

Flow motion

Efficient logistics are a crucial ingredient in keeping the bakery trade well stocked day-in, day-out whatever the weather. **Andrew Don** reports

This type of hiatus on the roads (see picture box-out, right) was repeated all over the country in the last two weeks of 2010, with delivery vehicles commonly delayed or incapacitated because of snow. Anything that delays food transport vehicles has a knock-on effect down the chain. Bakeries do not get the supplies they need; shops do not get the products they want; the public are left with gaps in their larders.

Snow is the pariah in an age when the Holy Grail is to distribute bakery products and ingredients more quickly, efficiently, cost-effectively and sustainably than ever before. Chris Sturman, chief executive of the Food Storage and Distribution Federation (FSDF), says journeys took much longer in the recent freeze. But speed and reliability are particularly important in bakery where orders will often be made today for the same- or next-day delivery. "If you then have journeys that take 12 hours instead of six, the vehicle is not available to do another job, so you get a slowdown of the whole supply chain," says Sturman.

Volumes for delivery also increased over the period because customers ordered on a contingency basis during the freeze. This required more vehicles on the road. "The main issue is satisfying the consumer, having enough of the product on the shelf when the consumer wants to buy it and in the condition that we all aspire to," adds Sturman.

Norbert Dentressangle prioritised during the freeze, but director Dan Myers admits "everyone struggled". He says: "At the moment everyone has been block-booking over the weekend. We are not performing as well as we would like, but compared to other people, we're doing very well, I would say."

Allied Bakeries, which has 850 vehicles, 180 trailers, travels more than 621,000 miles a week and manages 10,000 deliveries a day,



Delivery vehicles were commonly delayed or incapacitated by the cold snap

Date: Saturday, 18 December

Location: Hale Lane, Edgware, Middlesex

Weather: Deep snow

Traffic: Stationary

Cause: Sainsbury's delivery vehicle stuck. Driver tries to reverse but keeps slipping towards a tree



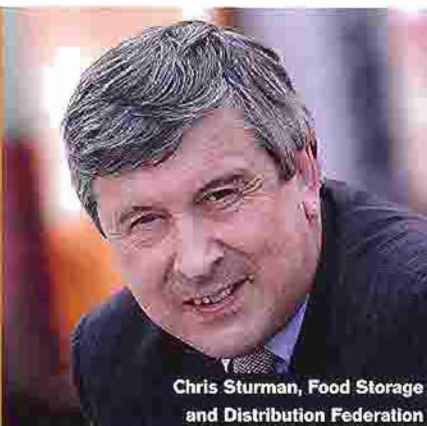
Dan Myers, Norbert Dentressangle

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has got the distribution process down to a fine art, delivering direct daily from 19 depots and bakery locations. It makes a delivery for every 11 miles of vehicle movement, so it can get the freshest possible products into store as quickly as possible. Paul Longley, logistics director, says: "It is quite possible products will arrive into the customer that have been baked in the last six hours."

The company has tried to make its bakery sites more self-sufficient and it produces a wider range across more of its bakeries, which has reduced the amount of goods it shifts between sites, slashing mileage. The company believes it performs better than anyone else on order fulfilment on what it calls a "direct-to-store" basis. It says its order fulfilment averaged 99.63% last year and claims not to have fallen below 99.5% in the last three years on an annualised basis. Speed and efficiency are crucial for bread which has a typical shelf-life of less than four days. "If a customer orders 10,000 loaves we make sure we get that to them," says Longley.

Reduction in carbon footfall

Allied claims it has reduced carbon footprint by 28% over the last six years. Drivers are trained to understand how the way they drive affects fuel efficiency and, therefore, emissions levels, working on simulators.

The company also bought 25 "tear-drop"

vehicles in 2009 to test, and a further 78 in 2010 at a cost of £4m. With a tear-drop vehicle the front of the trailer at the back of the vehicle is designed in a slope to improve its aerodynamic capabilities.

Allied also went from Euro 3 to Euro 5 (diesel) engines with EEV (energy-efficient vehicles) technology and, two years ago, it moved to automated gearboxes to effectively offset individual drivers' driving techniques. It has piloted zero-emission electric trucks with Modex and Smith. "We are waiting to see how that technology develops, because it doesn't typically have the reach we need at the moment," says Longley, adding that there are issues around battery technology, but that he is keen to keep pursuing opportunities through different technology ideas.

The group has also been doing work with Mercedes Benz, using the vehicle manufacturer's fleet-board system and its in-cab technology to measure driving technique. All vehicles have onboard telematics or telemetry, which enable Allied to monitor how its drivers perform. An onboard proof-of-delivery system is remotely accessible and customer order information can be sent to a vehicle after it has left. But, as Longley says: "You can have all the gizmos in the world and spend a fortune on it, but unless you have your people committed to delivering it, you have no chance."

For the next three to five years, Allied is committed to driving the sustainability agenda and is looking to see whether it can improve the service to stores. "We are looking at unwrapping and unravelling shopper behaviour in better matching our supply chain to meet shopper requirements in-store to further improve the freshness offering."

IT plays a key role in modern logistics. North-west family-owned firm Roberts Bakery uses Paragon Software Systems' advanced delivery routing software, which automates and optimises route planning and scheduling. Planning time has been slashed as a result, says the firm.

Dutch company, pcddata, introduced its Distrib bakery despatch management system some 20 years ago. With over 400 installations completed worldwide, including Warburtons and 17 of the British Bakeries sites in the UK, it claims to have refined its solutions and reduced the cost of installation to the point where even the smallest multi-product bakery can pay for the system cost in less than a year.

Warehouse tracking

Meanwhile, Merit Solutions, which manages process efficiencies in the baking industry, launched its SOM Despatch-Packing Module last summer [2010], which is designed to eliminate human error in the warehouse by tracking every item loaded onto vans. It also cross-checks them against the orders that need to be filled.

Norbert Dentressangle, which specialises in frozen product to the likes of Bakehouse, Speedibake and Delifrance, is one of those to have introduced technology to monitor and report fuel usage of its 8,000 vehicles. Myers says: "In-cab technology is becoming more prevalent, as are education and management of driver style, and technology that gives customers real-time visibility of where vehicles are."

He says technology will continue to be important as greater demands are placed on the industry to shorten lead times. "We've invested heavily in real-time trailer temperature monitoring; this is key with bread, which does not hold temperature very well."

The company has also been investing in voice recognition technology. Drivers wear headsets that direct them to the correct location, asks them to confirm they are there, instructs them how many items to pick and asks them to confirm the correct number. When they answer everything correctly, they are allowed to move on to their next pick.

"We've had it in a couple of our sites for about two years and we are rolling it out. It's a system that can talk to you in any language and you can have a man's or a woman's voice – or even Sean Connery," Myers says. ■