Emergency response plan (PIU)
in the event of extreme weather conditions
'Extreme Weather Plan'

(public version)

Ministry of State
Ministry of Sustainable Development and Infrastructure
Ministry of Home Affairs

Approved and rendered enforceable by the Council of Government on 22 May 2015.
The emergency response plan (PIU) in the event of extreme weather conditions is a framework document for managing weather-related emergencies in the Grand Duchy of Luxembourg. The concrete measures to be taken shall be decided upon by the competent authorities for national protection at the appropriate time, communicated to the public and put in place by the competent agencies and departments.
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1. Introduction and aims

The emergency response plan (PIU) in the event of severe weather conditions defines the actions the government will take in the event of one of the following orange or red weather alerts:

- gusts of wind;
- snow or freezing precipitation;
- storms;
- great/extreme heat;
- great/extreme cold;
- rain.

Decreed by the Council of Government on 22 May 2015, the 'Extreme Weather Plan' aims to:

- set the bodies that will manage the crisis;
- set the preventive and protective measures to be taken;
- and establish the alert procedures for the authorities and for informing the public in the event of an emergency situation.

The execution of the plan developed under the leadership of the High Commission for National Protection (Haut-commissariat à la protection nationale, HCPN) falls under the remit of the Prime Minister, Minister of State, the Minister of Sustainable Development and Infrastructure and the Minister for Home Affairs.

Only the forecasts and alert levels supplied and published by MeteoLux (www.meteolux.lu) are valid in connection with the 'Extreme Weather Plan'. Other sources and media may provide similar yet differing information. This can lead to confusion when evaluating the situation and should be avoided.

Any extreme weather warning published by MeteoLux and set out in this procedure constitutes the most likely forecast that this event would happen during the period of time in question.
2. Crisis management bodies

The 'Extreme Weather Emergency Response Plan' determines the following management bodies for weather-related emergencies:

2.1. Crisis cell

The Crisis Cell (Cellule de crise, CC) is activated by the Prime Minister and Minister of State in the event that a crisis is imminent or has occurred. It initiates, coordinates and monitors the execution of all the measures intended to deal with the crisis and its effects in order to return the situation to normal. It prepares the necessary decisions and submits them to the government for approval. In the event that operational intervention is required on the ground, the CC's mission extends to coordinating and monitoring its execution.

In a weather-related emergency, the Crisis Cell is made up of at least the following people:

- the High Commissioner for National Protection;
- the Director-General of the Grand Ducal Police;
- the Director of the Rescue Services Agency (Administration des services de secours);
- the Director of the Office for crisis communication (Service de la communication de crise);
- the Director of the Air Navigation Administration (Administration de la navigation aérienne);
- the Director of the Administration for Roads and Bridges (Administration des ponts et chaussées).

The Crisis Cell operates throughout the duration of the crisis until the situation returns to normal.

2.2. Operational cell

The Crisis Cell can appoint an operational cell to execute, implement and monitor the ordered measures and activities.

2.3. Weather Risk Evaluation Cell (Cellule d’évaluation du risque intempérie, CERI)

The CERI's role in managing a weather-related crisis is to monitor the changing meteorological situation and inform the Crisis Cell.

Made up of experts, the CERI evaluates the situation and increases surveillance before the Crisis Cell is activated.
2.4. Communication/Information Cell (CCI)

The CCI is in charge of communication and providing information for the media and citizens. The horizontal coordination of organising external communication falls to the Office for crisis communication.

3. Implementation of the plan

In principle, the crisis management bodies gain an understanding of a dangerous or very dangerous weather event by analysing the information available on a national or international level.

As soon as the weather department of the Air Navigation Administration becomes aware of an orange and/or red level weather forecast, the CERI is alerted and evaluates the information available.

If the weather forecast is a level red, the High Commissioner for National Protection is alerted and in turn informs the Prime Minister and Minister of State who decides whether to activate the Crisis Cell.

4. Measures to be taken in the event of an alert

The plan provides for a framework to alert the authorities, population and stakeholders depending on the danger posed by the weather event: orange or red vigilance.

The wider public will be informed of the changing situation by the government and via the websites www.infocrise.lu and www.meteolux.lu.
## EXTREME WEATHER

<table>
<thead>
<tr>
<th></th>
<th>ORANGE LEVEL</th>
<th>RED LEVEL</th>
</tr>
</thead>
</table>
| **HEAT**       | **GREAT HEAT**  
                   temperatures between 33° C et 35° C  
                   with an average temperature on the preceding day exceeding 23°C | **EXTREME HEAT**  
                   temperatures above 35°  
                   with an average temperature on the preceding day exceeding 23°C |
| **COLD**       | **GREAT COLD**  
                   temperatures between -11° and -15° | **EXTREME COLD**  
                   temperatures below -15° |
| **SNOW OR**    | **MODERATE SNOW OR ICE**  
                   between 5 and 15 cm of snowfall within 12 hours or moderate ice below 1 l/m² within 12 hours | **SEVERE SNOW OR ICE**  
                   snow over 15 cm within 12 hours or severe ice over 1 l/m² within 12 hours |
| **FREEZING**   | **HEAVY STORM**  
                   gusts of wind between 90 and 110 km/h  
                   or heavy rain between 25 and 35 l/h  
                   or hail between 1 and 3 cm | **VIOLENT STORM**  
                   gusts of wind exceeding 110 km/h  
                   or rain over 35 l/h  
                   or hail above 3 cm |
| **STORM**      | **HEAVY RAIN**  
                   rain between 20 and 35 l/m² in 3 hours  
                   or between 30 et 45 l/m² in 6 hours  
                   or between 45 et 60 l/m² in 24 hours | **TORRENTIAL RAIN**  
                   rain above 35 l/m² in 3 hours  
                   or above 45 l/m² in 6 hours  
                   or above 60 l/m² in 24 hours |
| **RAIN**       | **VIOLENT WINDS**  
                   violent winds between 90 km/h and 110 km/h | **VERY VIOLENT GALE**  
                   winds above 110 km/h |
| **GUSTS OF**   |                                                               |                                                            |
| **WIND**       |                                                               |                                                            |
## GUSTS OF WIND

### ORANGE VIGILANCE – VIOLENT WINDS

**violent winds between 90 km/h and 110 km/h**

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td>• broken tree branches;</td>
<td>• limit your journeys;</td>
</tr>
<tr>
<td>• some fallen trees;</td>
<td>• limit your speed on the road, especially if the vehicle or trailer you are driving may be affected</td>
</tr>
<tr>
<td>• damaged roofs and chimneys;</td>
<td>by the wind;</td>
</tr>
<tr>
<td>• vehicles swerving off the roads;</td>
<td>• do not go walking in wooded areas;</td>
</tr>
<tr>
<td>• localised disrupted road traffic, in particular in wooded areas.</td>
<td>• in towns, be careful of falling objects;</td>
</tr>
<tr>
<td></td>
<td>• tidy away or fix down any objects liable to be blown around or damaged, for example garden furniture,</td>
</tr>
<tr>
<td></td>
<td>parasols, etc.;</td>
</tr>
<tr>
<td></td>
<td>• on no account go onto a roof.</td>
</tr>
</tbody>
</table>

### RED VIGILANCE – VERY VIOLENT GALE

**winds above 110 km/h**

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td>• much significant damage to housing, parks and plantations;</td>
<td>• if possible, remain at home;</td>
</tr>
<tr>
<td>• heavily affected forests (significant damage to trees/uprooted trees);</td>
<td>• if you need to travel, limit yourself to what is strictly necessary and avoid wooded areas;</td>
</tr>
<tr>
<td>• very difficult traffic conditions throughout the network, cars forced off the road;</td>
<td>• tell someone that you are going out and your destination;</td>
</tr>
<tr>
<td>• seriously affected air and rail traffic.</td>
<td>• tidy away or fix down any objects liable to be blown around or damaged, for example garden furniture,</td>
</tr>
<tr>
<td></td>
<td>parasols, etc.;</td>
</tr>
<tr>
<td></td>
<td>• on no account go onto a roof;</td>
</tr>
<tr>
<td></td>
<td>• phone 112 immediately if someone is injured;</td>
</tr>
<tr>
<td></td>
<td>• phone 112 concerning objects on public roads only if they constitute a serious obstruction (trees,</td>
</tr>
<tr>
<td></td>
<td>branches, roofing debris).</td>
</tr>
</tbody>
</table>

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[www.infocrise.lu](http://www.infocrise.lu)  [www.meteolux.lu](http://www.meteolux.lu)  [www.112.lu](http://www.112.lu)

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In case of emergency call 112.
## RAIN

### ORANGE VIGILANCE – HEAVY RAIN

Rain between 20 and 35l/m² in 3 hours or between 30 et 45l/m² in 6 hours or between 45 et 60l/m² in 24 hours

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td>- heavy rain likely to affect the economic functioning of several sectors of activity;</td>
<td>- keep up to date with the situation on the roads before travelling;</td>
</tr>
<tr>
<td>- flooding in areas that do not usually flood;</td>
<td>- follow any diversions in place;</td>
</tr>
<tr>
<td>- localised unusual rises in the water level of streams and ditches;</td>
<td>- be careful of aquaplaning;</td>
</tr>
<tr>
<td>- the risk that sanitation systems may overflow;</td>
<td>- never go down a road that is under water;</td>
</tr>
<tr>
<td>- potentially difficult road traffic conditions.</td>
<td>- in zones that are liable to flooding, secure any belongings that may be damaged and keep an eye on the water levels;</td>
</tr>
<tr>
<td></td>
<td>- ensure that surface water drains are not blocked.</td>
</tr>
</tbody>
</table>

### RED VIGILANCE – TORRENTIAL RAIN

Rain above 35l/m² in 3 hours or above 45l/m² in 6 hours or above 60l/m² in 24 hours

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td>- very heavy rain which may affect economic and human activity for several days;</td>
<td>- if possible, remain at home;</td>
</tr>
<tr>
<td>- very significant flooding, even in areas that are rarely flooded;</td>
<td>- avoid unnecessary travel in the areas affected;</td>
</tr>
<tr>
<td>- localised torrential rises in the water level in streams;</td>
<td>- if you need to travel, be especially careful;</td>
</tr>
<tr>
<td>- extremely difficult road traffic conditions;</td>
<td>- follow any diversions in place;</td>
</tr>
<tr>
<td>- the risk that sanitation systems may overflow.</td>
<td>- never go down a road that is under water;</td>
</tr>
<tr>
<td></td>
<td>- tell someone that you are going out and your destination;</td>
</tr>
<tr>
<td></td>
<td>- in flood zones, and even in areas that are rarely flooded, take all the necessary precautions to safeguard your possessions in case the water level rises;</td>
</tr>
<tr>
<td></td>
<td>- prepare emergency lighting and keep a supply of drinking water;</td>
</tr>
<tr>
<td></td>
<td>- facilitate the work of the emergency services carrying out any evacuation and follow their advice;</td>
</tr>
<tr>
<td></td>
<td>- do not take any journeys by boat unless you have taken sufficient safety measures.</td>
</tr>
</tbody>
</table>

www.infocrise.lu  www.meteolux.lu  www.112.lu
# SNOW OR FREEZING PRECIPITATION

## ORANGE VIGILANCE – MODERATE SNOW OR ICE

between 5 and 15 cm of snowfall within 12 hours  
or moderate ice below 1 l/m² within 12 hours

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td>• large quantities of snow or ice for the region concerned,</td>
<td>• be especially careful when travelling;</td>
</tr>
<tr>
<td>• very difficult traffic conditions throughout the network, in particular in wooded areas (trees may fall);</td>
<td>• use public transport;</td>
</tr>
<tr>
<td>• increased risk of road traffic accidents.</td>
<td>• keep yourself informed on traffic conditions by consulting the website <a href="http://www.cita.lu">www.cita.lu</a>;</td>
</tr>
<tr>
<td></td>
<td>• follow any traffic restrictions and diversions closely;</td>
</tr>
<tr>
<td></td>
<td>• facilitate the work of road and motorway clearing vehicles by parking your vehicle off-road;</td>
</tr>
<tr>
<td></td>
<td>• be careful of falling objects;</td>
</tr>
<tr>
<td></td>
<td>• clear snow and salt the pavements in front of your house and avoid blocking water drains.</td>
</tr>
</tbody>
</table>

## RED VIGILANCE – SEVERE SNOW OR ICE

large amount of snow over 15 cm within 12 hours  
or severe ice over 1 l/m² within 12 hours

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td>• large snowfall or ice which could seriously affect economic and human activity;</td>
<td>• if possible, remain at home;</td>
</tr>
<tr>
<td>• roads swiftly becoming impassable over the whole network;</td>
<td>• only make essential journeys;</td>
</tr>
<tr>
<td>• a very great risk of air and rail traffic disruptions.</td>
<td>• listen to local radio stations if you need to go out;</td>
</tr>
<tr>
<td><strong>In the event of freezing precipitation:</strong></td>
<td>• keep yourself informed on the state of the roads by consulting <a href="http://www.cita.lu">www.cita.lu</a>;</td>
</tr>
<tr>
<td>• significant risk of damage to the high-voltage electricity distribution networks.</td>
<td>• tell someone if you are going out and your destination;</td>
</tr>
<tr>
<td></td>
<td>• prepare an emergency kit for your vehicle in case you have to wait on the road (chains, shovel, blankets, provisions, etc.);</td>
</tr>
<tr>
<td></td>
<td>• follow any traffic diversions and advice closely;</td>
</tr>
<tr>
<td></td>
<td>• be careful of falling objects;</td>
</tr>
<tr>
<td></td>
<td>• clear snow and salt the pavements in front of your house and avoid blocking water drains.</td>
</tr>
<tr>
<td><strong>In the event of freezing precipitation:</strong></td>
<td></td>
</tr>
<tr>
<td>• protect your water pipes from freezing;</td>
<td></td>
</tr>
<tr>
<td>• prepare emergency lighting and keep a supply of drinking water.</td>
<td></td>
</tr>
</tbody>
</table>

### STORM

#### ORANGE VIGILANCE – HEAVY STORM

**gusts of wind between 90 and 110 km/h or heavy rain between 25 and 35 l/h or hail between 1 and 3 cm**

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td>• significant localised damage to light housing and temporary structures;</td>
<td>• when a storm is on its way, you should place objects likely to be blown around by the wind (garden furniture, parasols, etc.) under shelter;</td>
</tr>
<tr>
<td>• rapid localised flooding of caves and low-lying ground;</td>
<td>• do not take shelter under trees, especially one that is isolated;</td>
</tr>
<tr>
<td>• the possibility of fires starting as a result of lightening not accompanied by rain;</td>
<td>• if you are in an exposed place, squat down as low as possible with your feet together, your head between your folded arms and pressed against your knees;</td>
</tr>
<tr>
<td>• considerable material damage or risk of accidents following strong gusts of wind or hail.</td>
<td>• do not walk in the forest;</td>
</tr>
</tbody>
</table>

#### RED VIGILANCE – VIOLENT STORM

**gusts of wind exceeding 110 km/h or rain over 35 l/h or hail above 3 cm**

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td>• several very violent storms, with large hailstones and destructive gusts of wind;</td>
<td>• avoid unnecessary travel;</td>
</tr>
<tr>
<td>• very significant localised damage to homes, parks, crops and plantations;</td>
<td>• if you need to travel, make your way to a safe place quickly and stay there;</td>
</tr>
<tr>
<td>• very serious localised damage to forests;</td>
<td>• avoid using a landline phone or electronic devices;</td>
</tr>
<tr>
<td>• a risk of fire following a large number of lightening strikes;</td>
<td>• tidy away or fix down objects likely to be affected by the wind, without placing yourself in danger;</td>
</tr>
<tr>
<td>• danger to light accommodation and temporary structures;</td>
<td>• avoid outside activities (in particular on flat ground or near trees, masts, antennae, electricity pylons and metallic objects);</td>
</tr>
<tr>
<td>• flooding in caves and low-lying areas;</td>
<td>• take refuge, until the all-clear announcement is made, in a more sheltered place or, if that is not possible, in your car;</td>
</tr>
<tr>
<td>• very high water levels around streams and small rivers.</td>
<td>• safeguard your possessions from the rising water if in a zone liable to be affected by rising water levels;</td>
</tr>
<tr>
<td></td>
<td>• inform the authorities if you witness any fires starting.</td>
</tr>
</tbody>
</table>
# HEAT

## ORANGE VIGILANCE – GREAT HEAT

**temperatures between 33° C et 35° C**

*with an average temperature on the preceding day exceeding 23°C*

### Possible consequences

- a risk of health problems, in particular for
  - older people,
  - children,
  - people with chronic illnesses or mental health issues,
  - people who have to take medication
  - and people living on their own;
- dehydration or heatstroke with the following symptoms:
  - a temperature over 40°C,
  - hot, red and dry skin,
  - headaches, nausea, drowsiness, intense thirst,
  - confusion, convulsions, loss of consciousness.

### Conduct to adopt

- close blinds, curtains and windows during the day and open them at night;
- drink lots of water throughout the day (1.5 l water per day);
- avoid going outside during the hottest time of day (11 am to 9 pm);
- cover your head when going out;
- wear light clothing;
- limit physical activity;
- maintain contact with vulnerable members of your family and friends. Help them get to a cool place.

## RED VIGILANCE – EXTREME HEAT

**temperatures above 35°**

*with an average temperature on the preceding day exceeding 23°C*

### Possible consequences

- a general risk of health problems, even for people in good health;
  - the people at particular risk include:
    - older people,
    - people with disabilities,
    - people with chronic illnesses,
    - people with mental health issues,
    - people who take regular medication
    - and people living on their own;
  - children;
- dehydration or heatstroke with the following symptoms:
  - a temperature over 40°C,
  - hot, red and dry skin,
  - headaches, nausea, drowsiness, intense thirst,
  - confusion, convulsions, loss of consciousness.

### Conduct to adopt

- close blinds, curtains and windows during the day and open them at night;
- drink lots of water throughout the day (1.5 l water per day);
- avoid going outside during the hottest time of day (11 am to 9 pm);
- cover your head when going out;
- wear light clothing;
- limit physical activity;
- use fans or air conditioning to cool yourself down;
- try to stay in a cool or air-conditioned place (large shops, cinemas, etc.);
- cool down with water several times a day (mister, shower, etc.);
- maintain regular contact with vulnerable members of your family and friends. Help them get to a cool place.
### COLD

#### ORANGE VIGILANCE – GREAT COLD

**temperatures between -11° and -15°**

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
</table>
| - a risk of health problems, in particular for:  
  - older people,  
  - babies,  
  - people with respiratory or cardiac illnesses,  
  - people living on their own;  
  - a possible risk to people in good health who work outside (traffic officers, builders, farmers, etc.);  
  - hypothermia;  
  - frostbite. | - do not remain exposed to the cold and wind for too long;  
- dress warmly in several layers with a wind-proof and waterproof outer layer and protect your head and hands;  
- take off any wet clothes;  
- drink hot drinks;  
- avoid alcoholic drinks;  
- air out your home for several minutes, even in winter;  
- maintain contact with vulnerable members of your family and friends. |

### RED VIGILANCE – EXTREME COLD

**temperatures below -15°**

<table>
<thead>
<tr>
<th>Possible consequences</th>
<th>Conduct to adopt</th>
</tr>
</thead>
</table>
| - an increased risk of health problems, in particular for:  
  - older people,  
  - babies,  
  - people with respiratory or cardiac illnesses,  
  - people living on their own;  
  - a risk for people in good health but who work outside (traffic officers, builders, farmers, etc.);  
  - hypothermia;  
  - frostbite. | - keep active but avoid going out in the evening, at night and early in the morning;  
- protect yourself from cold air currents and severe temperature shocks;  
- dress warmly in several layers with a wind-proof and waterproof outer layer and protect your head and hands;  
- take off any wet clothes;  
- drink hot drinks;  
- avoid alcoholic drinks;  
- air out your home for several minutes, even in winter;  
- keep an emergency kit in your vehicle in case you have to stop on the road (hot drinks, blankets, a fully-charged mobile phone, etc.) and keep yourself informed on the state of the roads by consulting [www.cita.lu](http://www.cita.lu);  
- maintain regular contact with vulnerable members of your family and friends. |