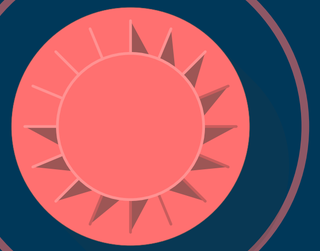
SEGURANÇA 4.0

Fire Drill.

Simplified manual



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contents.

introduction.

Fire Safety in Buildings (FSB) is based on three distinct pillars

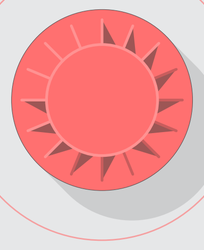
Inappropriate behaviour of building users via their action or inaction often compromises existing passive and active measures. For this reason, current FSB (Fire Safety in Buildings) regulations focus especially on self-protection measures, including fire drills and training.

Drills are exercises in which emergency situations are simulated according to a pre-set scenario, involving all occupants of the building, with particular involvement of the Safety Team. External resources (firefighters or other security forces) may also participate. Main goal of drills is to test the effectiveness of the Self-Protection Measures, to train the occupants and the Safety Team, as well as to improve the evacuation and response procedures.

why preform drills?

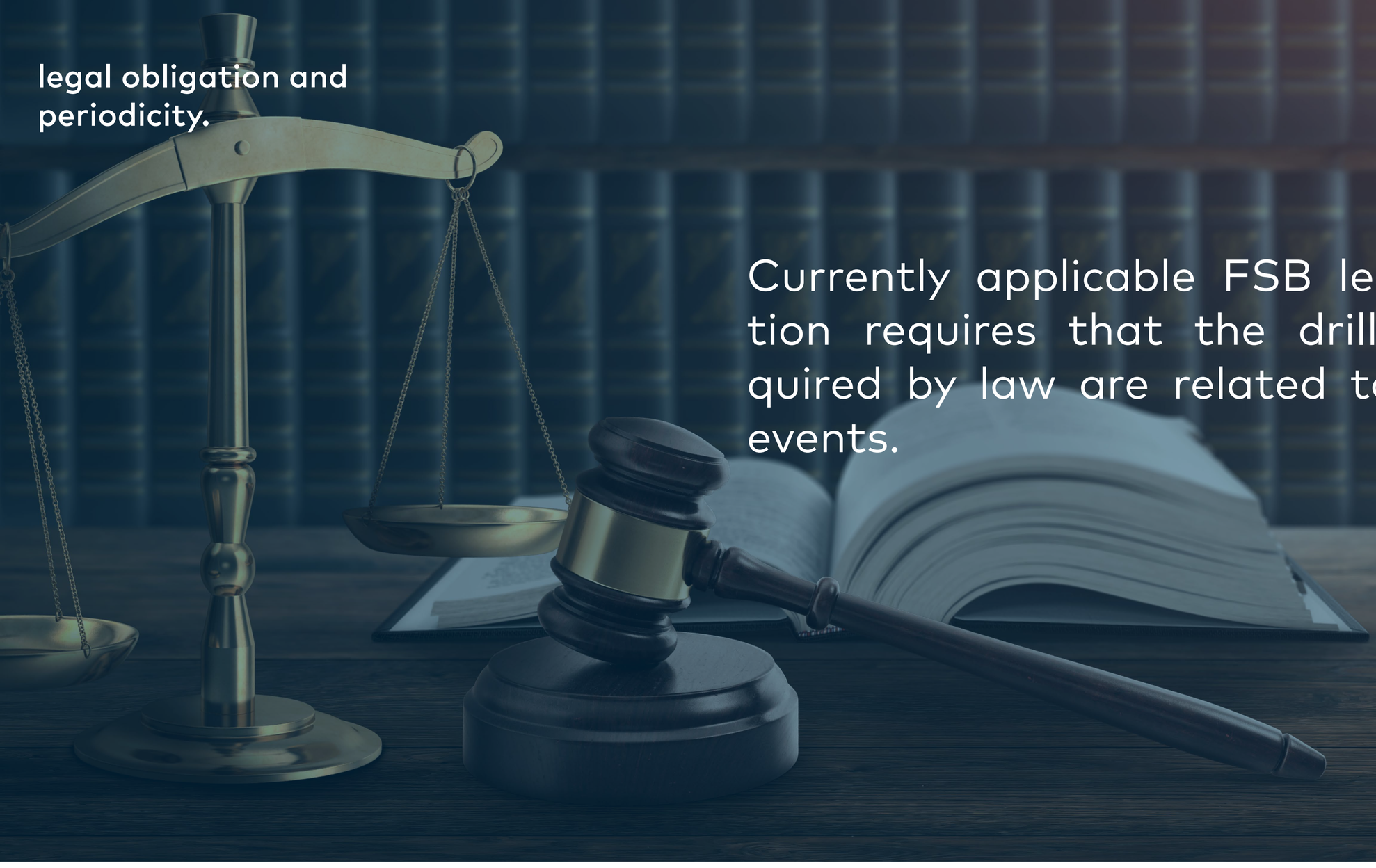
A fire may mean the loss of human life, immediate loss of assets and significant financial losses resulting from a number of factors, such as:

- Compensations to employees or third parties
- Production delays
- Loss of important information
- Social and reputational damage
- And so forth
- Temporary interruption of business
- Indirect damage to raw materials and goods
- Loss of customers



Drills are, without a doubt, the best tool to test and implement self-protection measures, as well as to ensure a practical evaluation of the training provided.
And they also help to prepare people to act efficiently in an emergency.

legal obligation and periodicity.



Currently applicable FSB legislation requires that the drills required by law are related to fire events.

The obligation to carry out drills and their frequency depend on the Usage Type[3] and corresponding Risk Categories[4]

Usage type	Risk Category 1st	2nd	3rd	4th	Drill frequency (years)
I	⊗	⊗	⊗	! (1)	2
II	⊗	⊗	!	!	2
VI IX	⊗	!	!	⊗	2
VI IX	⊗	⊗	⊗	!	1
III VIII X XI XII	⊗	!	!	⊗	2
III VIII X XI XII	⊗	⊗	⊗	!	1
IV V VII	⊗	! (2)	!	!	1

(1) Only for common areas; (2) With D or E risk locations;

However, shorter times between self-protection measure drills may be applied to make up for possible non-compliances

3 Usage type?

Usage type classifies the use of any dominant building or venue.

4 Risk category?

The Usage type os buildings and venues, in a fire risk matter, can be 1st, 2nd, 3rd and 4th Risk Category, being considered respectively low risk, moderate risk, high risk and very high risk.

5 Compensatory measures

The compensatory measures aim to mitigate the weaknesses that result from non-compliance with current FSB regulatory requirements.

team.

The person designated by the Safety Manager always carries the legal responsibilities of a Safety Delegate

However, taking into account that the Safety Delegate may not be present in an emergency event, replacement persons need be appointed.

choosing.

Members selected to be part of the Safety Team should have thorough knowledge of the building/venue where they work as well as of the main existing fire hazards.

People with a suitable appropriate profile and soft skills must be chosen to perform the functions assigned to them. Generally speaking, leadership positions in the Safety Team should be assigned to people who already hold leadership positions in their everyday working life.

communication.

One of the most frequent weaknesses is in communications area. Team members should report the status of their current tasks to the safety centre to support decisions to be made by the Supervisory Officer in

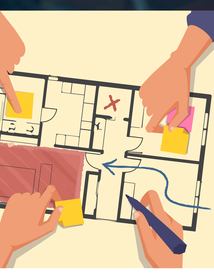
motivating.

The fire drill can also be used as a team-building opportunity, in which everyone participates in an active and engaged manner.
You can also increase motivation the Safety Team by having firefighters and/or other external rescue services partake in the drills.

Seeing the firefighters 'acting ' as well usually encourage people to participate more proactively.

fire drill guide.

Fire drills should be planned adequately, and this planning may eventually result in the creation of a guide. Besides detailing the proposed scenario, such as guide should also include instructions for all Safety Team members with active tasks during a drill.



Planear.

The success of a drill depends entirely on how thorough planning is since those involved have a clearer understanding of the necessary procedures.

Upon acquiring routine after some drills, the Safety Team will feel confident about what to do in a basic situation, so it is important to introduce unforeseen events in the planning. Some unforeseen events can be kept as a surprise for certain participants

The simulation planning must include the following information:

date.

Choose a date that doesn't jeopardise the company's operation and that allows you to involve as many employees as possible

Do not forget small details such as weather conditions and so not to coincide with external events that may disrupt the drill.

place and time.

Where and at what time will the fire event be simulated?

scenario.

The setting chosen should take into consideration several factors, such as existing weaknesses or existing risk, type of building occupants or existing fire safety systems, etc.

The degree of difficulty of the scenarios should increase over time.

Note also that you should analyse any issues occurred in previous drills and aim to improve the quality

participants.

A drill should not only involve the Safety Team, but also all employees and staff, regardless of their rank in the hierarchy.

Although the legislator advises for municipal firefighters and civil protection to be present to observe the drills, their presence is not mandatory. It should be noted, however, that the presence of firefighters and civil protection as observers is extremely useful as they provide an external point of view, and their technical expertise enables collaborate proactively in evaluating of the drill, contributing to improving the self-protection procedures.

The presence of other external entities may also be requested as observers. Their presence will add a certain amount of stress and tension for the Safety Team members, pressure that can be similar to what happens during a real-life event.

list.

During the fire drill, observers will need to log all activity that they observe. These logs should ideally specify the time at which an action occurred to allow for comparing the times logged by the different observers.

The items above should be logged on an evaluation grid so that the collected information is homogeneous and comparable. The grid needs to be be distributed to the observers during the debriefing, during which basic explanations about its completion should be provided, encouraging observers to familiarise themselves with it before the drill begins

The log prepared by the observers may be enhanced with photographs or videos taken by the observers themselves.

timeline.

The timeline is a fundamental working element when planning a drill. It provides a summary script for the main actions to be taken and the times when these are expected to take place.

It should be noted that the timeline should not be overly long and detailed to ensure an overall view of the fire drill objective.

Note that as many actions will take place concurrently, the times shown are only a speculative.

The times logged by the different observers by the end of the fire drill will assemble into the actual timeline.

safety instructons.

Another fundamental component of a drill guide are the safety instructions, which should be prepared for each team or for members with specific roles/tasks to fulfil, such as performing response and evacuation.

The Response Team must have prior knowledge of the existing safety systems in the building. This means not only knowing what systems there are, but also what they are for, and when and how they should be triggered.

Training is required prior to the fire drill to provide knowledge of the systems. This may comprise a classroom component with slideshows, but it should also include visiting the places where the systems are triggered so that it is clear to all what is being activated where.

comunicação.

In general, drills should not be announced beforehand, i.e., they should come as a surprise.

However, in accordance with applicable legislation, 'occupants shall always be given prior information about drills being carried out, but a scheduled date and/or time need not be specified'. In other words, the Safety Delegate need not announce what the scenario is or when exactly the drill will be undertaken, but to avoid panic situations, people must be informed in advance that there will be a drill.

This surprise drill with no predefined course of action shall only be carried out after the team has been trained properly and is familiar with the actions to take, otherwise it may be counterproductive as people get demotivated by lacking success.

conducting the drill.

Once the drill guide has been prepared and presented to the Safety Team, the time has come to put it into practice.

briefing.

Before carrying out the drill, there shall be a prior meeting where the fire scenario and safety instructions are reviewed. This meeting may include stakeholders as well as observers.

It provides the last occasion to clear any doubts and agree on minor details. The observers synchronise their stopwatches and specify the locations where they will observe the action.

The alarm code word ('drill, drill, drill') should also be recalled in this meeting so as not to mislead firefighters into believing that it is a real situation. A code should also be defined in case a real situation occurs during the drill, in which case the drill must be interrupted and response action must take place. This code could be, for instance, 'real, real, real'.

drill.

Once all intervening parties are at their usual workplaces carrying out their habitual work functions and the observers are positioned in the previously defined positions, the drill should commence.

The moment the detector issues the alarm is thye the drill starts, and from here one all actions should run continuously, and even if there are failures in the systems, the drill must continue. For instance, if there is a failure in the alarm system, the drill shall proceed with a voice alarm.

During the course of the drill, all participants perform the actions previously agreed upon, and the observers record the times and take any possible photographic or video records.

debriefing.

Immediately after the drill, a meeting shall be held with all stakeholders, team and observers to share experiences and observations.

The Safety Delegate needs to be supported by someone previously appointed to assist in preparing the drill report. Any opinions, be they positive or negative, must be noted at the meeting so that they can later be included in the report to be drawn up.

The observer grids must be collected and the data be processed and included in the drill report.

drill report.

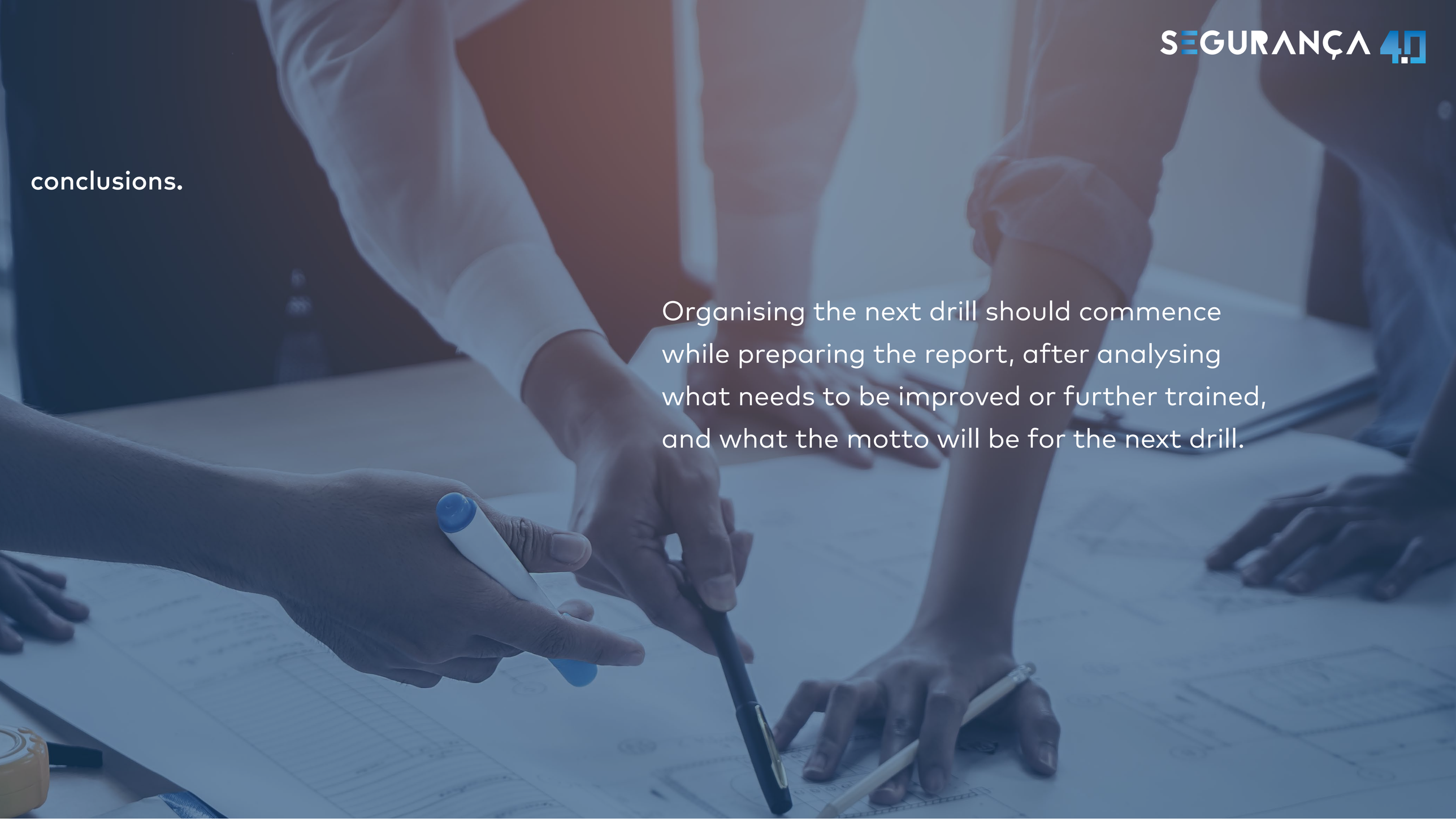
After the drill, a report shall be drawn containing the facts recorded by the observers and any comments made at the debriefing meeting.

This report shall be archived to form part of the Safety Records and be kept for 10 years.

The report is a key element for assessing evolution of the readiness for a real incident, as well as for identifying required improvements both in the building (passive or active measures) and the SPMs.

It is a constant work in progress.

After drill evaluation has been completed, any corrections/amendments to the special instructions should be initiated on the spot, improvements be implemented and planning for a new drill commence immediately.



conclusions.

Organising the next drill should commence while preparing the report, after analysing what needs to be improved or further trained, and what the motto will be for the next drill.

Carrying out of the first fire drill marks the beginning of a new cycle for an establishment/building/venue's emergency organisation. People are better prepared to face an emergency, but the preparation efforts do not end there.

Carrying out a fire drill may show that improvements to Self Protection Measures are needed. These improvements require approval of the Safety Manager, and need to be recorded in the Safety Logs and then communicated to the Safety Team. In this case, they need not be submitted to ANEPC for their opinion.

Only consistent practice from ongoing training will prepare the team efficiently to face a real fire situation.

Who knows saves!

In an emergency, with stress and panic, only previous practice and training allow people to act correctly.

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Datasheet.

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