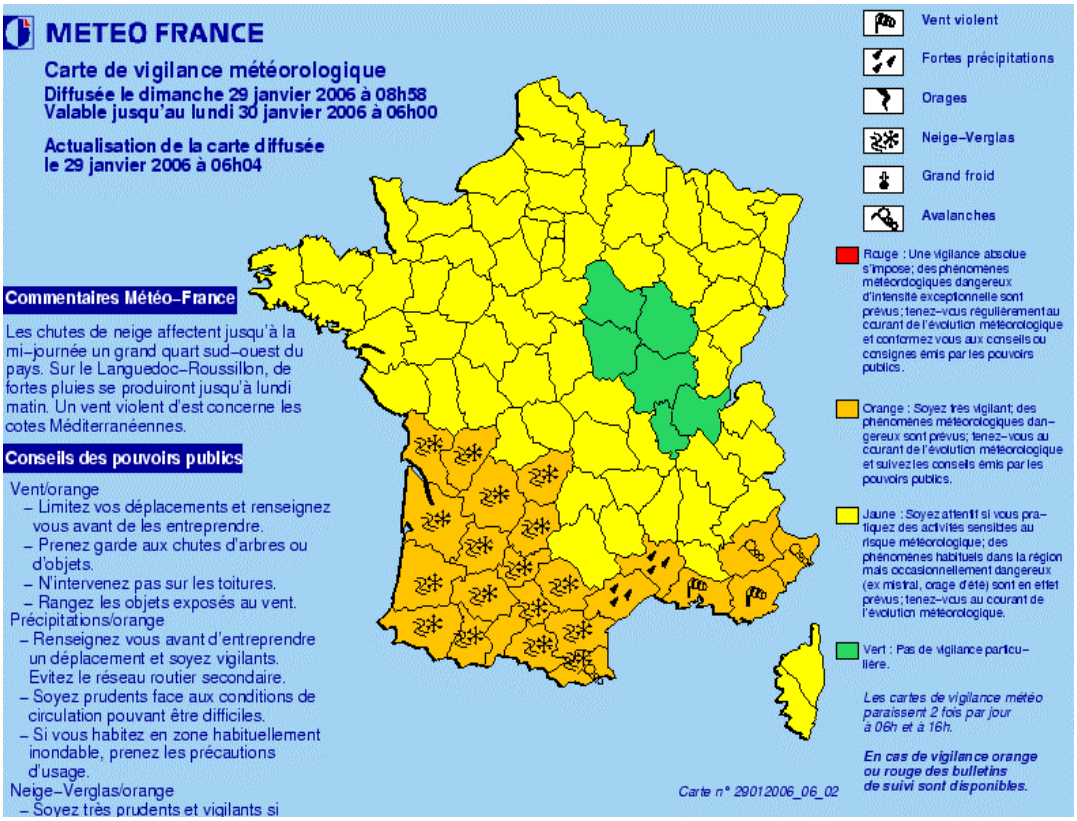
Abstract « Lessons learned from France » after the 1999 severe storms.

After back-to-back December 1999 storms, French authorities decided to overhaul the existing warning system between National Met Service Météo-France and civil-safety operatives.

In that process, the French "Vigilance Météo" (weather awareness) system was designed with two basic goals :

- simplify and optimize communications between Météo-France and civil-safety authorities,
- use the same basic information to address the public at large as well.

The "Vigilance" system and associated chart are an answer to both requirements : a simple to read chart that informs not only on the potential danger level but also on the type of related forecasted severe weather phenomena. Phenomena included in the initial system are : strong winds, severe thunderstorms, snow/icing, avalanche, heavy rainfall. It was declared operational on Oct. 1st 2001.



The colour-codes are simple to understand with 4 levels of severity : green, yellow, orange and red and the chart is widely broadcast by media and TV as soon as an orange-colored risk-level is identified so that the public at large gets the essentials. The chart is produced twice a day on the internet site www.meteo.fr and as of orange risk-level, comes with regularly updated follow-up bulletins that describe in more detail the situation and associated effects anywhere in the country. Behavioural advice is given along with qualification of the forecasted event.

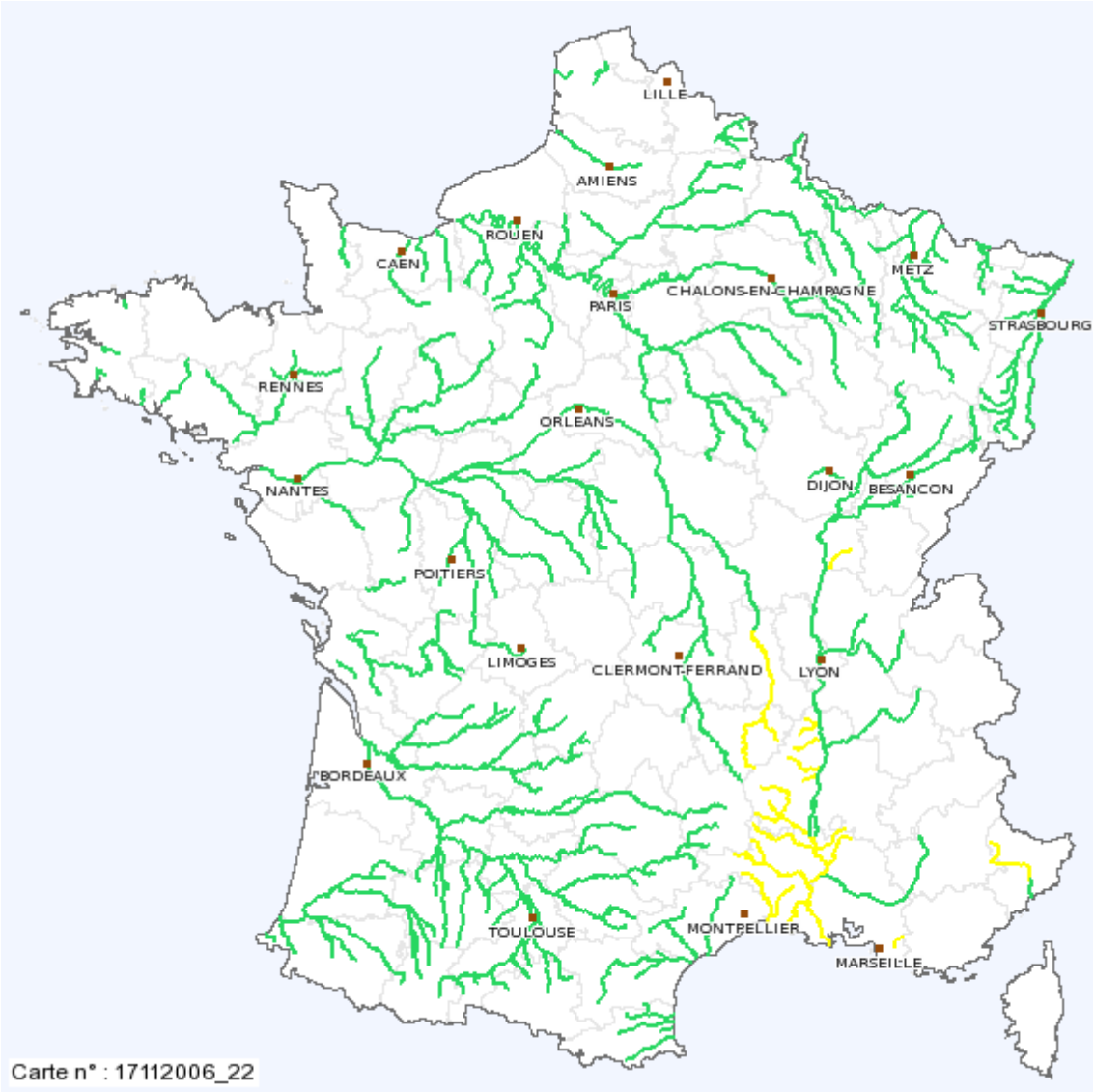
The system is subject to regular assessments with Civil-Safety authorities and a yearly publication that summarizes each severe episode is printed.

Opinion polls show widespread knowledge of the chart among the public at large mostly due to the fact that national and regional TV and radio networks whether private or public have adopted the system immediately : success is undeniable.

The system was later enriched with two major additions : heat-wave (after the August 2003 heat-related death-toll) and cold-spell.

After 2002 heavy flooding in the south of France, it was decided to reorganize flood forecasting across the country: a central operational hydrology facility called SCHAPI was created right next to Météo-France's central facility in Toulouse and regional services were reorganized with explicit flood-forecasting missions.

Since 2005, SCHAPI produces a "flood-awareness" chart much like its meteorology counterpart in order to inform authorities and the public at large about flooding risks of supervised rivers. It uses the same colour-coded risk-level scale.



Heavy rainfall followed by belated widespread flooding in the autumn of 2005 brought the prime minister to order that met-awareness and hydrology-awareness be even more closely linked in order to avoid confusion when the met situation improves while the hydrologic situation doesn't.
This was the starting point of the next major change which will be integrating both systems (i.e. hydrology & meteorology) into a comprehensive awareness system that integrates heavy rainfall and flooding as a single phenomenon. This is planned for 2007-2008.