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1.0 PURPOSE

The purpose of this document is to specify the user requirements for the applications that will be used on the new Motorola barcode readers used by PDO.

2.0 SCOPE

The applications will only be tested on the Motorola barcode readers

3.0 ABBREVIATIONS AND DEINITIONS

BCR: Barcode Reader
 CSV: Comma Separated Values (text file)
 WTS: Waste Tracking System
 DTC: Drum Transfer Certificate
 PDO: Predisposal Operations

Definitions:

Default: (Row, Pallet and Special) : A pattern of position combinations to be used to automatically fill the next position combination after the user enter/change a position combination.

4.0 APPLICATIONS WITH REQUIREMENTS

4.1 GENERAL

Application to be developed to operate on Windows CE
 Application to activate on BCR startup and to remain the only active application.
 Startup menu to show the sub application as reflected in the next paragraphs. Selection by either typing menu number or scroll.

4.2 APPLICATION: SCAN BATCH

This application will be used to scan the drums that have to be transferred between two building/stores.

The requirements are as follows:

- Input from operator required : scanning of barcodes
- Only a list of barcodes is generated
- Barcode number maximum 9 digits.
- No duplication of barcode is allowed during a scanning session
- A counter of the total number of drums scanned is displayed
- The most recently scanned barcodes shall show on the screen.(e.g. last 3 or 4, depending on screen size)
- Record barcode numbers in text file (.CSV)

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- User able to scan more than one batch before going back to do the 'download batch' on the WTS. Each batch has it's own DTC.

4.3 APPLICATION : DRUM MOVE

This application will be used to give a drum a unique position (Store-XYZ) in the store by scanning the barcode and enter the position. The three scenarios namely the registration of drums per row, the registration of drums per pallet and the registration of drums will be covered by three submenus Row Drum Move, Pallet Drum Move and Special Move

The general requirements for both scenarios are as follows:

- Application consists out of an input line (barcode, row(X), block (Y), height (Z), store code), a scrollable list of drums already scanned.
- Input from user required: scanning of barcodes and entering of position as required.
- Barcode number maximum 9 digits.
- The position will have to following composition:
 - Store code. Store code as per Attachment 1. For selection operator to be able enter first letter and or second, or scroll down and select from predefined list
 - X (row). A numeric number, which can range from 1 to maximum 999
 - Y (Block) Alphabetic letter, which may range from 'A' to maximum 'AZ'. Also provide for special codes like GEN, and other codes as specified in attachment
 - Z (height/level). A numerical number, which can range from 1 to maximum 5.
- Ensure that movements recorded on the barcode reader have a date and a time stamp.
- WTS to process each move individually to ensure that consecutive movements (based on BCR date and time timestamp) can be processed.
- No duplication of barcode-position combination allowed. To show a message that it is a duplicate and ask to rescan
- A text file list (.CSV) of barcodes with addresses and time and date stamps is generated
- Able to delete drum from list on BCR if incorrectly registered. Allow to delete drum entry, not edit. (Button)
- Display a counter of drum positions scanned
- Allow maximum 4 drums per Store-XYZ combination where Y is not one of the special codes as specified in attachment. Show message when position is not accepted
- Only allow next level (Z - height) registration, if lower levels have 4 drums per position. Note: only applicable if lower levels are also registered on BCR. E.g. : if 3 barcodes (drums) are on PEL-233A1, no drum position allowed in PEL-233A2
- If Y (block) is specified with special codes like GEN, the default address for the row(X) and height (Z) should be 0 (E.g. AWS-0GEN0, or PEL-0VRF0). Also allow for codes VRF, IQ3, DSP, RPK (as per attachment 1).
- Allow for admin function to add later possible other special codes for Y.
- Only special Y codes and stores from defined lists are allowed (see attachment).
- User should be able to overtype the default input as discussed in the special requirements for the Row Drum Move, Pallet Drum Move and Special Move

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- For the first drum scanned the user has to enter the address. Ability to complete text (e.g. stores) inputs
- Barcode not editable – only input from scan

Special requirements for Row Drum Move are as follows:

- The following default position approach shall be followed: Use store-XYZ (e.g. Pel-515A1) position for 2 drums, thereafter switch Y to next (e.g. Pel-515A1 changes to Pel-515B1). This position to be accepted or changed by operator. Acceptance by pressing 'enter'.
- Procedural approach for operator will be that person scans a row (more than 1 Y) starting at a letter (e.g. A) on lower level (Z=1), and scans the whole row lower level. The user then goes to the other side of the same row and starts again at A on the lower level after user overtype the default to correct XYZ (e.g. 515A1). Thereafter he shall proceed with the next level and follow the same approach again. User not allowed to go the other side of the row if the physical number of blocks scanned (request user to enter last block scanned as indicated on floor) not correspond to the number of drums scanned (display) (2 drums per block)

Special requirements for Pallet Drum Move are as follows:

- After the first drum position has been recorded, the following drums to be scanned shall show the previous drum's position. This position to be accepted or changed by operator. Acceptance by pressing 'enter'.
- The position shall default to the same position for a maximum of 4 drums, thereafter only the store code should show default, but XYZ to be blank so that the user could specify the first drum for the next pallet.

Special requirements for Special Move are as follows:

- After the first drum position has been recorded using one of the special Y codes (GEN, VRF, IQ3 etc.), the following drums to be scanned shall show the previous drum's position. This position to be accepted or changed by operator. Acceptance by pressing 'enter'.
- This position shall default to the same position until changed by the user.

4.4 APPLICATION: DOWNLOAD OF LIST ON BARCODE READER TO PC

This application will be used by the user to download the list/s on the barcode reader to the PC. After the files have been downloaded successfully, the files shall be deleted from the BCR.

4.5 REQUIREMENTS TO MANAGE THE DATA ON THE BARCODE READER

- User able to do a Scan Batch application while there are still Drum Move data on the BCR.
- Show a message of the number of drum positions scanned which are still on the BCR if any, when starting the application Drum Move. The user could then decided if he wants to download first or continue with the scanning

ATTACHMENT 1

Stores	Special Y Codes
AWS	GEN
A20	VRF
A21	IQ3
BAT	DSP
SDS	RPK
BSD	
IST	
PEL	
INT	
SEA	
THA	
TH1	
TH2	
TH3	
TH4	
TH5	
VLP	