

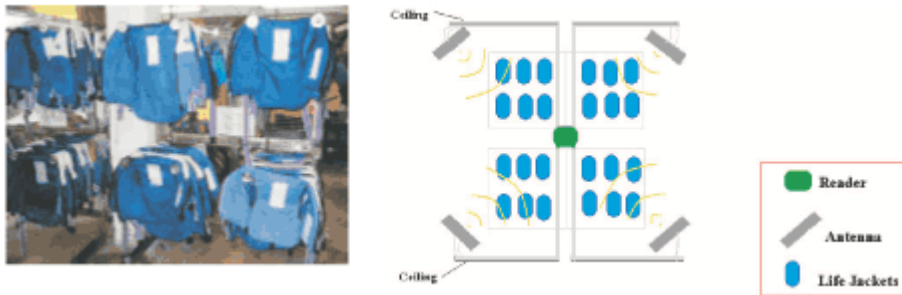
# NEC award RFID projects in public sector

## Case 1 RFID Inventory Control System for an activity centre

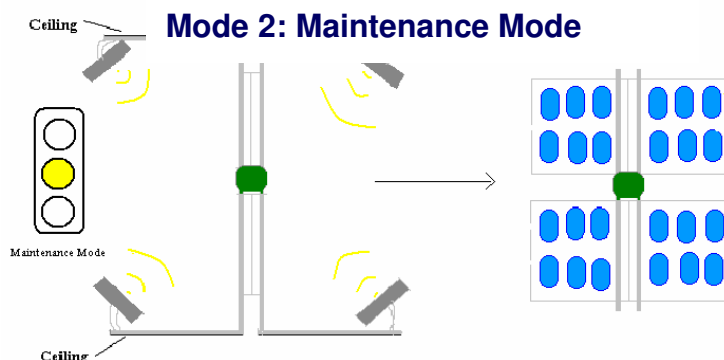
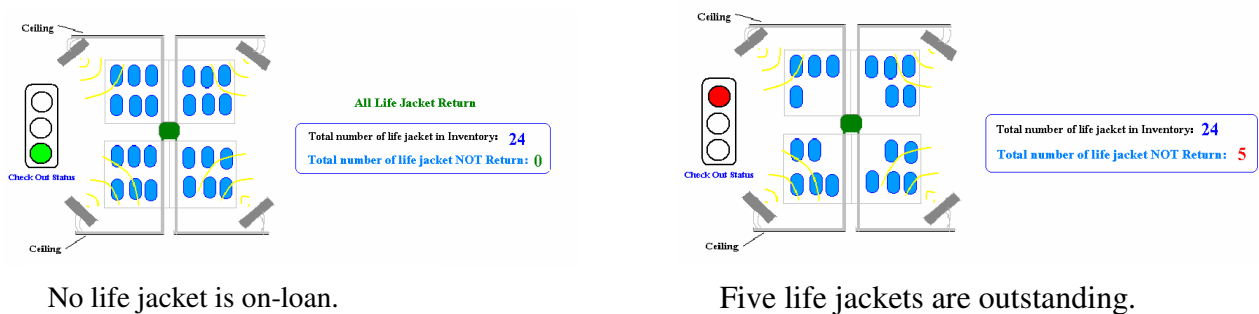
The system makes full use of Radio Frequency Identification (RFID) technology to speed up the efficiency of real time tracking of life jacket count in storeroom environment. It is effective to check for missing items and report will be generated for logging purpose. The following diagram shows the block picture and workflow of the system.

### Application:

- Water proof RFID tags for every life jacket.
- Real time information can be retrieved on the stock level.
- Reading range between antenna and RFID tag can be reached up more than 7 meters.



### Mode 1: Operation Mode



In this project, NEC is the total solution provider by offering 1) RFID Detection System which comprise of all RFID tags, registration stations, self-service kiosks, inventory readers, security gates and operation software. 2) Library Management System which provide library administration service, circulation service, searching service, reservation service, reminder service as well as renewal service.

### Application

#### 1) Tags Provide different kinds of RFID tags for different objects:



*For books / magazines*



∅ 40 mm (1.57 in)

*For CD Rom*



92 x 29 mm (3.62 x 0.76 in)

*For VHS Tape*

#### 2) Security gates

- To trigger alarm when items that have not been checked out properly.
- Using a single RFID tag for both identification and security of an item.
- With visual and audible alarms and traffic data collection.



#### 3) Self-service Kiosk

RFID-enabled self checkout system enables

- library patrons manage the checkout process on their own in an efficient and private manner.
- the patrons easily to place the borrowed library materials onto the detection area and simply follow the instructions to validate the transaction and receipt can be printed for staff own record.
- improvement on customer service because waiting lines are significantly reduced.



#### 4) Inventory Station

- A portable handheld Inventory Station enables librarian easily to identify items on the shelves.
- The portable reader has been designed to perform fast and accurate inventory checks and also to search for specific items (re-shelving, weeding, on-hold management, etc.)
- Instant data capture as soon as the portable RFID station is passed alongside the items in a continuous movement.
- It is connected to a PC which stores and displays item data. Data are then transferred to the library database.



