RFID NETWORK

Providing the technology and infrastructure for frictionless, automated, contact-free, RFID-based tracking

Why?

To automatically identify and track objects in environments where the data capture process is intrusive, impossible or labour intensive, in multiple applications such as: letter quality for remunerations or operational improvement, end-to-end tracking of all postal items, etc.

32 postal operators

280 postal facilities

2,800 read points

How does it work?

RFID (Radio Frequency Identification) is an alternative technology to barcodes for the identification of items. The main difference is that barcode information is captured by optical means (a barcode scanner) whereas RFID information is captured via a radio signal. The data remains the same.

RFID tags are placed in postal items (letters, packets or parcels) or receptacles. These items pass through RFID gates placed at the entrances or exits of mail processing facilities, thereby capturing the handover and processing of mail items without interfering with operational processes. This data is captured automatically as mail passes through the RFID gates.

The network is currently used by 32 postal operators and covers over 280 postal facilities with close to 2,800 reading points. Over the years the technology has been enhanced to facilitate other solutions in the postal supply chain. In 2013, IPC extended the network with Passive RFID technology to support the INTERCONNECT tracking services.

Benefits

- **Clear indication of ownership**: the inclusion of RFID tags makes it possible to track postal items at specific locations, typically where items change responsibility from the sending post to the receiving post. RFID equipment at specific entrance or exit doors records the passage of these tags without interfering with the operational process. The time and location is associated with the item details. This information undisputedly marks the ownership of the postal item that is necessary to measure the letter performance of the postal operator responsible for processing the flow.
- **Allows for low-cost tracking solutions**: passive RFID technology allows the network to roll out low-cost tracking solutions for e-commerce.
- **Open data exchange platform**: IPC implemented an open data exchange platform based on the Electronic Product Code Information Services (EPCIS) framework to facilitate the RFID data communication with other EPCIS-compliant networks.
- **Open passive RFID encoding standards**: IPC has developed RFID encoding standards for single-piece (based on UPU S10 standard) and asset tracking to ensure interoperability. For quality of service purposes IPC has also developed a standard for test letter encoding.
- **RFID data is used in IPC products**: UNEX™, IPC Pallet Box, Sprinter Network.
- **RFID data is used by external projects** like UPU GMS and domestic postal studies.
- **RFID knowledge centre**: IPC RFID team have been early adopters of the technology and have gained in-depth knowledge in the complexities of implementing, managing and operating RFID technology on a global basis. IPC has demonstrable experience in facilitating the integration of RFID technology in the postal sector.

More information

To find out more about this service, please contact rfidtrackingteam@ipc.be.

More info