



INTEGRATED DEVELOPMENT OF EARLY WARNING SYSTEMS

Innovation through
Partnership

Public warnings on mobile phones

In Germany, several initiatives to disseminate public warnings and behavioural advices by government agencies or organizations responsible for safety and security directly to the affected people via smartphone applications (App) have been developed and implemented.

NINA

NINA, the 'Emergency Information and News App' of the Federal Office of Civil Protection and Disaster Assistance (BBK), is the first App for warning the population for the whole of Germany and is fully integrated into the Modular Warning System (MoWaS) of the Federal Government and the Federal States. NINA warns Germany-wide and location-related about dangers such as storms, floods and other major damage situations. Local disaster management authorities can issue alerts for incidents within their jurisdiction by entering the warning information into MoWaS.

Using a push function, NINA keeps the users up to date with the latest hazard information, and provides event-driven behavioural and general emergency tips from experts to prepare for potential hazards. The App also allows to forward alerts to other contacts via email or SMS.

Current weather warnings from the German Weather Service (DWD) and information on water levels from the flood forecasting centres of the Federal States and the Federal Maritime and Hydrographic Agency (Bundesamt für Seeschifffahrt und Hydrographie - BSH) are also published via NINA.

www.bbk.bund.de/NINA.





KATWARN

Since 2011, KATWARN provides warning notifications from German authorities on local, state, or federal level for different kinds of threats (e. g. extreme weather, local hazards, or terrorist threats). It is a technical distribution system that does not create alerts by itself. All warnings originate from government agencies or responsible safety and security organizations, who decide on the content, timing and extent of issued warnings. The KATWARN system is best known for its smart phone application, which provides warnings and behavioural advices for the user's current location, as well as for other freely selectable locations, and offers topic-related safety information.

KATWARN was developed by the Fraunhofer Institute FOKUS in Berlin on behalf of the German public insurance companies, and is being operated in many districts and federal states of Germany since 2011. Furthermore, the Germany's National Meteorological Service (DWD), as a federal authority, also uses KATWARN for the highest categories of national weather warnings, in case of weather events with possible far-reaching effects on humans and their surroundings. Private companies and operators of critical infrastructures for their areas of responsibility also use the system.

KATWARN provides warnings and behavioural advices for the user's current location, as well as for a number of freely selectable locations, and offers topic-related safety information. KATWARN features include a push-function which will sound an alarm on the cell phone in the event of a warning. The system allows authorities to define and warn specific target groups that have subscribed to a topic of interest, or internal authority groups to receive non-public security information. Alerts can be shared at any time via social media, guaranteeing only reliable information is being forwarded.

Besides Smartphone APPs, KATWARN can be linked to any kind of digital information channel, like news portals and websites, digital advertising boards in public places or on board computers of vehicles.

After the KATWARN technology has been proven successful in Germany, it is ready to be used on an international level. As part of a technical consultation to improve the early warning system in the Dominican Republic, an adapted version of KATWARN was developed and presented for demonstration purposes.

<https://www.katwarn.de/en/>



WarnWetter

With the launch of its App for weather warnings named WarnWetter in June 2015, the National German Meteorological Service (Deutscher Wetterdienst – DWD) provides the large, continually growing community of smart phone and tablet users with all important weather and warning information it has on store.

The WarnWetter App provides easy-to-understand warnings with the most widespread coverage. The app's coloured warning map gives a quick overview of the general warning situation in Germany and, through it, easy access to more detailed information.

Users can choose to have personalised warnings sent directly to their smart phone for specific places and criteria, such as heavy rain and storm, etc. and can receive the warnings as push messages. Up-to-date satellite and weather radar loops as well as precipitation and animated wind forecasts provide the users with a wealth of context information about the warning situation. The graphics can be zoomed from a Middle-Europe-wide view to the regional level.

Localised forecasts and warning trends, which illustrate the further development of and warning situation, make the range complete. The App also displays warnings for storm surges, flood warnings, heat warnings, lightning activity and avalanche warnings at the Alps.

The DWD warnings have also been integrated into the mobile phone Apps NINA of the BBK and KatWARN of the Fraunhofer Institute.
http://www.wettergefahren.de/warn_wetter_app.html