

Digital emergency assembly points can save lives

Berlin, 8 Oct. 2018. Digital address systems can save lives. This was proven in a practical test by an emergency services association (Verein Notfallsammelpunkte DACH e.V.) together with fire brigades in a Lower Saxony community.



The way emergency rescue services can now be optimised in hiking areas, from raising the alarm to arriving at the scene with the aid of digitalisation has now been put to the test by the fire brigades of the district of Jesteburg and the Verein Notfallsammelpunkte DACH e.V. in a pilot project.

As Andreas Wutzke, from the association's PR department stated clearly upfront, "There is still largely a misconception among the public that in an emergency situation rescue services can pin down a mobile phone and therefore the caller's position. But this is not the case. If the location has been provided legitimately at all, it takes about 45 minutes to obtain the geocoordinates from the provider in each case. These are difficult to use any further due to their length. In addition, honing in on the position in rural areas especially is just as imprecise as describing the actual person seeking help."

The association, whose members are mostly rescue and relief unit workers, is committed to the use of what are known as emergency assembly points, which can be detected quickly and easily using a digital address system and rescue units can navigate precisely to even the most remote spots.

For this purpose, in a realistic rescue exercise, two scenarios were compared – one with and one without a digital address system – in the Lüneburg

Heath Park together with the volunteer fire brigades of the Jesteburg district community.

The control centre took the first emergency call, which was likely from a person who had a heart attack, via the emergency number 112 at around 10.48 am. At 10:56 the rescue units were able to move out after the control centre attempted to determine the approximate whereabouts of the casualty based on his descriptions. Within ten minutes the rescue units were on site but not in a position to actually locate the person in question. After an hour, the search was called off without success.

In a real emergency, helicopters with a heat-sensing camera and search teams would have been deployed from this point on.

In the second scenario with the digital emergency address, the control centre responsible received the emergency call at 12:33 pm and the rescue was on its way four minutes later. After another ten minutes, the rescue workers reached the casualty, who was about 150 metres from the emergency assembly point JE103 and they were able to recover him successfully.

These time savings result in significant advances, especially in rural areas, where the legally required assistance period of 17 minutes is quite often exceeded. For what is referred to as the golden hour



1st scenario: After 20 minutes, the teams were split by a map



1st scenario: Search teams in the hiking region only one kilometer away from the rescue area



2nd scenario: Call accepted in the control center Jesteburg



2nd scenario: Location is displayed directly via digitized address



2nd scenario: Operations management checks access routes via panorama function



2nd scenario: 14 minutes after emergency call – rescue vehicle arrived emergency collection point



2nd scenario: Care of the injured person about 150 metres behind emergency collection point



Shield emergency collecting point JE103 (JE – describes the responsible guard – in this case: fire department Jesteburg)



Rescue Team of Exercise (Samtgemeinde Jesteburg) and Representatives of Notfallsammel-punkte e.V.

of rescue, i.e. the important timeframe after an accident, according to Martin Ohl, the fire brigade chief in the community of Jesteburg, the emergency assembly points are a significant advance in rescue logistics. The cardiologist Thomas Voigtländer from the German Heart Foundation is also convinced by the benefits of emergency assembly points. "With heart attacks and strokes, every minute you save saves lives. In the first case, based on the casualty's situation with acute heart failure, the patient would not have survived. In the second part of the exercise, the patient would have had a good chance of surviving the heart attack relatively unscathed due to the faster rescue routes."



Thore Meiferts and Andreas Wutzke of Notfallsammel-punkte DACH e.V., Christian Alber Dep. Municipality Fire Chief and Martin Ohl, Commune Master Samtgemeinde Jesteburg

The system behind the emergency assembly points

The system that is behind the digital emergency assembly points is called CitoCode (Latin for fast code) and it turns the geocoordinates of a position into a short logical combination of letters and numbers. After entering this combination, the navigation system displays the exact position and even a 360-degree image of the emergency scene in question alongside a description of the best way to get there.

This enables the rescue service workers to assess which vehicles can reach the scene of the emergency at all.

The association's objective is to reduce the maximum distance to these rescue points to 500 metres. In the next few years, more than 5,000 of these emergency assembly points will be created and the data will be provided to communities and rescue services free of charge.