

postal

technology international



PERFECT PLANNING

Technology to help maintain a reliable logistics service

MIDDLE EAST FOCUS

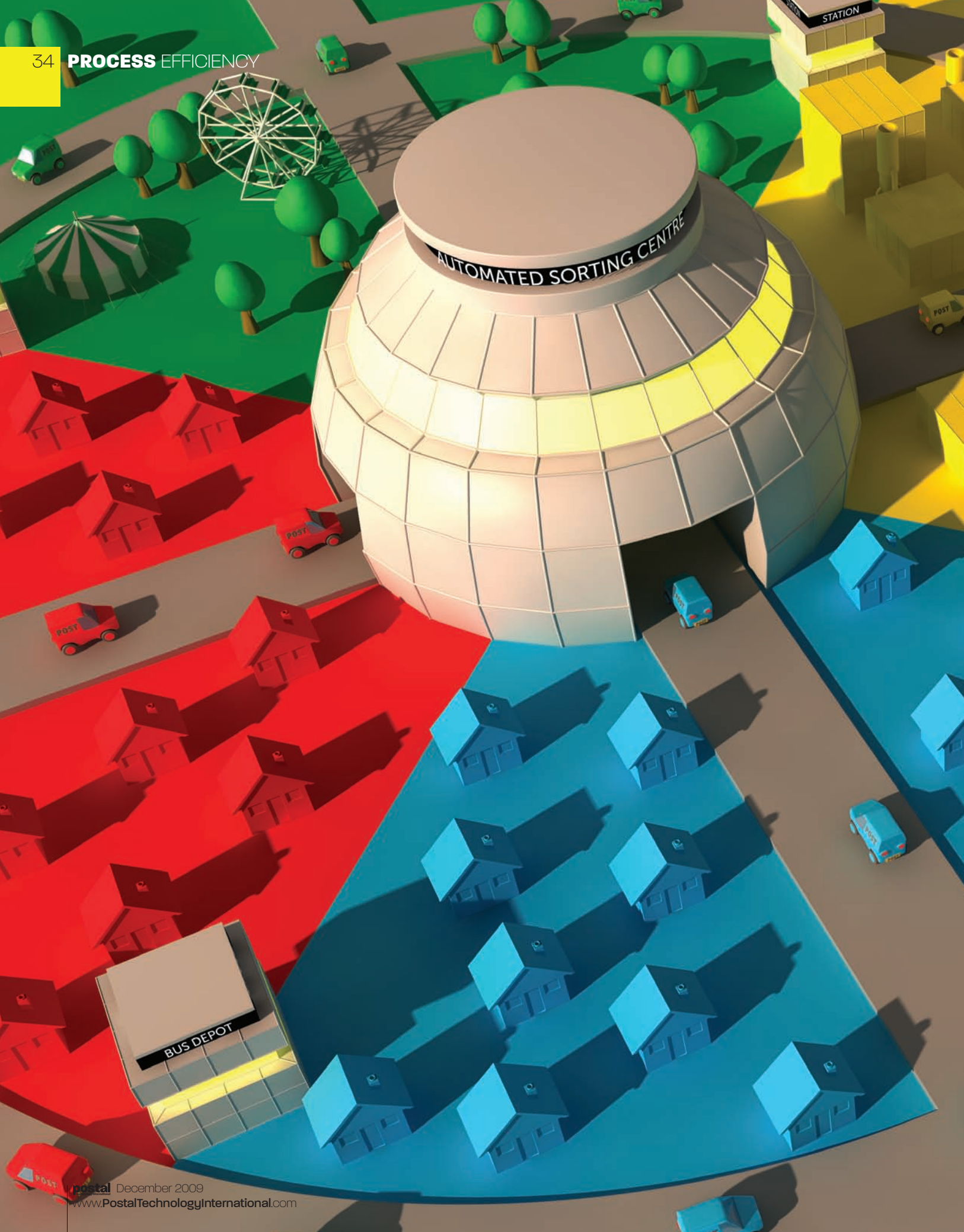
Strong partnerships are a key success factor in the Middle East

BANKING ON SUCCESS

Does the success of Swiss Post depend on a banking licence?

Smooth process

HOW CAN EFFICIENCY HELP COURIER AND PARCEL COMPANIES DELIVER QUICKLY AND ON TIME?





Smooth process

CUSTOMERS RELY ON COURIER AND PARCEL COMPANIES TO DELIVER QUICKLY AND ON TIME, THEREFORE EFFICIENCY IS EXTREMELY IMPORTANT. **THOM GIBBS** EXPLAINS MORE



In a fast-changing industry new technological developments often make big promises about the benefits they can have on business efficiency. It can be difficult to deduce which technology will genuinely improve the efficiency of your operation rather than effecting only superficial changes, but the litany of products offered by hardware and software companies means that the postal industry is rarely short of options. As the parcel sector has moved towards automation, the speed of the sorting process has accelerated, improving overall efficiency within the industry. Efficiency is also crucial for courier companies, which routinely trade on their ability to process and deliver a package more quickly than any of the alternatives.

Ankra Systems is a Netherlands-based company employing 25 people and turning over between €5 million and €7 million a year. It specialises in automated loading and unloading systems for trucks and has worked with ColiPoste, the parcel operator branch of La Poste, since 2003. Ankra Systems recently completed implementation of its unloading systems in ColiPoste's entire fleet of 440 trailers, so all are now equipped with a belt and moving floor system that allows for automated unloading of parcels. Forty-five of the dock systems required to make the project functional have been installed at the company's 13 sortation centres.

Ankra's managing director Jasper van den Driest says that the automated loaders have multiple benefits for efficiency: "Our current systems can unload two trailer loads an hour, which represents about eight to 10 thousand parcels per hour, per dock. Sorting machines, the most expensive pieces of equipment in the hub, have much better use because our unloading systems guarantee a continuous flow of parcels. When it was done manually you'd have a very big peak, followed by a couple of hours with the sorting machine sitting idle. Overall that reduced the effectiveness of the sorting machine.

"The result at La Poste was that the overall capacity of each sorting hub increased quite dramatically." Van Driest also highlights the improved space efficiency that the automated unloading systems create, as there is no longer the need for manoeuvring space for forklifts and other vehicles. "If you're looking at

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building a new facility and you take our systems into account it definitely has a positive effect on the layout."

In addition to its developments with unloading systems, Ankra has recently patented an automated loading system that was unveiled at September's Post-Expo in Copenhagen. "Loading is still mostly done manually and we want to automate that process as well," says Van Driest. "The loading system we are working on will complete La Poste's fully automated vision."

The automated loading system is based on loading trailers from the top rather than the back, facilitated by the addition of a small mechanical hatch towards the front of the trailer. A conveyer connects directly to the sorting system and a steel structure extends from the sorting centre over the trailer's docking area and feeds parcels through the hatch. A removable cushion on wheels maintains a pile of parcels as they are loaded and a sensor moves the belt system backwards to allow more parcels to enter each time the pile reaches the top of the trailer and causes parcels to stop falling.

"At the moment ColiPoste docks an empty trailer and uses a telescopic conveyor to take parcels from the sorting machine all the way into the trailer," says Van Driest. "But at the end of the conveyer you still need a person to take off the parcels and put them inside. It's very time consuming and it's not a very healthy working environment due to extremes of temperature and a lack of natural light. Our solution improves efficiency, but maybe the most important benefit is on the health and safety of employees. The time improvement depends on the type of parcels but we think we can load in an hour with a fully automated process. Manually it can take more like half a day." The project is still at the design stage but talks are in progress with La Poste to build the first prototype.

It isn't just mechanical developments that are improving efficiency in the parcel and courier sector. Denmark's Lyngsoe Systems has 30 years' experience working with tailor-made parcel-tracing and control software. It created a parcel-control system for Royal Mail as well as supplying software solutions for Post Denmark and Canada Post. Its Quality of Service Monitor (QSM) software incorporates the latest RFID technology and delivers service statistics and traceability information for posts' and couriers' most important clients. The software

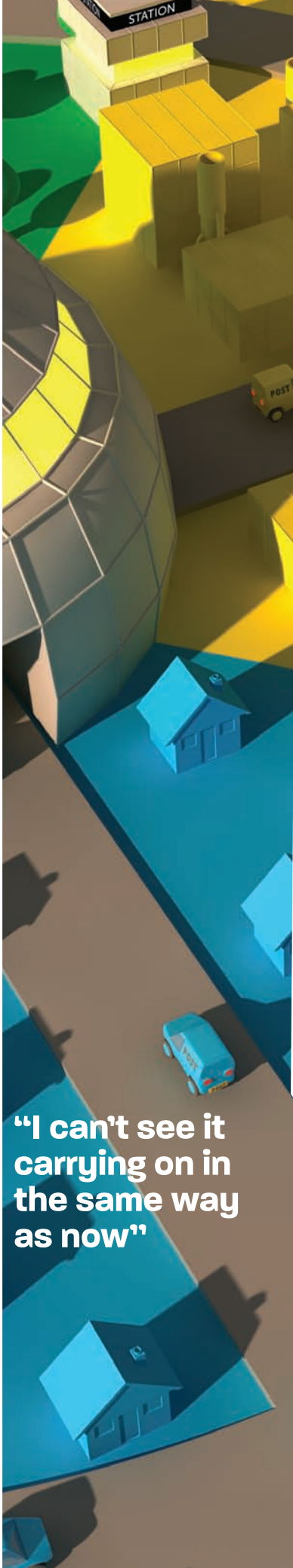
can provide real-time performance reports and offers easy access to the data collected using RFID tags. A range of modules can be added to the software packages and the system can be customised with local languages and restricted access to some functions and data.

Using QSM also cuts out the financial burden of developing your own software, says Keld Ole Nielsen, division manager of postal solutions at Lyngsoe: "Big courier companies normally have software systems that they have developed on their own. These days it's quite expensive to have your own IT department, and in using our software instead you're using something that has had input from several customers. It cuts out the cost of having systems designed specifically for you, and means that the technology and ideas that have come out of working with other customers are available to everyone. It's a web-based platform that doesn't require any local software installation, so you're also cutting out the expense and time of installing software on thousands of employees' computers."

GIRO is the Canadian company behind GeoRoute, software that specialises in route planning for courier companies. GeoRoute is frequently used to help companies assign efficient territories for their drivers within the regions they deliver to. "We have a tool to make sure that these territories are balanced for each driver, based on the historical data the organisation has," says Serge Galarneau, director, routing, of GeoRoute. "The software will look at ways to define territories that are efficient, group together street segments that make sense, and make sure that the territories are balanced between the workforce, so that one territory doesn't have to work more hours than others."

GeoRoute can also aid companies in creating efficient delivery sequences for their drivers. "There are two strategies. The first is to use a fixed sequence every day and the other is to create a new one each day – a dynamic sequence," says Galarneau. "If companies are working with a fixed sequence, GeoRoute can optimise the route and save about three percent on time and distance. With dynamic sequences the time saved is more like six percent. Once the routes are created they can be transferred to the navigation system in the truck and the driver can follow that when he's making his deliveries."

While both GeoRoute and QSM work well within conventional parcel and courier setups,



"I can't see it carrying on in the same way as now"



there are also some emerging technologies that subvert the accepted door-to-door strategy of package delivery. ByBox was set up in 2001 as an attempt to solve the problem of failed internet deliveries. The company has a network of 18,000 electronic drop boxes in 1,200 locations across the UK, which are used primarily within the business-to-business sector, but is now looking to expand its consumer operations. It has collaborated with Deutsche Post on its unattended delivery project as well as trialling its products with Royal Mail.

"Our system helps efficiency in a couple of different ways," says CTO and co-founder of ByBox, Dan Turner. "For a start if you are delivering to a box cluster rather than 20 different mailing addresses you can get rid of 20 parcels in one stop. Your van can make more deliveries with eight stops than it could with 80 stops at conventional delivery addresses. We've conducted thorough investigations into the ecological efficiency as well, and we've had the system validated by Heriot-Watt University. The researchers' view is that if the lockers are on a customer's daily route, at a railway station for example, the amount of carbon that a parcel generates is 83 percent less using ByBox than it is when using a conventional door-drop delivery."

Turner believes the industry as a whole has to consider the idea that attitudes to post may change even more dramatically in the future and he sees his company as well placed to adapt to the changes. "Our point of view is that there's a fundamental shift going on and posts need to stop thinking in the old traditional way of getting more people into the post office. That's not what it's about any more," he says.

"I think in the future customers won't have the choice of getting parcels delivered to their door rather than using a pick-up point. Either we will have consolidation centres, which would mean companies like DHL and UPS sharing one van in an area rather than using their own, or we'll have all the parcels going to one place that people can pick up from. I can't see it carrying on in the same way as now." ■