



ORGANISING A TEMPORARY RETREAT STRATEGY

HAZARD





RAINFALL AND

COASTAL





HEAT

STORMS AND



WILDFIRES

IMPLEMENTATION STEP





BUILDING IN OPERATION

TERRITORY

AREA OF ACTION



USES

COST



LEVEL OF SKILL



Fallback solutions involve putting in place alternative measures aimed at transferring activities, assets and/or users to different locations that don't face the same risks. Two retreat approaches exist. The first one, known as the permanent retreat strategy, involves relocating activities and assets as part of territorial planning to protect them from the risks associated with coastal dynamics. The other approach involves the temporary relocation of users in the event of climate disasters like intense heat, flooding, forest fires and storms. Planning a temporary retreat strategy can be part of a business continuity plan (BCP). The aim of the plan is to enable a group (government, local authority, institution, company, hospital, etc.) to continue operating in the event of a disaster, possibly in degraded mode, or a major crisis situation.

IMPACTS

Adaptation plans should include the organisation of a temporary retreat strategy. This approach not only makes it possible to **anticipate a major crisis**, but also to **minimise the financial, material and human consequences** of the event, while largely preserving the organisation's operational capabilities and essential functions. This preparatory action model enables the organisation to respond in a coordinated and effective way in the event of a major disruption. This includes the establishment of command structures, emergency communication channels, and fast decision-making procedures. This facilitates the **rapid resumption of critical activities** subject to complex operational constraints, such as hospitals, nursing homes and emergency call centres, thereby strengthening the confidence of stakeholders. For less critical activities, less costly solutions requiring **longer deployment times** can also be envisaged.

INSTALLATION GUIDE

In order to organise the response to a major crisis, a distinction is made between:

Brief, sudden events (storms, snow and ice, flash floods, etc.): emergency measures should-be-put in place to protect occupants (for example, by moving to the refuge areas provided in the event of flooding or a heat wave) and facilities, which may involve suspending activities until the event is over.

Prolonged episodes (heatwaves, drought, etc.): in addition to the above measures, it is advisable to maintain or resume priority activities as quickly as possible, in particular by aiming to make work organisation practices more flexible.

Prolonged events that render the building or area unusable (unavailable or inaccessible) (so-called "slow" flooding, mega-fires, etc.): in addition to the above measures, a temporary retreat strategy should be implemented for the part of the building that can be "retreated from", or the area "to be abandoned".

In order to prepare a retreat strategy, it is necessary to quantify the resources required to resume business, such as which stock to preserve, the retreat area needed, and the updating of backed-up data. It is also crucial to identify available retreat

sites that are not subject to or adapted to climate risk,

to avoid undergoing the same damage, taking into account criteria such as capacity, technical compatibility and ease of access. Equipment adapted to continuity objectives will need to be duplicated, and procedures put in place to maintain activities from these retreat sites. The secure transfer of data and applications to back-up systems (e.g. the cloud), the relocation of tangible elements to retreat sites ("sister" site, private service provider, temporary public reception site) that can withstand the weather, as well as appropriate insurance, all need to be taken into account. To facilitate the retreat, it is advisable to use mobile equipment such as laptops, USB sticks and mobile phones.

In the face of flooding and coastal dynamics, in normal situations it is advisable to concentrate essential equipment and activities on the upper floors, raise structural elements, use water-resistant materials and install anti-water devices in order to limit the elements to be protected that remain in the building and to quickly transfer the activity to these retreat sites. Similarly, in the event of storms and strong winds, you should take measures to limit the wind load on equipment and anchor outdoor furniture.

The organisation of a temporary retreat strategy must be accompanied by a plan to communicate the risks to occupants.

WEAK POINTS AND STRONG POINTS

- It is important to be vigilant, as suppliers of retreat centres tend to overbook by drawing up the same contract with numerous potential users for the same resource. When the weather is unpredictable, they operate on a first-come, first-served basis.
- There is no regulatory distance between the unusable site and the retreat site. The alternative locations to which users must travel should be relatively close. This involves a trade-off between the risks to be covered and ease of access.
- The occupants of buildings can retreat to their homes, provided they meet minimum comfort requirements. This also requires that the dwelling is not exposed to the same climate hazards.
- Mobile vehicles equipped with offices or accommodation enable rapid deployment of temporary solutions while maintaining flexibility of location.
- Common areas, training rooms, conference rooms, meeting rooms, etc. in other buildings occupied by the same organisation and not affected by the disaster offer potential fallback sites (cross fallback).



Maladaptation can result from the following:

Over-exploitation of resources and energy

Duplicating equipment at a retreat site increases the pressure on material resources to manufacture this additional equipment, in particular rare metals for computers, data centres, telephones, etc. The extraction, manufacture and disposal of these resources lead to increased energy consumption, increased waste production, the use of toxic chemicals, additional emissions, and pollution of water and air. The extraction, manufacture and disposal of these resources lead to more energy consumption, increased waste production, the use of toxic chemicals, additional emissions, water and soil pollution, ecosystem degradation and the destruction of biodiversity. Organisations can look for alternatives such as sharing equipment with other entities, using virtual or cloud-based technologies (while remaining vigilant about the impact of digital pollution) to reduce the physical duplication of equipment, and putting in place mechanisms to recover and reuse resources to minimise the environmental impact.

Failure to consider climate uncertainties

It is essential to regularly test and update the retreat strategy to ensure that it remains effective, given the increasing frequency and intensification of climate hazard events predicted by the IPCC. This ensures that the organisation is prepared to face the current and future challenges associated with major climate crisis.

MONITORING INDICATORS



ESSENTIAL RECOMMENDATIONS WORTH THINKING ABOUT



IDENTIFY THE CLIMATE HAZARDS TO WHICH THE BUILDING IS EXPOSED



IDENTIFY ONE OR MORE PERMANENT RETREAT SITES ABLE TO WITHSTAND EXTREME WEATHER



MAP FLEXIBLE AREAS AND THEIR CAPACITY TO HOST EQUIPMENT WITHIN DIFFERENT BUILDINGS BELONGING TO THE SAME ORGANISATION



MONITOR MY ACTIONS FOR CLIMATE CHANGE ADAPTATION

+/-: Quantitative indicator

★: Qualitative indicator

INDICATORS OF MEANS

INTERPRETATION



Time required to move from the original facilities to the planned retreat sites (hours)





Percentage of essential resources required to pursue critical activities available at the retreat site (%)

Percentage as close as possible to 100%.



Comparison between the percentage of people working in a critical activity whose activity will be maintained without and with the retreat site

The retreat site must maximise the percentage of people able to maintain their essential activity



Percentage of people with non-critical activities who can go home (%)

This percentage should be maximised



Annual number of simulation exercises to test the retreat strategy

The retreat strategy must be tested frequently



Percentage of recommendations followed (%)

The maximum number of recommendations must be implemented

INDICATORS OF RESULTS

Comparison between

INTERPRETATION



the number of business interruptions resulting from climate hazards before and after the implementation of a retreat strategy

Minimise the number of business interruptions as much as possible



Comparison between the duration of the interruption of activity before and after the implementation of a retreat strategy and that of a control situation* (hours)

Minimise the duration of business interruptions as much as possible



Comparison between the financial, material and human repercussions and those of a control situation*.

Minimise the financial, material and human repercussions



Comparison between the time required to fully restore normal activities and a control situation* (hours)

Minimise as much as possible the time needed for activities to return to normal



Percentage of building users satisfied with the implementation of the retreat strategy and business continuity (%)

This percentage should be maximised

* The control situation is defined by the parameters established to isolate the influence of the adaptation action (similar conditions: weather, time of measurement, space, etc.)

FIND OUT MORE

Direction Générale des Entreprises, Confédération des petites et moyennes entreprises (2015), <u>Kit PCA à l'usage du chef</u> <u>d'entreprise en cas de crise majeure</u>

Rocle, N. (2017), <u>L'adaptation des littoraux au changement cli-</u> matique : une gouvernance performative par expérimentations et stratégies d'action publique

General Secretariat for Defense and National Security (2013), Guide pour réaliser un Plan de Continuité d'activité