FREEZING RAIN

The weather conditions that lead to the formation of freezing rain are linked to a particular thermal inversion, which sees an intrusion of warm air at high altitude in the presence of a layer of cold air (with temperatures below 0°C) near the ground. As raindrops pass through the layer of very cold air near the ground, they become supercooled, causing them to freeze as soon as they hit an object, e.g. trees, electricity cables, aeroplane wings on runways, and finally the ground, forming a layer of transparent, homogeneous, smooth and very slippery ice.

It should be noted that, due to the climatic characteristics of our territory, freezing rain is not assessed from May to September, when the corresponding colour code on the Hydrological and Hydrogeological Weather Watch/Alert Bulletin is grey.

The colour code assessment for freezing rain in the forecast phase is divided into four levels from green to red, classified according to the expected extent and duration of the phenomena. The event scenarios and the possible effects and consequent damage to the territory are summarised in the following table.

FREEZING RAIN		
COLOUR CODE	**EVENT SCENARIO**	**POSSIBILE EFFECTS AND DAMAGE**
GREEN	Absence of significant foreseeable phenomena.	Unpredictable, local traffic problems cannot be ruled out.
YELLOW	Possible localised episodes of freezing rain	- - Local disruption to road traffic, including cycle paths and footpaths, with possible delays or partial closures. - Local disruption to public transport, air travel and rail services. - Localised fallen branches, resulting in partial or total closure of roads.
ORANGE	Episodes of freezing rain over large areas of the territory.	- - Widespread disruption to road traffic, including cycle paths and footpaths, with possible delays or partial closures. - Widespread disruption to public air and rail transport. - Widespread fallen branches, resulting in partial or total closure of roads. - Prolonged interruptions to essential services caused by damage to overhead networks.
RED	Widespread and persistent freezing rain.	- - Severe and prolonged traffic problems, with prolonged dangerous conditions for travel. - Severe and prolonged disruption to public transport, rail and air travel, with delays or suspensions of services, some of which may be prolonged. - Extensive fallen branches, resulting in partial or total obstruction of roads. - Severe and/or prolonged problems in the provision of essential services caused by widespread damage to overhead networks.