

Crew manager Bo Sandström talks about the greater sense of certainty and peace of mind that the Paratus system has brought to his job. GPS navigation supplemented by multi-layer GIS map functions is just one example of the benefits.



PARATUS: PEACE OF MIND

WHEN EVERY SECOND COUNTS

“We feel more secure as we work, and we can raise the quality of our emergency responses,” says crew manager Claes-Otto Åkesson of the Fire and Rescue Service in Borås, Sweden. He is talking about the difference in his work since the Paratus system was introduced throughout the wider Södra Älvsborg Fire & Rescue Service (SÄRF).

Claes-Otto Åkesson is both a crew manager at the Borås station and the IT coordinator for the whole of the Södra Älvsborg Fire & Rescue Service, which covers five municipalities in the region. The Paratus system was introduced at SÄRF in 2008. Since then, it has been progressively refined and adapted to suit local conditions within the service.

SÄRF has installed vehicle computers aboard its incident command vehicles and on some of its fire and rescue tenders. It also uses handheld computers (PDAs). Currently the PDAs are being used for navigation only, but they can also (if SÄRF develops its IT support system further) be used to allow personnel to take the Paratus system functions and data with them, off their vehicles, at the site of an emergency.

This is what Paratus IT support offers SÄRF personnel on emergency calls:

- Ability to receive emergency call details from command & control centre, and send

confirmation back.

- GPS navigation.
- Access to local GIS data, to supplement the GPS navigation system.
- Emergency response plans.
- Checklists for emergency response procedures (e.g. post-emergency clean-up operations or where chemicals are involved).
- Integration for decision-support systems.
- Document templates, e.g. for reports and site monitoring notifications.
- Laws and statutory requirements.
- Internet interface.
- Video.

“We are still in the early stages of the process of adopting what is a very sophisticated IT support system. But we have made good process, and fast,” says Claes-Otto Åkesson.

His colleague, crew manager Bo Sandström, talks about the added peace of mind the system brings for personnel.

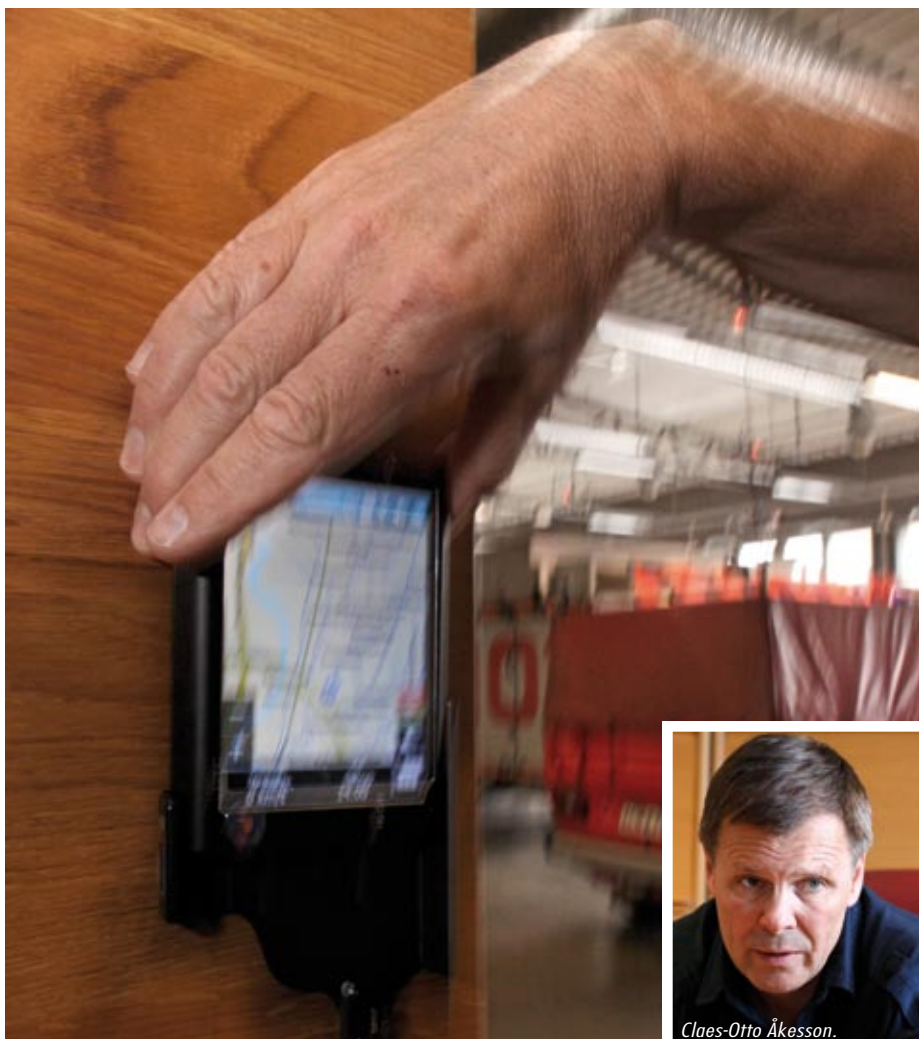
“Knowing how much extra support you have right there in the system is a real weight off your mind. For example, you waste no en-

ergy finding your way to the callout address, so you can concentrate on your tactical planning instead. You feel right on top of events. For crew managers like us – driving the command vehicle to the scene of the emergency alone – it means one thing less to concentrate on,” he says.

Both crew managers agree that the GPS navigation system is a key function in the system. But the fact that it is now being supplemented by several layers of additional GIS data makes it so much more valuable.

The navigation system is to include fire hydrant maps and high-resolution urban maps for selected built-up areas. This latter innovation will make it easier for the emergency personnel to choose the best access route, given that road barriers and other obstacles will be visible on the map.

Other data which is either already in the system or about to be added includes object information (e.g. for industries with potential hazards such as chemicals), urban and topographical maps, and Land Registry maps showing ownership of premises.



Claes-Otto Åkesson.



As soon as the alarm sounds, the IT support system goes off with the staff on board the vehicles. Top right: Urban Holm, Mattias Maltesson and Claes-Otto Åkesson. Bottom right: Mattias Maltesson shows how he uses the computer aboard the coordinator's vehicle during major incidents.

>>> **“As for internet access,** this means that personnel on the scene of an emergency can go online and log on to SÄRF’s own network. That gives quick, easy access to all the data and documentation held there,” the two crew managers explain.

“One reason for investing in this system was to raise the quality of our emergency response and perhaps gain some extra time in the process. And that is exactly what it has done,” Claes-Otto Åkesson continues.

“Another thing we want to do is introduce easy-to-use checklists even for ordinary emergency call types that we deal with all the time. The point of this is to lessen the workload and also to quality-assure the crew manager’s work at the scene of an emergency. It will also mean that all crew managers can work in a much more uniform way than before. In the longer term, it will act as an enhanced control function, boosting the quality of our services.”

Another quality improvement tool is the system’s video function. The incident command vehicle has a video camera mounted inside the windscreen, which starts recording as soon as the crew manager answers a new call. It films the route followed to the emer-

gency, then when the vehicle gets there, it is parked (and the camera is directed) in such a way as to document the entire emergency response sequence as it unfolds.

“Having this material recorded makes it easier to go back over what happened if you need to follow up the emergency response, or work with procedural development or some other kind of feedback or learning process,” says Claes-Otto Åkesson.

The Södra Älvsborg Fire & Rescue Service can list another positive result of its decision to invest in the Paratus system. In autumn 2008 it decided to create a service coordination function at its part-time brigade in a place called Vegby. Although only a village, Vegby occupies a geographically strategic position in the large area covered by this fire & rescue service. Now, if there is an emergency call in the region which is classed as ‘Major’ or is expected to take an unusually long time to resolve, a service coordinator and a fireman from Vegby will be appointed to the case. “It’s working well. It’s a new role for us, but all the pieces are falling into place more clearly, each time we have to coordinate a fresh emergency,” says service coordinator Mattias Maltesson. Then he and fireman Urban Holm

go on to give a concrete example of the difference that their IT support system made in a recent forest fire incident.

“The crew manager was working right there in the thick of it. We got organised at a central muster station and then provided back-up with all the organisational support needed.”

The most important tool proved to be the IT support available via SÄRF’s customised Paratus system. The coordinators in Vegby kept tabs on the positions of all the service personnel mobilised, they located high-resolution maps via the internet, and they provided the crew manager with all the information he needed for highly-effective response.

MORE FACTS

The Södra Älvsborg Fire & Rescue Service (SÄRF) is a municipal service which organises and provides fire and rescue services in five municipalities in the west of Sweden: Bollebygd, Borås, Svenljunga, Tranemo and Ulricehamn. It has one full-time brigade, 12 part-time ones and five volunteer stations. Total personnel: approx. 400. Its headquarters are in Borås.