



## Case Study - UHF Encapsulated Tags

### UHF encapsulated tags

As RFID is now very successful, Etilux took up the challenge a long time ago. In 2005, Etilux participated to one of the biggest RFID project of the time:

The development of the Saudi Post postal services in Saudi Arabia.

The post has modernized its different fields of activity and offered home mail distribution. Before, the annual 842 million sendings were put in letter boxes placed near the addressees' homes. With the Wasel project, most Saudi Arabian households have received an address. Then, they have been equipped with their own letter box.

The letterboxes, equipped with RFID chips, inform the new postmen, when they are in front of the good box, thanks to a scanner.

Before the mail distribution, the postman controls, with a handheld scanner, that the letter box address matches the address indicated by his scanner. The system even becomes interactive when EMS shipments or registered post are distributed, because it sends an e-mail to the consignees to inform them that a particular shipment has arrived.

From a technical point of view, the metal letterboxes, made in China, are designed with a space for the RFID tag, which is encapsulated in a plastic housing to limit the interferences between metal and tag.

The implementation phase concerned the installation of 1.2 million boxes in 10 months in the city of Riyadh. In this context, Etilux supplied the order of 1.2 million RFID tags in 2005 and 2006.

Despite some inconveniences due to the service implementation (thefts, increase of contribution fees, and postmen's training), the installation is also in progress in other Saudi Arabian cities.

