

A new view of Food and Livestock Traceability

By Dr Peter Harrop, IDTechEx

Food scares involve everyone but so does concern over cost and availability of food. The good news is that, today, food safety measures can be improved while, at the same time, reducing costs and increasing sales and customer satisfaction. To achieve this, voluntary cooperation within industries and between nations has a vital part to play as well as new legislation. Increasingly mandates matter too, from McDonald's demanding full traceability from suppliers to Wal-Mart, Target, Best Buy, and Albertsons mandating RFID labels on all incoming pallets and cases.

The newer technologies of tracking and tracing are being adopted faster than is realised. Genetic testing of food and livestock is now a substantial business. Radio frequency identification of food and livestock is fast becoming the biggest application of RFID and the most ubiquitous local area network connectible in the world of computer science. However, these new ways to track, trace and identify must be integrated with existing systems and optimally designed for service to the customer and cost control, not just safety. Some of these measures already achieve multiple paybacks from faster and more transparent supply chains, more efficient recalls and fewer empty shelves in the supermarket. Then there is faster, more thorough and more accurate response to food safety crises involving accidental contamination and infection, including bioterrorism. Traceability no longer sees a separation of farm from food. The "farm gate" can no longer a barrier. We have to consider "growing plant to plate" and "animal feed to animal to plate" nowadays. Nothing less will do.

Another development is the globalisation of the subject with some of the smaller nations having a lot to teach some of the big ones about improved legislation and more rapid adoption of new technology. The EU, Canada, Uruguay, Botswana, Australia and New Zealand are among countries with mandatory animal identification systems. Increasingly, retailers demand traceability to the four corners of the earth. Clearly any study of best practice has to be global in reach.

A global conference reflecting the new realities

At the major global conference "Food and Livestock Traceability" in Dallas February 1-2 2006, www.trackingfood.com, legal and containment issues worldwide, including what comes next, will be clarified by Dr John P Sanders, Epidemiologist at the Food and Drug Administration, Dr Richard Barnes, Director of Food Security Programs, Food Products Association, USA and speakers from Leatherhead Food International and the British Food Standards Agency. WAWA of the US, the Can-Trace food traceability initiative in Canada and AgInfoLink Global of the US will share their experience in pulling together large numbers of participants from different industries and managing the data.

On the technology front, bioMerieux of France and the US, Maple Leaf Foods of Canada and LFI will describe the rapidly widening success DNA testing and other analytical technologies for both food and livestock. BASF of Germany will describe the world's first whole chain electronic traceability project. It involves farmed salmon. SIRA Technologies will cover responsive barcodes.

IDTechEx has the world's largest database of RFID in action, with over 1500 cases www.rfidbase.com and it will discuss lessons from over 500 of them that directly involve food and livestock in 20 countries. Hands on experience will be shared by the Brazilian Government, Aleis International of Australia, which has RFID tagged over ten million cattle including the whole of Botswana, and Abacus Biotech in New Zealand.

Speakers concerned with RFID tracking of both food and livestock, jumping the farm gate, include Dr Ryo Imura, President, Hitachi Mu Solutions of Japan discussing work in Japan, Korea, China and Taiwan and Professor James Rowe of the Australian Sheep Industries Cooperative

Research Centre – a country that is a leader in legislating for RFID tagging of livestock. Optibrand of the US will describe biometric identification of livestock, including retinal eye scans.

Combined technology is appearing, for instance RFID tags for both food and cattle monitor condition by recording such things as time-temperature profile. In this respect, KSW Microtec of Germany and the US will present on its Smart Active Labels SALs for monitoring the identity and condition of food at the same time. The global packaging company Sealed Air (Cryovac) will assist with this presentation.

These are only a few of the 26 speakers from ten countries that will present. Many attending the conference will need to get up to speed on the jargon and the technology and some will want in depth information on specifics. The organisers have therefore arranged four optional masterclasses led by global experts. Two are before the conference on January 31 and two are after, on February 3. They cover “Challenges and Solutions for Food Identification and Tracing”, “Introduction to RFID”, “Introduction to Legal Issues and Mandates of Food Traceability” and “Introduction to Smart Packaging”. In addition, those attending the conference will receive, free of charge, the IDTechEx “Encyclopedia of Food and Livestock Traceability” explaining over 600 acronyms and terms used in the industry and associated issues with a profusion of illustrations. They will also receive a 50% discount on the acclaimed report “Food and Livestock Traceability”, with its many new case studies.

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