) or refuge area or shelter (inside the built-up area)
- ◯ Signage on the evacuation routes
- ◯ Priority evacuation for the more vulnerable
- ◯ Location of meeting points
- ◯ Means of transport
- ◯ Protection of evacuated properties/Involvement of the security forces
- ◯ Conducting of exercises

Place of Shelter or Refuge

Collective shelter (enclosed space) – Fire-resistant buildings

- Sports pavilions
- Multipurpose sports halls
- Churches
- Swimming pools
- Schools
- Multipurpose halls
- Community centres
- Public buildings
- Easy-to-access residential buildings

Collective refuge (open space) – Places away from vegetation and which are easy to access

- Football pitches
- Churchyards
- Central squares
- Large squares
- Fairgrounds

- ◯ Water tanks
- ◯ Wash houses
- ◯ Swimming pools

Signage

- ◯ Identification of the collective shelter
- ◯ Identification of the collective place of refuge
- ◯ Accesses

Shelter Kit

- ◯ Bottled water
- ◯ First-aid kit
- ◯ Radio
- ◯ Flashlights/torches
- ◯ Special items for infants, the elderly and the disabled
- ◯ Toiletries
- ◯ Pet food and water

Translation:

safe communities portugal