



Collection is carried out by specialized state and private companies; large banks also have their own subdivisions.

The change of the collector begins with the issuance of cash and other tangible assets, each of which is issued individually by registering and signing. Each collector is responsible for their own equipment, as well as cash and other tangible assets assigned to him in the cash collection center (CCC).



## **RFID Technology Features**

Thanks to the introduction of RFID technologies, all the processes of receiving/transmitting, moving values and people in cash collection centers (CCC) become automatically recorded. Using RFID tags, the system recognizes both employees and values in full accordance with the requirements of the Bank of Russia.

The introduction of RFID technology will automate the main processes of the collection service, such as:



Accounting for the movement of cash bags



Identification of bills cassettes



**Accounting for attachments of collectors** 



### Accounting for the movement of cash bags

An RFID tag with a unique identifier is attached to each bag, which is tied to a database with information about the destination of the bag, amount, route, etc.



# Cash withdrawal and delivery to bank branches or serviced points of sale

- In the process of transferring money and sealing the bag, the collector reads the label with which the bag is marked
- Information about the amount transferred by the cashier is entered by the collector into the information system via the mobile reader interface
- The cashier confirms the correctness of the data entered by the collector using a key fob or card with a built-in RFID tag (RFID tag acts as a verifier - electronic signature)
- Using an RFID reader, the cashier verifies the marked bags delivered by the collection service - the bag arrived for other purposes, is immediately returned to the collector



### Identification of bills cassettes

Each bills cassette is marked with an RFID tag with information about the denomination of banknotes in the cassette, the correspondence of the ATM model, accessory to a specific ATM, etc.

- At the time of issue of cassettes to collectors, information on the cassette destination is entered in the RFID tag
- To verify the cartridge at the time of loading money, each ATM is equipped with an RFID reader
- If the cartridge does not correspond to a specific ATM, the RFID reader sends a light signal to the collector
- If an irrelevant cassette has been inserted into the ATM, the RFID reader sends information about this to the bank's information system
- If jammed bills are found during the collection of empty cassettes at the cash register by the collector, the RFID tag will inform about the ATM in which this problem is observed



Using RFID cassettes and a mobile reader, you can quickly search and inventory cassettes in warehouses and in vaults.

### Accounting for attachments of collectors

Fast group reception/delivery of attachments of collectors involves marking each piece of equipment with RFID tags. The issuance of equipment occurs as a single set, and not separately.



- The collector responsible for material assets identifies himself with the help of a key fob with an RFID tag
- KIC employee issues a container with equipment, each unit of which is also marked with an RFID tag
- In the automatic mode, accompanying documents are generated in the bank's information system, which are printed and signed by the parties
- The procedure for returning equipment at the end of the shift is similar



# **Benefits of implementing RFID**



- Increasing transparency and controllability of the collection process
- Automatic documentation generation
- Real-time data display in the information system
- Accounting automation
- Automatic completion of electronic logs
- Acceleration of registration procedures for receiving/issuing cash and other material values by 10 times
- Group reception/issuance of attachments of a collector



#### **Keychain TwinTag mini RFID**

### for marking keychains of metal keys

The keychain can be used as an identifier of a collector and a verifier-electronic signature of a cashier of a bank branch or a serviced outlet

#### Marking Objects:

- The keys
- Bags
- Attendant ID
- Cashier ID



TwinTag-mini RFID tag is designed for use in solutions requiring stable registration of objects in three planes (3D format)



### TargetTag RFID Tag

to identify electronic equipment without interfering with its use

#### Marking Objects:

- Satellite phones
- Cell phones
- Tablets
- Cassettes for notes

### **CandyTag RFID Tag**

for marking dielectric surfaces

#### Marking Objects:

Cash bag







#### **RFID reader RST-Bookos**

for automation of operations of issuing and receiving equipment of collectors marked with RFID tags

The reader automatically detects the entire set of equipment placed on its surface. Data on each piece of equipment and a responsible employee is automatically transferred to the bank's information system.

RST-Bookos is made as a monoblock in a plastic case. For communication with the bank information system, the reader is equipped with a USB cable.





#### **Bookos-mini RFID Reader**

to verify a specific cartridge and determine its compliance with an ATM

The reader is integrated into the hardware of the ATM. The dimensions of the RFID reader do not exceed the dimensions of a standard smartphone, making it easy to install inside an ATM without taking up much space.

To communicate with the bank information system, the reader is equipped with a USB cable connected to the hardware of the ATM.



In addition to the basic ability to connect to a personal computer, the RFID reader can easily integrate with a small netbook, compatible with Android tablets and smartphones. Due to this and compact product form factor, the reader can be used as a mobile RFID complex.





#### Mobile RFID Reader

- for verification by the cashier of bags delivered by the collector to the bank branch
- to confirm the process of collection by the collector of money from a bank branch or a serviced outlet
- for search and inventory of cartridges for notes and bags in safe-vaults and warehouses of KIC

To communicate with the bank's information system, the reader is equipped with a WiFi / 3G module.

Mobile reader allows you to read RFID tags offline.



# **Company introduction**

RST-Invent – is a Russian RFID-tags and equipment vendor, RFID-system and software developer.





Work experience since 2005



Own RFID-tags and equipment facilities in the Leningrad region



Geographic reach: RF, USA, Asia, Europe



A full cycle of competencies in RFID: from the development of the element base to the implementation and maintenance of ready-made solutions



# **Contact information**





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