

# RFID TRACKING



Providing a low-cost tracking solution for postal operations

## Why?

E-commerce consumers want end-to-end visibility when ordering online, certainly when the item is shipped internationally. Therefore, posts should be able to offer a reliable tracking solution for low-cost cross-border e-commerce items. High-end items are tracked based on barcodes while low-value products are often not tracked. IPC developed a low cost solution for this type of items, allowing posts to respond to consumer demand. Many posts have already invested in passive RFID infrastructure in their operations. With little to no additional investment, they can link up to a cross-border RFID tracking network. By doing so, posts can offer low-cost tracking to their customers for e-commerce items for which there is currently no tracking information, or use the RFID information to complement traditional tracking methods.

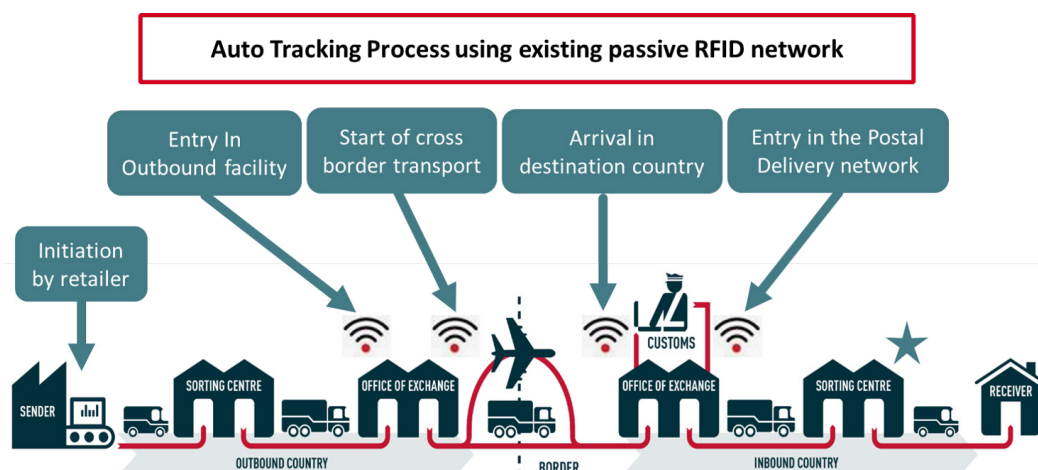
## How does it work?

- A passive RFID tag is initiated by the e-retailer and the first registration is recorded in IPC's RFID system database.
- Once a tag has been activated, it is attached to an e-commerce packet by the e-seller.
- Then, the e-commerce packet with passive RFID tag travels through the untracked operational flow.
- Passive RFID gates at key locations within the post's operational process (including transport and hand-over to other partners) generate RFID reads.

## Integrated into postal operations

IPC has developed the necessary IT systems to create, capture, classify, manage and report RFID events for postal item tracking purposes. IPC's RFID Tracking Service provides the necessary service support and management for posts using the passive RFID technology infrastructure.

IPC supports posts with commercial RFID tracked 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 products.



## Reliable and accessible data

The reliability of the tracking data is ensured through the IPC systems 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 service users. Customers, e-seller staff or postal experts can consult the relevant RFID events; they can connect to the RFID tracking information via an interface where they can see last location of the item and its current status in the postal operational flow. Currently several posts are using the RFID Tracking Service for e-commerce packets item tracking, either as a non-barcoded item or in combination with barcode scanning. In the latter case, the purpose is to complement the barcode scanning information.

## Benefits

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

- Tracking information is available (to e-sellers and posts) for packets without the use of a barcode via the RFID technology;
- Posts can offer a low-cost tracking solution to their customers;
- Barcode scanning can be completed or even replaced where possible for e-commerce items;
- Continuous support before, during and after roll-out of low-cost RFID tracking solution, thereby making the process easier
- Easy access to tracking data;
- RFID information is available to help desk staff of postal operators and e-retailers so that a better and complete service can be given when customers contact such helpdesks for assistance;
- Online reporting of the service performance, allowing posts to monitor performance of the RFID infrastructure

## Services offered to posts

### New Tracking Service:

A new service for tracking receptacles with RFID technology has been developed. The solution is fully integrated within existing postal operations and provides further accuracy of the hand-over process, further Leg 2 visibility and logistics efficiencies. RFID tracking is currently applied in postal bags and trays.

### Customer Support:

- Dedicated IT tools and applications for posts with commercial products based on the IPC RFID Tracking Service
- Specific support and assistance to posts considering introducing commercial products based on the IPC RFID Tracking Service
- Design and set-up of pilots for new flows or tracking solutions

### RFID Network Improvement:

- Network Monitoring Performance program: read rates of live items and flows through the RFID infrastructure are monitored
- Red Flow investigation: monthly follow-up on all flows with read rate below 95%, including the follow-up of the action plans
- Dedicated posts experts group are monitoring RFID infrastructure performance for QoS measurements (UNEX™ and TD) to improve the RFID network quality and recommend RFID innovations

### Reporting:

- **RFID Vision:** on line analytical and reporting tool
- **Monthly reporting:** an overview of all RFID events by postal operator as well as breakdown per outbound and inbound post to improve read rate levels with posts
- **RFID Services Monitoring Committee:** posts participating in the service meet at least four times per year for a follow-up on RFID services and to discuss RFID tracking aspects.

For posts interested to join, IPC runs a special programme for newcomers that enables posts to fully use the service in less than six months.

## More information

For more information, visit our website: [www.ipc.be](http://www.ipc.be).

To find out more about this service, contact us via e-mail at [rfidtrackingteam@ipc.be](mailto:rfidtrackingteam@ipc.be).



More info