

Unique IT makes automotive testing operations more effective

The company Rajd SysTech AB has developed a unique product for the automotive testing business. The product name is Nelson Proving Ground Management (NPGM) and is a flexible web-based solution that optimizes and streamlines automotive testing accession for both the automotive testing business and the test site or testing contractor.

NPGM creates competitive advantages for both parties with more effective tests including quality assurance for better products and faster testing.

For the automotive testing company NPGM is an opportunity to save time, current monitoring the outcome of the test on track and road, thus ensuring a faster information flow to the test personnel. Information can be provided currently and on-line and as a web-based system, at different geographic locations. Appropriate measures can then be deployed and more people can share information for better efficiency.

Data related to the geographical position so-called geotagged data, including information about weather conditions during the test provides a better basis for the final analysis of the test results obtained. The system makes it even possible to obtain and monitor vehicle dynamics.

The system offers a unique solution with a mobile wireless communication network on a land or ice track that allows both local access points as a continuous connection to the Internet for testing.

The testing contractor will have the prospect to offer and conduct tests in which automotive testing company can continuously participate in the development of the specific test both in space and time. This will ensure that the commitment undertaken will be done with quality assurance.

For the test contractor the system will enable complete control over all test tracks and the whole plant with both speed controls, access control including planning of the usage of different tracks.

Track planning can easily be transferred to the car testing company to self-manage through booking calendar.

Safety and security aspects are built into the system and all vehicles can be monitored and alerts are sent automatically to the car testing center or to the Nelson Mobile Unit (NMU) application to track and verify the conditions.

The key words in the system development have been optimizing, streamlining, time-saving, including monitoring for safety and accessibility to the tracks. All key words were applied to conditions for both automotive testing companies and test contractors.

The supervision has a guarantee that Harald Fjellström, CEO of Colmis, thinks is important: "We think it feels very secure and safe to always know where all customers drivers and our own drivers are whether they are performing a test protocol or are driving a service vehicle," Fjellström said.



“Since we test drive on highways as well, where test drivers can be 100-150 kilometres from our facility, the system provides security both for us and test drivers that we know where they are if an accident should happen. It will be quicker to reach out if there is a need for it,” he continued. “Another advantage is that there are so many services you can build on. “This winter, we’ll also be using virtual fencing, called geofence, that does things like, for example, control where a vehicle may or may not be, or is obliged to keep to a certain speed.”

“We’ve been using the system for three years now, and we are very satisfied. We can absolutely recommend this to other actors in the industry. It’s a top-notch way of participating in the development of the technology, and we are convinced that our customers also appreciate it,” Fjellström concluded.

The development of RAJD’s product, NPGM, occurred in cooperation with CDT at the Luleå University of Technology as part of their ‘Intelligenta Inlandsvägen’ (I2) project. CDT co-ordinated research and development, and tested and evaluated the system for thin clients in a mix of 2G, 3G, WLAN, WIMAX, and CDMA.