



## NOTICE TO THE POPULATION

INTENSE PRECIPITATION, STRONG WINDS AND ROUGH SEAS – PREVENTIVE MEASURES

### I. SITUATION

According to the meteorological information from the Portuguese Institute of Sea and Atmosphere (IPMA), for the next 36 hours, heavy and persistent rainfall, strong wind and maritime disturbance are expected, highlighting:

- Strong and persistent precipitation from today afternoon (18TH OCT), with the possibility exceeding 40 mm in one hour and 60 mm in 6 hours, with the possibility of accumulating 60 to 90 mm in 24 hours in Minho and Douro-Litoral and in the Centre region and 40 to 60 mm in 24 hours in much of the remaining territory;
- Very strong wind with gusts of up to 120 km/h in the Centre and South regions;
- Strong sea disturbances, with waves of 5 to 7 meters.

Follow weather information at [www.ipma.pt](http://www.ipma.pt)

### HYDROLOGICAL INFORMATION

Information provided by the Portuguese Environment Agency (APA):

- **Minho Hydrographic Basin:** critical situations are not expected;
- **Lima hydrographic basin:** in the Vez river sub-basin there may be an increase in inflows that could cause flooding in riverside villages in Arcos de Valdevez;
- **Cávado river basin:** due to the forecast of heavy precipitation, urban flooding occurs in Braga;
- **Ave river basin:** in the Ave river basin (Santo Tirso) a significant increase in inflows;
- **Douro hydrographic basin:** in the sub-basins of the Tâmega river (Amarante) and Sousa river (Paredes) the inflows may have an increase in flow, but without river flooding;





- **Vouga river basin:** High precipitation is expected upstream of S. Pedro do Sul (Vouga), as well as upstream from the city of Águeda (Águeda river and Alfusqueiro), meaning that an increase in flows in these river basins is expected;
- **Mondego river basin:** due to the forecast of heavy precipitation, urban flooding occurs;
- **Tagus river basin:** critical situations are not expected;
- **Sado hydrographic basin:** precipitation in the Livramento sub-basin is very high levels and flooding may occur in Setúbal.

Hydrological information at [www.apambiente.pt](http://www.apambiente.pt)

## 2. EXPECTABLE EFFECTS

Typical episodes of transition seasons, with the occurrence of the first rains accompanied by strong wind, are favourable to:

- The occurrence of floods in urban areas, caused by the accumulation of rainwater due to obstruction of drainage systems;
- The occurrence of floods, increased by the overflow of the bed of some water courses, rivers and streams;
- Causing slope instability, leading to mass movements (landslides, mudslides and others) caused by water saturation, a phenomenon that can be aggravated by the removal of vegetation cover following rural fires, or by soil artificialization;
- The contamination of drinking water sources by inert materials resulting from rural fires;
- The dragging of loose objects onto the roads, or the detachment of mobile or poorly fixed structures, due to episodes of strong wind, which can cause accidents with vehicles in circulation or passers-by on public roads.

## 3. PREVENTIVE MEASURES

The National Emergency and Civil Protection Authority (ANEPC) recalls that the possible impact of these effects can be minimized, especially through the adoption of appropriate





behaviours, therefore, and particularly in historically more vulnerable areas, it is recommended to adopt the main preventive measures for these situations, namely:

- Ensure unblocking of rainwater drainage systems and removal of inert materials and other objects that can be dragged or create obstacles to the free flow of waters;
- Ensure adequate fixation of loose structures, namely scaffolding, signs and other suspended structures;
- Take special care when traveling and staying near wooded areas, paying attention for the possibility of falling branches and trees, due to stronger wind;
- Take special care when driving along the coastline and riverside areas historically more vulnerable to coastal overflow, avoiding movement and staying in these places;
- Do not practice activities related to the sea, namely sport fishing, sports boating and seaside walks, also avoiding parking of vehicles too close together from the seafront;
- Adopt defensive driving, reducing speed and taking special care with the possible formation of water tables on roads;
- Do not cross flooded areas, in order to prevent the dragging of people or vehicles into holes in the pavement or open drains;
- Pay attention to meteorological information and indications from Civil Protection and Security Forces.

ANEPC | Communication and Awareness Division

