

SPECIAL REPORT

Interaction design means simpler, safer traffic management

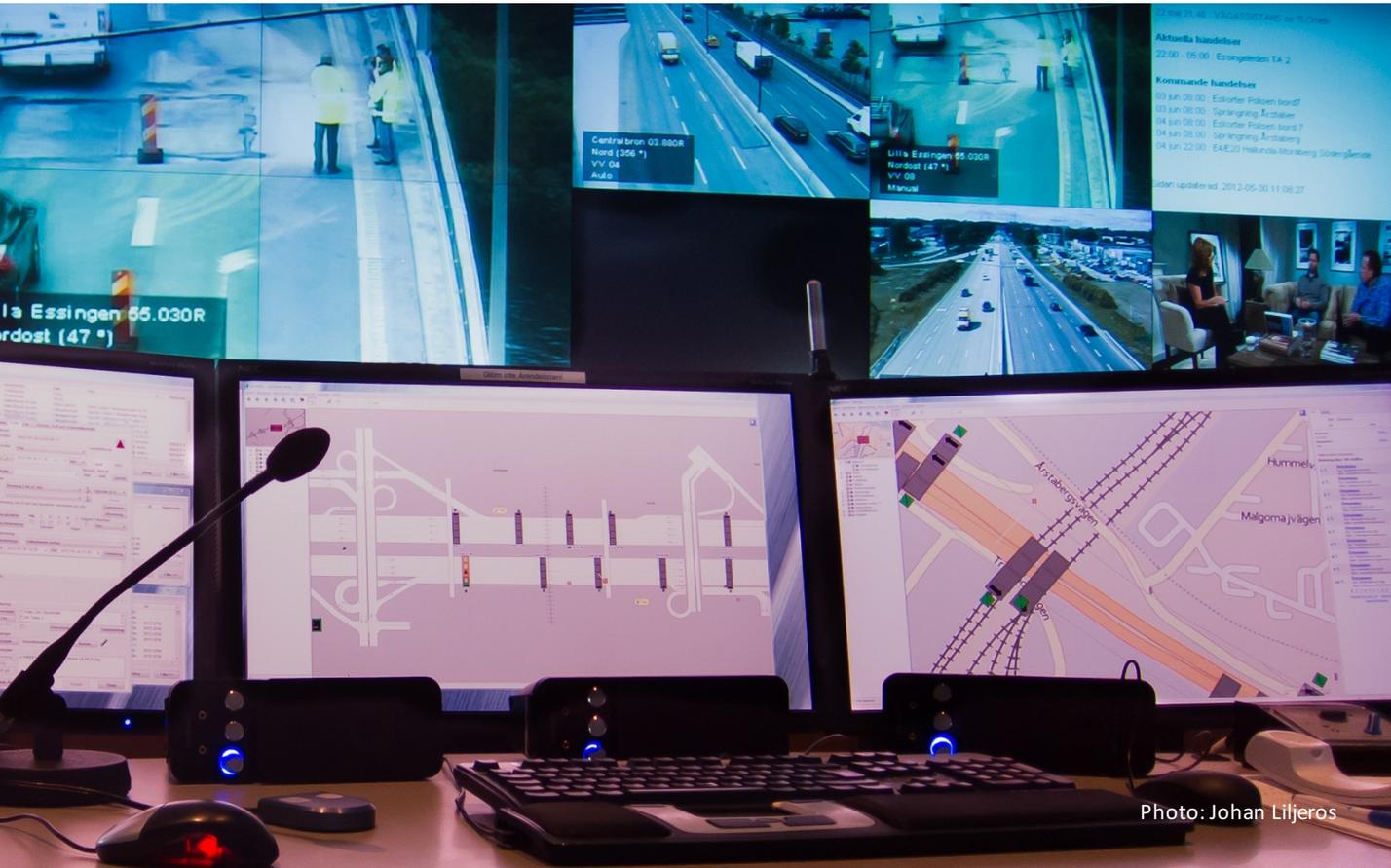


Photo: Johan Liljeros

The Swedish Transport Administration's National Traffic Management Support (NTS) has been helping traffic managers make safe decisions fast since 2004. Now the system will be even more powerful and simpler to use. With the assistance of specialist expertise from Infracontrol, user studies and requirements analyses are in progress to form the basis for improvements that will keep traffic flowing safely even in the future.

Tomas Julner, Traffic Management Administration Manager, says it's high time for a review of user functions to safeguard the essential role of decision support systems for the future:

“Decision support at NTS gives traffic managers the ability to deal with every event quickly. It lets us minimize disruptions, disseminate information quickly and reduce the impact on traffic and the environment. But because the system went into operation quite a while ago and some of the user functions need adapting to new requirements, we sought the help of Infracontrol and their extensive experience of interaction design and usability in traffic management, to draw up a proposal on how we can refine the system further.”

Better support functions through interaction design

NTS facilitates supervision and control of road traffic. It is a powerful decision support system that uses quality-assured contingency plans to help traffic managers deal with every possible situation quickly and safely. A review of usability is underway and one of the specialists in this field is Karin Ideland, Interaction Designer at Infracontrol:

“Together with the Swedish Transport Administration, we’re looking at how the interplay between users and systems can be simplified and further adapted. Among other things, it’s about achieving the more efficient management of events that require action and about graphic design that makes the user’s work simpler and faster.”

She tells us they have identified user requirements through interviews and observations, and against that background they analyze how the support system measures up. Concrete proposals are made based on this regarding how flows and functions can be made more intuitive so that the work of traffic managers becomes faster and safer.

“It’s important that this type of system support human cognitive abilities, i.e. the ability to comprehend things. We must understand that it is human characteristics that govern how a good support system should be designed, regardless of how much technology we put to use.”

Users participate from the beginning

Andrew Pryke, Project Manager in the Risks and Safety department at Faveo, is an important partner in this collaboration. He emphasizes that this type of process demands the active participation of the users themselves:

“We work according to an iterative process in which we draft proposals that are discussed and cross checked with the users a number of times until we reach the desired result. This also means the result is fully embedded with the users so that improvements made have full effect.”

Because this creates a greater commitment to change and development, it is an important part of ongoing improvement work.

About NTS and Infracontrol

Infracontrol has been the Swedish Transport Administration's principal supplier of NTS since 2009 and carries out constant system development and adaptation. The work is carried out in close collaboration with our English collaborative partner Nicander Ltd, whose personnel have taken part in the development of the system since it was created and commissioned at Trafik Stockholm in 2004.

Infracontrol was founded in 1993 as an independent system integrator specializing in IT for infrastructure. Two of our most important fields of expertise in our product offer are interaction design and our ability to create effective, simple interplay between man and machine. Infracontrol’s customers are primarily public sector purchasers for the state and municipalities. Today, the company has annual sales of SEK 50 million, employs 28 people and has offices in Göteborg, Stockholm and Oslo.

Want to know more?

Contact Karin Ideland, Interaction Designer, +46 31 – 333 27 17, karin.ideland@infracontrol.com