OFFICIAL INFORMATION OF THE CZECH NATIONAL BANK of 21 June 2018

on the Organisation of Testing and Supervisory Testing of Devices for Handling Domestic Banknotes and Coins by the Czech National Bank

The subject of testing devices for handling domestic banknotes or domestic coins by the Czech National Bank (hereinafter the "CNB") in accordance with this Official Information is verification of whether such devices meet the standards in accordance with Act No. 136/2011 Coll., on the circulation of banknotes and coins, as amended (hereinafter "Act No. 136/2011 Coll.") and Decree No. 274/2011 Coll., on the implementation of certain provisions of the Act on Circulation of Banknotes and Coins, as amended (hereinafter "Decree No. 274/2011 Coll.") and the other requirements of Act No. 136/2011 Coll.

A device for handling domestic banknotes or domestic coins or a set of them (hereinafter a "Device") will be understood to mean a Device that meets the conditions stipulated in Article 4 and 5 of Decree No. 274/2011 Coll. An anonymous device is understood to mean a self-service technical device used to provide services or sell goods during which the receipt, exchange or return of domestic banknotes or coins occurs (hereinafter an "Anonymous Device"), a non-anonymous device is understood to mean a technical device through which handling of money recorded on an account maintained by a credit institution occurs, consisting of the receipt, exchange or payout of domestic banknotes or coins (hereinafter a "Non-anonymous Device") in accordance with Article 11(1) or (2) of Act No. 136/2011 Coll. In the case of Anonymous and Non-anonymous Devices there is also testing of their ability to reject or retain suspicious banknotes or coins, in the case of Non-anonymous Devices also the ability to determine the identity of the account holder and specify the transaction performed.

The Czech National Bank also, in accordance with Article 24 of Act No. 136/2011 Coll., performs, as a part of its supervisory activities concerning compliance with the duties stipulated by the act, testing of Devices, Anonymous Devices and Non-anonymous Devices (hereinafter "Supervisory Testing").

The CNB states the following concerning the organisation of testing and supervisory testing of Devices for handling domestic banknotes and coins:

A. Testing of Devices

I. Preparation for Testing of Devices

- 1. A manufacturer of a Device, its representative, a service company or supplier (hereinafter a "Supplier") is entitled to request from the CNB trial sets of banknotes and coins (hereinafter "Trial Sets") to set up a Device.
- 2. Trial Sets for the setup of a Device can be requested for a specific type of Device before the submission of an application for testing or if there is a need to verify the functionality

- of a Device, always based on an agreement between the CNB and the Supplier, but no more than three times a year, always for five hours.
- 3. Preparation of a Device using Trial Sets is performed in the CNB head office building. In extraordinary cases, following a prior agreement, the CNB will enable the preparation and setup of a Device using a Trial Set in another place.
- 4. The CNB will enable the use of Trial Sets only in the presence of a CNB employee.
- 5. The CNB decides on the composition of a Trial Set.

II. Registration for Testing

- 1. A Supplier registers a Device or a set of them for testing using an application that is completed in accordance with "Instructions for Completion of Application for Registration of Device for Testing in accordance with Act No. 136/2011 Coll." located at the CNB's website¹⁾.
- 2. An application for registration contains information and annexes:
 - a) Information about the Supplier, including contact details and details about the Supplier's representatives;
 - b) Information about whether the Device is for handling domestic banknotes or domestic coins or a set of them, or whether it is an Anonymous or Non-anonymous Device;
 - c) Information about the type of Device, which includes, in particular, the specific hardware, the detector configuration including the software version and the configuration parameter version, e.g. Template, Currency File, etc. (hereinafter the "Template"); in the case of a set of Devices information about the types of all Devices in the set;
 - d) Information about what nominal values of banknotes and/or coins the Device will handle;
 - e) Information about whether the Device is able to handle only domestic banknotes facing one way, or also domestic banknotes not facing one way, or the orientation supported by the Device for the insertion of domestic banknotes;
 - f) Information about which protective elements and parameters of domestic banknotes or domestic coins a Device checks and also information about the method of verification;
 - g) Detailed instructions for the operation of the Device, preferentially in electronic form, including information about how often it is necessary for operators to perform service inspections and maintenance, in order to ensure the Device operates reliably;
 - h) Information about how it is possible to change the parameters for handling domestic banknotes or domestic coins in accordance with their fitness for further circulation, in particular whether operators, a service company or only the manufacturer is entitled to do this;

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¹⁾ http://www.cnb.cz/cs/platidla/pravni predpisy/testovani zarizeni.html

- i) If a module for handling banknotes is tested and it is part of, for example, ATMs, self-service tills, payment machines, etc., information about what the options are for changing the parameters for handling domestic banknotes or domestic coins in the end user application and also with what application the Device will be tested.
- 3. A Supplier will deliver a completed application, including the mandatory annexes:
 - a) <u>electronically with a guaranteed electronic signature</u> based on a qualified certificate issued by a licensed certification authority to the e-mail address testovani.zarizeni@cnb.cz or to the data box with the code **8tgaiej**
 - b) by post in a separate envelope marked "Device Test" to the address:

Czech National Bank Department 320 Na Příkopě 28 115 03 Prague 1

- c) or by hand in a separate envelope marked "**Device Test**" to the CNB's filing office, Senovážná 3, Prague 1 (opening hours of the filing office: Monday to Thursday: 8:00 a.m. to 4:15 p.m., Friday: 8:00 a.m. to 3:00 p.m.).
- 4. If an application does not contain all the mandatory requisites, the CNB will call on the Supplier to supplement it. In the event the Supplier does not correct all defects in a request within 30 days of the day it was called on to do so by the CNB, the CNB will reject the application.
- 5. Based on the information provided by the Supplier, the CNB will assess the ability of the Device or set of Devices to succeed in testing and it reserves the right to refuse to test a Device that can reasonably be expected not to succeed in tests with regard to its technical design.
- 6. After recording an application, the CNB will send the Supplier a confirmation of the application's acceptance.
- 7. A Device or set of Devices is included for testing in accordance with the order of applications received, testing dates are allocated by the CNB.
- 8. Testing is charged for at the price stated in the CNB's Price List for Cash and Commercial Services (hereinafter the "Price List"), unless agreed otherwise. The price does not take into consideration the CNB's costs for the preparation and realisation of testing.
- 9. The price for realising testing should be paid by cashless transfer into an account whose number is stated in the payment instruction that the Supplier receives together with an invitation for testing.
- 10. The Supplier is entitled to attend testing of a Device for which it submitted an application. The CNB will usually send an invitation with a set date for testing 15 days in advance. In the event of a change to the date, the place of testing or if the testing will not take place in

- a justified case, the CNB will notify the Supplier of these facts a sufficient time in advance.
- 11. If the Supplier is not able to attend testing on the set date, the CNB will, following an agreement with the Supplier, arrange testing on the next possible date.
- 12. In the event that the Supplier does not succeed in the first test and applies for a re-test for a Device, it will complete and submit a new application in accordance with sections 2 and 3. In the case of a repeat application for a Device, it is no longer necessary to provide the mandatory annexes, if there are no amendments to them. The CNB will usually arrange the sending of an invitation that states the testing date 15 days in advance.

III. Course of Testing

- 1. Testing of a Device will take place in the CNB head office building. In extraordinary cases, following a prior agreement, the CNB will enable testing to be performed in another place.
- 2. Testing is performed by a commission comprising at least two CNB representatives. In the event of interest, the CNB will usually enable two Supplier representatives to attend testing.
- 3. Before the start of testing, the serial number of the Device will be entered in the "Record of Testing Performed" and also there will be a check on the version of the hardware and detector configuration, including the version of the software and Template stated in the application; in the case of a set of Devices information about the types of all Devices in a set.
- 4. If, in accordance with an application, only a certain mode is tested, this fact will be stated in the "Record of Testing Performed".
- 5. Testing will take place in accordance with the instructions for operation of a Device attached to an application.
- 6. During testing, the commission assesses
 - 1) in the **basic test** the ability of
 - a) a **Device** to recognise a nominal value, verify the number, authenticity and validity of domestic banknotes or domestic coins and physically separate authentic and valid domestic banknotes or domestic coins from suspicious or invalid domestic banknotes or domestic coins²⁾;
 - b) an **Anonymous Device** to recognise the authenticity and validity of domestic banknotes or domestic coins and reject suspicious and invalid banknotes or coins³⁾:

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²⁾ Article 4(3)(a) and (b) of Decree No. 274/2011 Coll.

³⁾ Article 11(1)(a) and (b) of Act No. 136/2011 Coll.

- c) a **Non-anonymous Device** to recognise the authenticity and validity of domestic banknotes or domestic coins, retain suspicious banknotes, reject suspicious and invalid coins⁴⁾ and determine the identity of the account holder and specify the transaction performed (hereinafter "*Backtracking*").
- in a **test of fitness for further circulation** the ability to sort domestic banknotes or domestic coins in accordance with their fitness for further circulation⁶.
- 7. For a basic test the commission will use a testing set of domestic banknotes or domestic coins of all valid nominal values, the composition of which will be decided by the CNB. Domestic banknotes are inserted in the basic test in all test orientations stated in the application. After a successful basic test there is a test of fitness for further circulation.

8. The basic test is regarded as having been successful, if:

a) a Device

- correctly counts the number of units,
- recognises the nominal values,
- recognises all suspicious and invalid banknotes and coins, or banknotes and coins with other designs, which it physically separates from authentic and valid banknotes and coins.
- among suspicious banknotes removes no more than 10% of authentic and valid banknotes of each nominal value or of each valid design in a testing set:

b) an Anonymous Device

- in the mode for inserting banknotes or coins recognises the authenticity and validity of domestic banknotes or domestic coins and rejects all suspicious and invalid banknotes or coins³⁾,
- when inserting banknotes rejects no more than 10% of authentic and valid banknotes of each nominal value or of each valid design in a testing set;

c) a Non-anonymous Device

- in the mode for inserting banknotes or coins recognises the authenticity and validity of domestic banknotes or coins, retains suspicious banknotes and rejects suspicious coins⁴⁾,
- sorts withheld suspicious banknotes into cassettes (magazines) for suspicious banknotes,
- among suspicious banknotes sorts out no more than 10% of authentic and valid banknotes of each nominal value or of each valid design in a testing set;
- is able to determine the identity of the account holder and specify a transaction performed (backtracking) for all retained suspicious banknotes.
- 9. For a test of fitness for further circulation testing sets of authentic domestic banknotes or domestic coins fit and unfit for further circulation are used and the CNB decides on their composition. A testing set of banknotes or coins contains the nominal values that a tested Device will handle and that the Supplier stated in the application. Banknotes in a

⁴⁾ Article 11(2)(a) and (c) of Act No. 136/2011 Coll. ⁵⁾ Article 11(2)(b) of Act No. 136/2011 Coll.

⁶⁾ Article 6 and Article 7 of Decree No. 274/2011 Coll.; Article 11(1)(c) and Article 11(2)(c) of Act No. 136/2011 Coll.

test of fitness for further circulation are inserted <u>at random</u> in all the orientations supported.

- 10. A test of fitness for further circulation is regarded as successful if no more than 10% of domestic banknotes or domestic coins of each nominal value and design unfit for further circulation are assessed by the Device as fit for further circulation and also no more than 10% of domestic banknotes or coins of each nominal value and design fit for further circulation are assessed as unfit for further circulation.
- 11. Banknotes are placed in a tested Device only once, a test can be repeated only in the event of damage or banknotes sticking in a Device. A damaged banknote is replaced in the testing set by a replacement banknote.
- 12. Coins that are incorrectly recognised in a test of fitness for further circulation can be placed into a Device again. The result achieved after the possible second inserting of coins is the final result.

IV. Testing Results

- 1. The CNB will issue a "Record of Testing Performed" on the course of testing and its result and it will be signed by members of the testing commission and the Supplier's representatives present. If only a certain mode is tested on a Device, such facts will be stated in the list of successfully tested Devices for banknotes and coins (hereinafter the "List of Tested Devices"), which is published at the CNB website⁷⁾.
- 2. A successfully tested Device is entered without undue delay in the list of successfully tested Devices.
- 3. The results of testing are valid throughout the territory of the Czech Republic for all Devices that are identical to the tested types of Devices with the same software version. There is no time limit on the validity of a test.
- 4. In the event of a change to the hardware or software of a successfully tested Device compared to the state entered in the list of successfully tested Devices (section 1) the Supplier is obligated to report in writing or electronically changes arising within ten days of the day a change is made to the CNB (Article II(3)). After assessing reported changes, the CNB will decide on requests of the Supplier for re-testing of an affected Device.
- 5. In the case of a Device that did not succeed during re-testing or that was not submitted for it, the validity of the results of the original testing will end as of the first day of the following month and as of the same date it will be deleted from the list of successfully tested Devices.

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⁷⁾ http://www.cnb.cz/cs/platidla/pravni predpisy/otestovana zarizeni bankovky.html or http://www.cnb.cz/cs/platidla/pravni predpisy/otestovana zarizeni mince.html

- 6. When issuing new designs of domestic banknotes or domestic coins or the arising of significant new types of forgeries, the CNB can decide to end the validity of results of all successfully tested Devices as of a certain date. It will publish this information at its website at least three months in advance and call on Suppliers to re-test Devices for free.
- 7. The price for testing in accordance with the price list is not billed in the case of re-testing in accordance with Article IV(6) and Article VI(8). In the case of a repeat application for testing for Devices that were removed from the list of successfully tested Devices for handling banknotes or coins, such Devices will be regarded as being newly-registered Devices and the price for realising testing is billed in accordance with Article II(8).

B. Supervisory Testing

V. Course of Supervisory Testing

- 1. When performing supervision of money circulation, inspectors proceed in accordance with Act No. 255/2012 Coll., on inspections (the Inspection Code), as amended (hereinafter the "Inspection Code").
- 2. The following Devices are tested as a part of supervisory testing:
 - Devices successfully tested by the CNB as Devices meeting the handling standards stated on the CNB list⁷⁾,
 - Anonymous Devices;
 - Non-anonymous Devices;
- 3. Supervisory testing is performed at the workplace of the inspected entity (in particular a credit institution performing cash transactions, handler of domestic banknotes and coins, operator of Anonymous Devices or operator of Non-anonymous Devices) during inspections on the spot in the premises where the Device, Anonymous Device or Non-anonymous Device is located. There is no charge for supervisory testing.
- 4. Supervisory testing is performed by CNB inspectors stated on an Authorisation to Inspect in accordance with Article 4 of the Inspection Code.
- 5. During supervisory testing of a Device inspectors assess:
 - 1) in a **basic supervisory test** the ability of
 - a) a **Device**
 - to recognise a nominal value,
 - to verify the number, authenticity and validity of domestic banknotes or coins.
 - to physically separate authentic and valid domestic banknotes or coins from suspicious or invalid domestic banknotes or coins²⁾;
 - b) an **Anonymous Device** to recognise the authenticity and validity of domestic banknotes or domestic coins and reject suspicious and invalid banknotes and coins³);
 - c) a **Non-anonymous Device** to recognise the authenticity and validity of domestic banknotes or domestic coins, retain suspicious banknotes, reject suspicious coins and not return to circulation invalid banknotes and coins and determine the identity of the account holder and specify the transaction performed ("Backtracking").
 - 2) in a **supervisory test of fitness for further circulation** the ability of a Device, Anonymous or Non-anonymous Device to sort domestic banknotes or domestic coins in accordance with their fitness for further circulation⁶.
- 6. In the case of deposit Anonymous and Non-anonymous Devices without a recycling function only the basic supervisory test is performed.

- 7. During supervisory testing Banknotes are inserted into the machine (Device, Anonymous Device, Non-anonymous Device) only once, a supervisory test can be repeated only in the event of the damage or sticking of banknotes in the machine. The CNB inspectors decide on the repetition of a test.
- 8. Coins that are incorrectly recognised in a supervisory test of fitness for further circulation can be placed into a Device again. The result achieved after the possible second inserting of coins is the final result.
- 9. **For a basic supervisory test** inspectors will use supervisory testing sets of banknotes or coins, the composition of which is decided by the CNB. There is a prohibition against taking photographs of supervisory testing sets, scanning or using them for setting up Devices.
- 10. If a Device for handling domestic banknotes or coins is successfully tested by the CNB as a Device meeting the handling standards, in the supervisory test it is tested in the mode in which it was successfully tested and that is stated at the CNB website⁷⁾. In a basic supervisory test banknotes are inserted into a Device facing all directions supported by the Device.

11. A basic supervisory test is regarded as successful if in the supervisory testing set:

a) a Device

- correctly counts the number of units,
- recognises the nominal values,
- recognises all suspicious and invalid banknotes and coins, which it physically separates from authentic and valid banknotes and coins,

b) an Anonymous Device

- in the mode for inserting banknotes or coins recognises the authenticity and validity of domestic banknotes or domestic coins and rejects all suspicious and invalid banknotes or coins³⁾;

c) a Non-anonymous Device

- in the mode for inserting banknotes or coins recognises the authenticity and validity of domestic banknotes or domestic coins and retains at least 90% of forged banknotes inserted (on aggregate for all orientations inserted),
- is able to determine the identity of the account holder and specify a transaction performed (*backtracking*) for retained suspicious banknotes in the reserved cassettes,
- the placement of forced banknotes in receipt cassettes for authentic banknotes is regarded as retaining forged banknotes in the event that the forged banknotes are recognised by the Non-anonymous Device as suspicious, the identity of the account holder is determined for them and the transaction performed is specified (backtracking).
- In the case of the insertion of coins, a supervisory basic test is successful if a Non-anonymous Device rejects all the suspicious coins inserted⁸⁾.
- 12. For a supervisory test of fitness for further circulation inspectors will use a supervisory testing set of banknotes or coins the composition of which is decided by the CNB. A supervisory testing set contains domestic banknotes and domestic coins fit and

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⁸⁾ Article 11(2)(c) of Act No. 136/2011 Coll.

unfit for further circulation. A list of banknotes with their serial numbers inserted into a Device, Anonymous Device or Non-anonymous Device is stated in the "Record of Supervisory Test".

- 13. If a Device for handling domestic banknotes or coins is successfully tested by the CNB as a Device meeting the handling standards, in the supervisory test it is tested in the mode in which it was successfully tested and that is stated at the CNB website⁷⁾. Banknotes in a supervisory test of fitness for further circulation are inserted into a Device, Anonymous Device or Non-anonymous Device at random in all four orientations supported by the Device.
- 14. A supervisory test of fitness for further circulation is regarded as being successful if no more than 10% of domestic banknotes or domestic coins of each nominal value unfit for further circulation are assessed by a Device, Anonymous Device or Non-anonymous Device as fit for further circulation.

VI. **Results of Supervisory Testing**

- The CNB inspectors will issue a "Record of Supervisory Testing" about the course of supervisory testing and its result, and it will be signed by the inspectors that performed the supervisory testing and the representative of the inspected person present. The records will contain the serial numbers of banknotes or coins marked in colour that were assessed incorrectly by a Device, Anonymous Device or Non-anonymous Device. One copy of the record will be handed over by the inspectors to the inspected entity during on-the-spot checks, a second copy is part of the source documents for the record of inspection⁹.
- In the event the basic supervisory test of a Device is unsuccessful¹⁰, the inspectors will tell the inspected entity that the Device cannot be used for mechanical handling of banknotes until a remedy is effected. A Device can be used again for mechanical handling of banknotes after its repeat successful supervisory testing by CNB inspectors.
- In the event the basic supervisory test of an Anonymous or Non-anonymous Device is unsuccessful¹¹⁾, the CNB inspectors will inform the inspected entity that it is necessary, in a set period, to correct shortcomings or that the Device's mode for accepting or inserting cash should be promptly switched off until a remedy is effected. An inspected entity informs the CNB inspectors of the correction of a shortcoming and they then perform a repeat basic supervisory test on the Device. The mode for inserting cash can be switched on for an Anonymous or Non-anonymous Device after repeat successful supervisory testing by CNB inspectors.
- 4. Facts in accordance with Section 2 and 3 are marked on a "Record of Supervisory Testing" and the representative of the inspected entity signs familiarisation with them.

⁹⁾ Article 12 of the Inspection Code.

¹⁰⁾ Article 23(2) of Act No. 136/2011 Coll.
11) Article 11(1)(a) and (b) or Article 11(2)(a) - (c) of Act No. 136/2011 Coll.

- 5. In the case of supervisory testing of Non-anonymous Devices, the results of *backtracking* are stated in the "Record of Supervisory Testing". If *backtracking* is performed on a tested Non-anonymous Device unsuccessfully, *backtracking* is performed for the forged banknotes retained by the Non-anonymous Device on another Device at the Supplier's workplace.
- 6. Findings from supervisory testing of a Device, Anonymous Device or Non-anonymous Device will be described in a Record of Inspection in accordance with Article 12 of the Inspection Code, where the "Record of Supervisory Testing" of a Device, Anonymous Device or Non-anonymous Device will be included in it and will be archived in the inspection file of the inspected entity.
- 7. In the event a Device had shortcomings in supervisory tests, the Supplier has the chance, after they are removed, to request verification of the functionality of the Device in accordance with the procedure stated in Article I.
- 8. If the CNB ascertains, as a part of its supervisory activities, that a Device successfully tested by the CNB as a Device meeting the handling standards⁷⁾ is not, in ordinary operating conditions, able to comply with handling standards, the CNB can, based on the results of supervisory tests performed as a part of its activities, call on manufacturers to re-test this type of Device or set. The CNB shall notify such fact to the Supplier of the Device and ask it to re-test it within 30 days of the day the CNB notifies that the Device or a set thereof does not meet the handling standards.

VII. Cancellation Provisions and Effect

- 1. This Official Information repeals Official Information of the Czech National Bank of 11 April 2014 on the Organisation of Testing of Devices for Handling Domestic Banknotes and Coins.
- 2. This Official Information will be complied with from 1 July 2018.

Member of the Bank Board Vojtěch Benda (signed)

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