



## PUBLIC TRANSPORTATION AUTHORITY OF VÄSTMANLAND

When Västmanland County and Västerås Public Transportation updated their communication solution they chose a proven combination of the Swedish National TETRA network and Celab Operator Platform. The results? Streamlined communications, a less stressful working environment and above all improved safety.

The County of Västmanland are since 2012 solely responsible for developing and operating the public transportations in their region. The actual transits are carried out by Public Transportation Administration and Västerås Public Transportation that are owned by the County. They are also an important part of the regions contingencies organisation, mainly for evacuations. Therefore it is important that their communications work as expected, important calls and messages should not only reach their recipient but also managed correctly.

A challenge not to be underestimated, given that the 165 busses operate the county's roads and streets virtually around the clock and carry out more than nine million trips each year. It is as the expression states, easier said than done.



**REFERENS**

Public Transportation authority of Västmanland

## THE CHALLENGE

Just like many similar organisations they have been using an analogue two-way radio system for a long time. And it had its issues. With sporadically bad coverage user could never be sure that important transmissions, like emergency calls, really reached the recipient. Meanwhile noise and other interference lowered the general quality of service. The constant group calls was also disturbing several drivers and therefore a potential security risk. The risk was that drivers loses concentration and/or lowers the volume and thereby misses something truly important.

In the beginning of 2014 they decided to join the national RAKEL system. They also wanted a solution that could simplify and streamline central command. During the spring they launched a public procurement that soon resulted in a win for Celab.





## THE SOLUTION

RAKEL is a national two-way radio system. It was initially developed for the public safety sector but nowadays it can be used by virtually any organisation that contributes to Sweden's civil contingencies. Thereby it was available for the public transportation authority of Västmanland.

RAKEL is designed to work even during the most demanding circumstances. The system uses its own infrastructure which minimizes the risk of overload. The network also uses UPS solutions and diesel generators to keep it running during power outages.

The work of installing the new solution began in the early summer of 2014. From our side the project was managed by Thomas Möllergren at Celab Stockholm. To have access to dedicated project manager throughout the project was highly appreciated by the customer. The geographically short distance between the two were also important, making it possible for frequent face-to-face meetings.

- It was a very smooth procurement, says Tobias Svensson who managed the project on the client side. Even things like communications planning and programming documentation were correct from the start, something we did not expect.

In November of 2014 all vehicles had been equipped with Motorola TETRA terminals and the solution was in full operations. At the same time a new dispatch solution was launched at the traffic command centre. It is based on our own Celab Operator Platform and enables quick and easy control of calls and messages. A contact list makes it simple to contact individuals or specific talk groups. Incoming calls are placed in a queue, unless it is a prioritised call like an emergency. Then it will be placed first in line and a clear visual and audible warning will alert the operator. All events are also logged for increased traceability.

Thanks to Celab Four:C Mobile, which they also use, the traffic controller can now also leave the command centre and manage communications from the field.

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*Tobias Svensson, Project Manager Public Transportation Authority of Västmanland*



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*"We haven't missed any emergencies since we implemented the new system"*

*- Kent Petterson, Project Manager at Västerås Public Transportation*

## THE RESULT

If you ask the drivers or dispatchers they say that the most obvious difference is the improved coverage and that they now have a quieter and less stressful working environment. That also been verified in a survey conducted among the employees.

But most importantly, the safety has been improved. Bad coverage is no longer an issue, not even in the most distant corners of the county. The voice quality has also been improved dramatically, noise and interference are almost completely gone. And the new dispatch solution ensures that particularly important communications receives immediate attention and that matters of less importance get placed in que.

- We haven't missed any emergencies since we implemented the new system, says Kent Petterson, Project Manager at Västerås Public Transportation.

Furthermore the cooperation with public safety organisations have also been simplified considerably. As an example the police can much easier requisite buses to assist in evacuations during events like wild fires. This can also be necessary in other dramatic events like when Erikslunds shopping mall in January 2016 was subjected to a bomb threat.

Luckily this turned out to be a false alarm orchestrated by a twelve year old boy. However the system and organisation were subjected to critical test that it passed with flying colors.