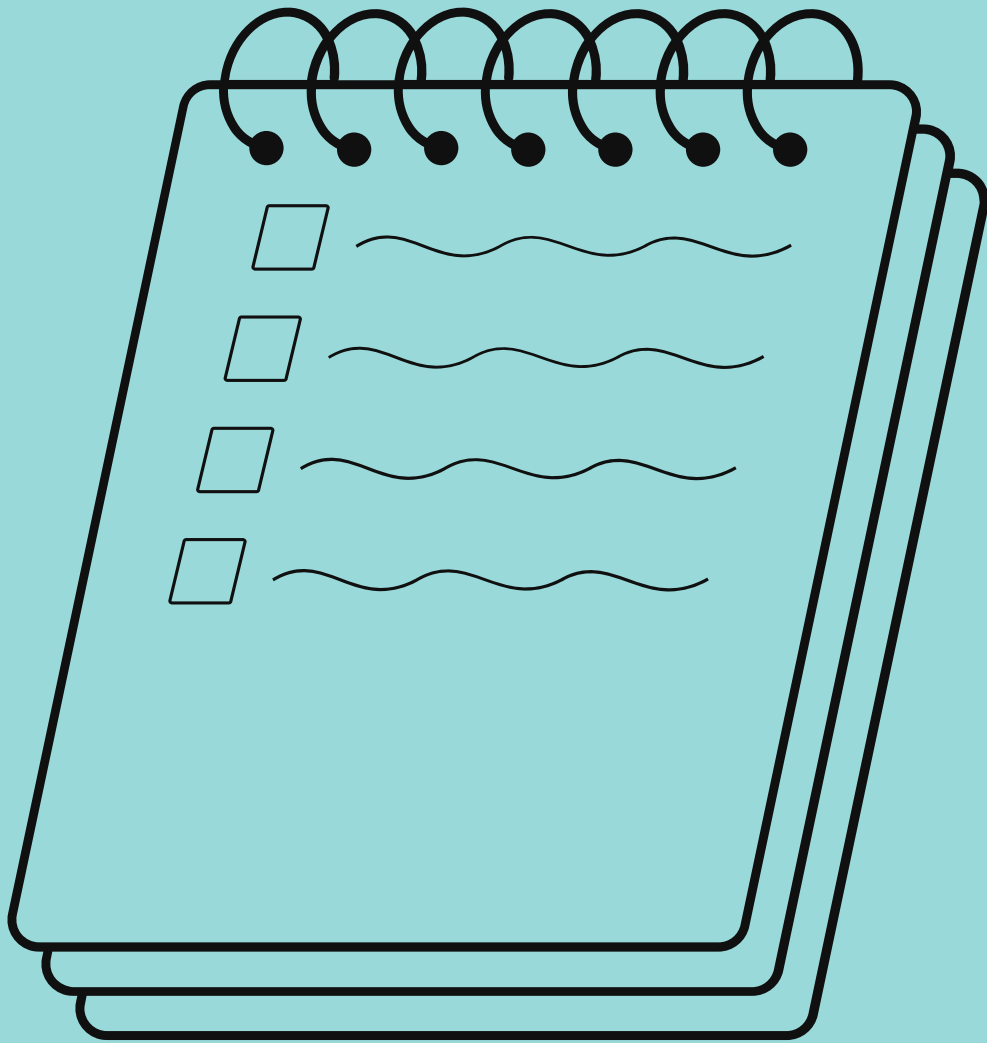


Ezzahar Aimad

Plan

1	What's a SmartBox
2	The messages received by PowerCard
3	Integrity Checks
4	Validation Message Processing



What's a SmartBox

A cash-acquiring device, that aims the cost efficiency, and sends informative messages to the PowerCard about the cash drops, removals, and demands ...



The merchant drops money in the SmartBox,



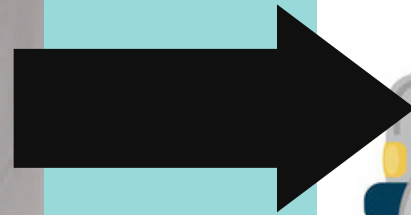
PowerCard verifies the integrity, and sends a message back to the SmartBox

On drop

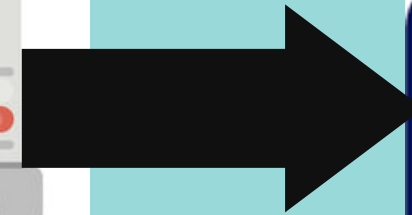
On removal



The merchant drops money in the SmartBox,



The CIT removes the bags containing notes, coins and cash



PowerCard verifies the integrity, and sends a message back to the SmartBox

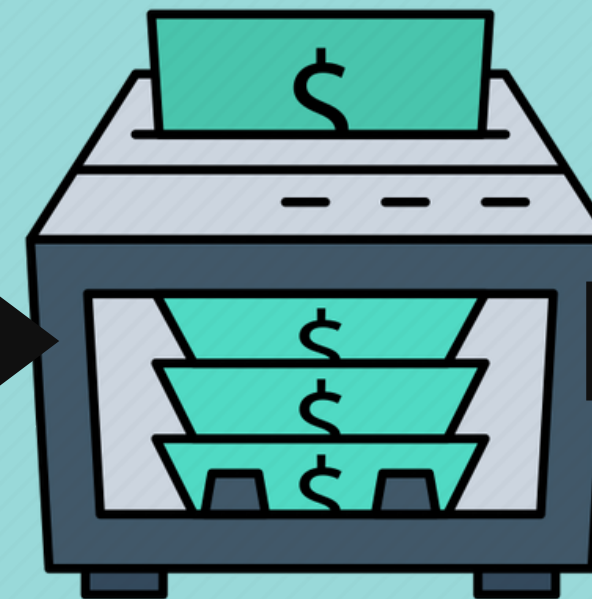
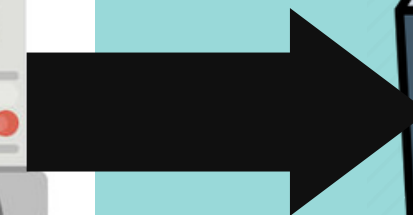
On count



The merchant drops money in the SmartBox,



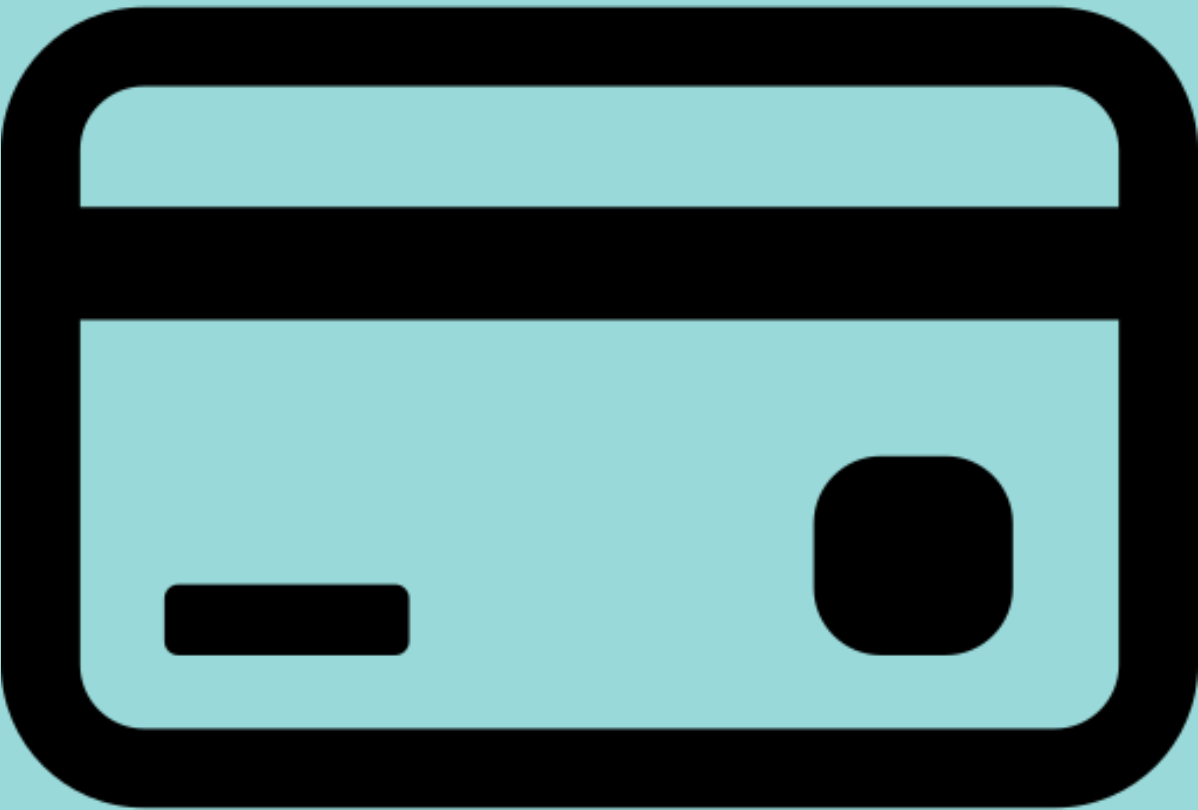
The CIT transports the bags containing notes, coins and cash to the cash center



The cash center counts the assets, and sends the value counted to PowerCard



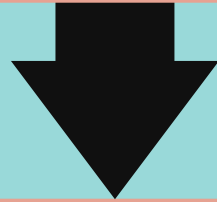
PowerCard verifies the integrity, and sends a message back to the SmartBox



Messages received by PowerCard

DROP	Generated by the device, contains the information related to each drop on the cash device.
REMOVAL	Whenever the CIT (Cash in Transit) remove a bag, this message is sent to PowerCARD.
VERIFICATION	When the cash center counts the physical bag, a signal is sent to PowerCARD to inform the system about the counted value in the bag.
DEMAND	A message sent by the device to trigger the settlement for SmartBox merchants that are on demand settlement option.

Invalid message format



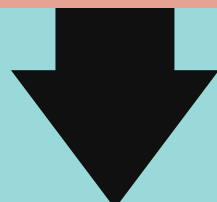
Merchant not Found



Merchant not Mapped



Duplicated Message



Verification message without drops

Integrity Checks

The order is relevant, cause once an integrity validation fails, the validation process is stopped and a message with the error status is sent back to the SmartBox

Validation message processing

