

Tracking postal movement

Postal and express shipping agencies are predicted to become one of the most prolific end-users of RFID technology. Here we look at past, present and emerging trends in this growth sector for automatic identification



Great strides are being made in the adoption of auto ID systems by the postal sector. In 2007, 5.5 million employees processed and delivered 433 billion domestic letter-post items, some 5.5 billion international items and over 6 billion ordinary parcels. Some 660,000 postal establishments make the postal network the largest physical distribution network in the world. As traditional mail is falling in volume globally and eCommerce is rising, RFID is playing a crucial role in reducing the decline in traditional postal volumes and coping with increased eCommerce package shipments. Any business which requires asset movement relies on continuous improvement and decision making. Postal agencies can be an early proving ground for the viability of RFID-based control systems and they are also most likely to become one of the most important end-users of RFID technology.

Postal RFID going global

The UPU, an inter-governmental network of national postal services, celebrated 60

years as a specialized agency of the United Nations in 2008. Recently, the UPU announced the implementation of a new tracking program for international letter mail as part of its Global Monitoring System (GMS) using an RFID portal. The GMS is one of the most important quality of service improvement projects ever initiated by the UPU and is used to determine remuneration rates for international mail.

The concept of the system is based on mailing thousands of anonymous test letters and packages annually. These test letters are unidentifiable in appearance and are mixed in with national systems' normal mail flows in order to test how long an item remains in transit and to pinpoint potential bottlenecks in the delivery system that can cause delays.

Thanks to a design architecture based on open standards, the system is not tied down to any specific RFID technology, and thus provides users with the flexibility to integrate the GMS with their internal measurement systems if they so wish.

What the GMS means to the postal community

The GMS is a UPU quality measurement system for letter mail applicable to all UPU members. The plan is that this system will eventually be applied to all UPU member postal operators. In August 2009, India and 20 other countries started using the UN Universal Postal Union's new Global Monitoring System to evaluate the quality of their letter-post service using RFID technology.

During the first phase of the project, between August and December 2009, 530 independent panellists from 38 countries sent 24,000 test letters containing RFID tags through 45 postal facilities worldwide. The UPU has been developing the GMS over the past three years with the objective of securing RFID technology for use by all member countries. Using an open standard, each RFID tag costs about \$0.30 as opposed to others, which can cost up to \$20 each. As a consequence, the system can run as an open-loop solution, where the cost of re-impatriation can be saved and tags can be dis-

posed of when each parcel or item shipped reaches its country of destination.

Earlier proprietary RFID-based systems

Previous postal experiences with RFID for mail measurements over the last 10 years, have seen RFID being used to test the delivery performance of multiple national postal systems. In 2008 over half a million test letters and parcels with reusable active RFID tags were sent between 43 countries. This resulted in considerable quality of service performance data being amassed and proper fee payments applicable to express shipments being determined. At the end of 2008, more than 8,000 reader points and over 1,000 mail facilities existed in those countries which were included in the mail performance assessment.

European and North American postal administrations have used a bespoke semi-active system for mail quality of measurement to comply with European Postal Quality of Service directives. The same bespoke technology is used by DHL Global Mail for their international mail products and by national mail regulators to measure domestic mail quality. A number of Posts jointly own the non-standard IPR so it has been used in a number of different ways by different organizations. In round term estimates, this means there are more than 10,000 reading points in 1,000 sites in 50 countries. So the system has evolved into a number of variants being used by all the Posts that share the IPR and the technology providers that develop the technology. For instance the semi-active concept is being used by Lyngsoe for performance measurement of its baggage tracking applications and roll cage asset tracking in Post Denmark.

The Spanish Post Office, Correos and Swiss Post are two specific examples of RFID that are not covert quality of service related and are among the best instances of RFID adoption in the postal market. Correos, boasts one of the largest RFID projects undertaken to date in Europe and is the largest ISO 18000 6C implementation in Europe, while Swiss Post roll cage tracking is the largest RFID implementation in Switzerland.

by Sophie B. de la Giroday



Attend Postal Innovation on May 3-4 and on November 16-18, 2010 to discover the emerging need for innovative auto ID solutions in the postal segment

Postal Innovation: A high-end technology congress

A new global initiative has been created to connect representatives of the postal and express shipping organizations with experts in the field of automatic identification from around the world, bringing to life the first international think-tank and observatory on innovative technologies and methods in the postal market sector.

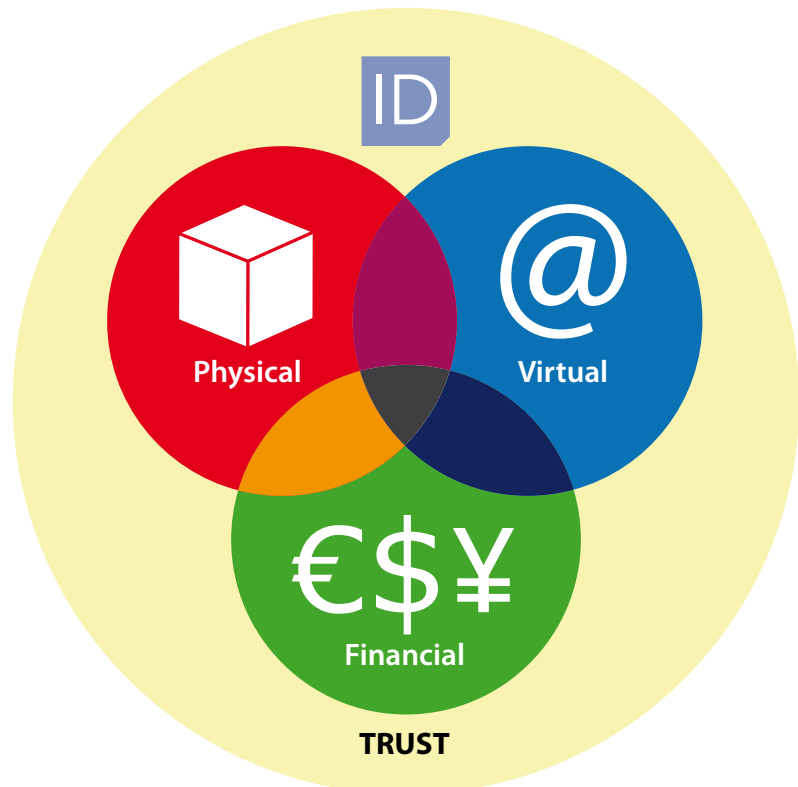
Postal Innovation (www.postalinnovation.com) is a high-end technology congress offering a showcase of the most advanced technologies and applications aimed to improve postal and express shipping services, as well as illustrating how they can best be implemented on a global scale, improving business and creating new sources of revenue. Going live twice in 2010 with a dedicated conference, Postal Innovation will gather decision makers from around the world on May 3-4 in Abu Dhabi (United Arab Emirates) and on November 16-18 in Milan (Italy). Bringing you the expertise of the ID WORLD International Congress working group on Postal Services, Postal Innovation is Wise Media's latest dedicated initiative on a vertical market in which innovation is expressing the most attractive new paradigms.

Focus of the event

The Postal Innovation working group of the ID WORLD International Congress will go live with its first dedicated event in the Middle East focusing on the topics of Identification Strategies, Advanced Express Logistics, Geo-Referencing and Personal Referencing, Quality of Service (QOS) Measurement, Interoperability in Item Referencing, Green Supply Chains and Hub Security.

The business areas with the highest financial contribution in the postal sector are at the intersection of the three key domains of "Physical", "Virtual" and "Financial" business.

Postal Innovation offers a showcase of the most advanced technologies and applications aimed to improve postal and express shipping services, as well as illustrating how they can best be implemented on a global scale, improving business and creating new sources of revenue



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