Enhancing cross-border delivery through RFID

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E-commerce consumers want visibility when ordering online, certainly when the item is shipped internationally.

According to the latest edition of the IPC Cross-Border E-Commerce Shopper Survey, 84% of the cross-border online purchases are below 2 kg and 61% are worth less than €50. Postal operators remain best placed to deliver low-cost and low-value packets. However, it is therefore essential for posts to offer a cost-efficient and reliable tracking solution for low-cost cross-border e-commerce items.

RFID provides the ideal solution for posts, with many already invested in passive RFID infrastructure within their operations for other purposes such as letter performance management or terminal dues. The cost of RFID tags is no longer an obstacle anymore as the price continues to decrease, costing less than €0.10 per piece. With little to no additional investment, they can connect to a cross-border RFID tracking network and offer low-cost tracking for international items for which there is currently no tracking information.

A low cost tracking solution

International Post Corporation (IPC) has developed the IT systems to create, capture, classify, manage and report RFID events for tracking purposes. This solution is cost-effective and therefore, allows for low-cost e-commerce item tracking. IPC’s RFID Tracking Service provides service support and management for posts using the passive RFID technology infrastructure. This network uses existing technology and could ultimately replace – where possible – barcode scanning activities by postal staff.

IPC supports posts with commercial RFID-tagged products, as well as several other posts participating in the RFID network and/or considering commercial roll-out of this service within their markets. Participating posts can offer the low-cost tracking solutions to e-retailers in their market. E-retailers can purchase RFID tags from the post to attach to their shipments.

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**Integrated into postal operations**

A passive RFID tag is initiated by the e-retailer and is recorded in IPC’s RFID system database. Once a tag has been activated, it is attached to an e-commerce packet by the staff of the e-seller. The e-commerce packet with a passive RFID tag travels through the operational flow for untracked packets.

Passive RFID gates at key locations within the post’s operational process (including transport and handover to other partners) generate RFID reads.

The reliability of the tracking data is ensured through the system by filtering duplicate RFID reads and unwanted data. Moreover, RFID reads are centrally evaluated against clearly defined business rules and events are matched to the appropriate item.

All data is stored in IPC’s Central Data Store and is available to all users. Customers, e-seller staff or postal experts can consult and connect with the tracking tools via an interface where they can see last location of the item and its current status in the postal operational flow.

Currently 28 postal operators are part of the IPC RFID tracking network and five posts have viable commercial products using RFID tracking for e-commerce packets item tracking.

The IPC RFID Tracking Services team offers customer support to posts, including network performance monitoring, monthly reporting, design and set up of pilots.

**Benefits for posts and e-retailers**

The IPC RFID Tracking Service bring benefits for posts and their customers (e-retailers):

- Tracking information available (to e-sellers, their customers and posts) for packets without the use of a barcode
- Posts can offer a low-cost tracking solution to their customers
- Easy access to tracking data
- Posts can analyse RFID events to assess quality issues in their operations
- Barcode scanning can be replaced where possible for e-commerce items; postal staff have fewer items to scan
- Continuous support before, during and after roll-out of low-cost RFID tracking solution, thereby making the process easier
- Regular monitoring and reporting of the service performance, allowing participating posts to closely monitor performance of the RFID infrastructure