Software cash register systems (E-cash register)

These technical requirements apply to all software cash register systems imported, prodesed or cunstructed in the territory of the Republic of Azerbaijan

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What is E-cash register

It is a software and hardware complex that provides the collection, processing, storage of purchased and processed checks and cashier's transactions, as well as transferring information about the checks and actions in the software case to the cash register monitoring system. E-cash, commerce, public catering, services and other areas are used for cash settlement of the population.

Or.....

This modern equipment can convey information about the entire sales turnover with cash, card and electronic money through the fiscal operator. Data is entered into the tax authority as an electronic copy of receipts and can be kept in the database for many years.

World experience……

Application of online cash systems in the Russian Federation began on June 1, 2018. A number of positive changes have already been made in the first quarter of 2018, the number of tax inspections by the Federal Tax Service employees decreased by 26%.

The online cash register in South Korea has been widely used since 2005. Until now, the whole country has adopted this experience. Typical online cash register represent software packages or software-hardware complexes, which can accommodate all the necessary information in a single composite of several modules. As a result of the introduction of this system in the country in 2016, the transparency of the economy increased by 96% due to the issuance of cash checks in retail operations.

New cash registers on transferring money to tax authorities in real time for documenting acquisition in Kazakhstan are being used since July 2015. Here the data is transmitted through open, VPN-corridor, which is encrypted in the cashier's financial module. The operator prepares daily records on each case and enters the Kazakhstan State Revenue Committee's network. Tax authorities get access to the operator's base through a simple web interface and track the turnover of each cashbox.

In Hungary, since 2014, the country's Tax Control Agency has issued licenses to cash-desk units with only a special cash control unit. Operational information is encrypted in the tax authority. Interestingly, Hungary is a mobile operator in the transmitter role. They act as fiscal data operators and have access to the whole country. Due to the introduction of the online cash system in this country, the VAT tax difference declined from 21% to 14% in 2013 to 2015, and the VAT collection increased by 15%.

What do experts say about application of e-cash register?

- getting more honest, flexible and comprehensive information about taxpayers' activity will increase the effectiveness of tax administration.
- will prevent tax evasion from allowing tax authorities to obtain more operational information.
- will create equal competition conditions for entrepreneurs.
- cash flow control will be strengthened, thus avoiding tax evasion.
- Efficiency of using human resources, including tax audits, will increase

Software cash register system (SCS)

Legal source…

Tax Code.

Decree No 109 of the Republic of Azerbaijan of February 5, 1994 "On Additional Measures to Improve the Circulation of Money in the Republic of Azerbaijan«

Resolution of the Cabinet of Ministers of the Republic of Azerbaijan No. 138 of June 13, 1995 "On Establishment of Interdepartmental Expert Commission on Cash Registers«

Resolution of the Cabinet of Ministers of the Republic of Azerbaijan No 266 of December 28, 1995 "On application of cash registers in the territory of the Republic of Azerbaijan«

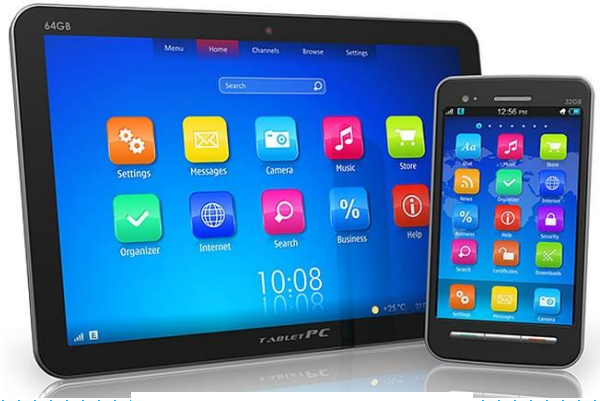
"Regulations on the rules for the sale, operation, maintenance and repair of cash registers in the Republic of Azerbaijan", approved by the Decree of the Cabinet of Ministers of the Republic of Azerbaijan dated December 28, 1995 № 266 on application of electronic transmitting devices to cash registers, on amendments and addenda to the Cabinet of Ministers of the Republic of Azerbaijan dated November 26, 2009, and the application of a new state or interstate standard.

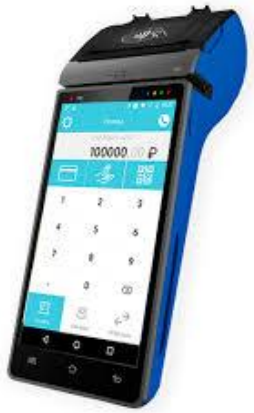
Some requirements for e-cash register and token:

- checks and information about events in the software case should be transferred to the monitoring system in the data processing center in real-time (online) or in connection delay mode;
- reliable records of checks, events in the software drawings and their sequential formulation should be maintained;
- checks should be pulled out and the monitoring system should be moved to the data processing center after the connection has been resumed;
- ensure the completeness and authenticity of the information on the checks transferred to the information processing center of the monitoring system and the events in the program desks;
- carry out format check of checks;

Proqram kassa sistemlərinin (PKS) təsnifatı

- Group 1 - This type of SCS is based on the computing device provided by the SCS operator, which is in conjunction with an installed software case.
- Group 2 - SCS based on the taxpayer's computing device provided with the software package installed by the SCS operator.
- Group 3 - SCS based on the computing device provided by the SCS operator, with the installed software package. This type of SCS has its own energy source and can work without an external energy source.





The following information should be included in the check given to the customer:

- Taxpayer information:
- Information on goods (service):
- Payment Information:
- Payment method and disclosure of transactions
- General information:

THE EXAMPLE OF CASH REGISTER CHECK

Name and address of the business entity

taxpayer's name

Cash register series number and name of the seller

List and cost of goods sold

Payment method

Explanation of cash payment

Cash register model, serial number, and registration number

QR code

TIN

Check Type and Number

Date and time

VAT percentage on product sold

Amount of payment

Calculated tax

Expression of the QR code by letters and numbers by Token

TS adı: ABC store
TS ünvanı: Baku, Main street b. 12
Telefon nömrəsi: 012 000 00 00

VÖ ADI: «Bakı» MMC
VÖEN:1234567890
Obyektin kodu:123456

SATIŞ ÇEKİ
Çek nömrəsi №574

Mağaza: 001
Kassa nömrəsi: B005 Tarix: 01.01.2019
Kassir: B520 Ivanov Ivan Saat: 09:02:56

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Məhsulun adi		Miqdar	Qiymət	Toplam
Çörək	(ədəd)	2	1,25	2,50
ƏDV 0%				
ət	(kg)	1	10,00	10,00
ƏDV 18%				
Çay	(ədəd)	1	5,00	5,00
ƏDV 18%				

YEKUN MƏBLƏĞ **17,50**
ƏDV %0 0,00
ƏDV %18 2,70

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Ödəniş üsulu
Nəğdsiz: 15.00
Nəğd: 2.50

Ödənilib nəğd AZN 5,00
Qalığ qaytarılıb nəğd AZN 2.50
Odenildi pul almadan (bonus kartı) 00,00

ENDIRIM 0

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Gün ərzində vurulmuş çek: 0001
Kassa aparatının modeli: LUCH19A
Kassa aparatının seriya nömrəsi: 12345678
Fiscal ID: FASDFASDFASDFASDFASDFASDFASDFASDF
VNNM qeydiyyət nömrəsi: 12345678

Çekı yoxlamaq üçün sayt
www.e-kassa.gov.az

The following information should be drawn up on the SC and transfer to the data processing center in the electronic format :

- Sales
- placement of money received before the beginning of the queue;
- Cash withdrawal (end of queue);
- reimbursement of cash (return of goods);
- Cancellation of incorrect sales quotation (cancellation of payment);
- daily (turn-by-turn) report (Z-report);

Some special occasions….

- Software cash registers intended for use in petrol stations sold by petroleum products, liquefied hydrocarbon gases, should ensure the calculation of the amount and the creation of a sales license with oil products, simultaneous delivery of liquefied hydrocarbon gases.
- Software cash registers intended for use by public catering facilities and service providers at the table must ensure the calculation of the amount and the creation of a sales receipt simultaneously with acceptance of the order and the provision of products (services).

Other requirements …

- Software cash register allows companys and individual entrepreneurs to conduct cashback transactions through the sale, purchase of goods, as well as acceptance of cash payments for services or cashless payments through bank payment cards.
- The program must be printed on the taxpayer, the check, and get the general information from the certificate.
- The software safeguards the identification of the cash register system user;
- The software must provide the ability to collect PIN code for SCS;
- The cash register must have an unchanged factory or serial number. The SCS should have a literal-digit code, version code, and output serial number, factory or serial number to be displayed on the checks.
- The software case must be able to stop all operations until the last draw of the last check is inaccessible in the paper drawer having a unique identifier on the paper carrier.

The use of SCS in the following cases should be impracticable

- the software has been changed in comparison with the standard program cache included in the State Register;
- it is not possible for the check with the unique identifier to be printed on the paper carrier;
- SC has been damaged;
- the factory or serial number of the software box has been changed;
- The serial number of the software cash register is incompatible with the number indicated on the token certificate included in the SCS;
- the link to the token was broken;

Technical requirements for Token use:

- For the installation of the token, the presence of a compatible USB port in the calculation device ;
- Windows, Linux, Android and other existence of an operating system for launching the token application in the programming language “C“.
- Internet access with one of the tools such as GSM, WiFi, Ethernet

- Before using the SCS, the token should be registered in Tax Ministry and provided with the taxpayer's personal information certificate.
- The Token must provide the inaccuracy of the cashier transactions without the Token's PIN.
- Token should keep the checks until the check is reached up to 7 days or 4000 checks if it is not connected to the monitoring system.
- Token controls the check date, and does not allow the tokens to be rescheduled for a tote-by-date stay (more than 7 days).
- Token must be provided with a certificate issued by Tax Ministry.
- Token ensures safe keeping of the checks in case of non-connection with the monitoring system.

Also provides token:

- control over the authenticity and authenticity of checks formed during cash transactions using cryptographic algorithms;
- formation of a unique authentification indicator for the registration of checks by cryptographic protection of data;
- sequential number of formed checks;

SCS can not be used in the following cases:

- when the token is full;
- when the token is damaged
- when the token is opened
- when the token is changed
- unauthorized access to the token;

SCS should have the following parameters known from the keyboard:

- programming of the product (goods) (name or code, quantity, price of goods) not less than 1000;
- Programmable sections (division name and code) - not less than 8;
- programmed payment methods - not less than 3 digits;
- programmed discounts on the price - not less than 3 digits;

- SCS should also have the function of controlling movement of goods. Along with the possibility of programming goods included within the sales period, it must have the function of specifying the signal after the end of the goods reductions and finishes.

PKS should provide the following functions:

- sale of goods;
- Sale of goods programmed and freely available;
- error correction;
- refusal of the goods;
- return of goods;
- replacement of goods;
- Calculation of foliage;
- cash on hand;
- Cash withdrawal from cash desk;
- giving final report when shift queue;

control of the remnants of goods;

Protection level…

- For Group 1 SCS: SCS is sealed to ensure that the SCS disassembly and sealant screw can not be removed without filling. ;
- If the SCS suddenly ceases to function or if there is no electricity, it should be maintained that the data stored on the token is not damaged. In the case of electricity supply discontinuity, the information on the token is stored for a period not less than 1000 hours;
- SCS does not work when token exposed unauthorized intervention, or malfunction, as well as failure of SCS in case of failure or disassembly of the printing device;

- SCS must perform its functions normally in Class 40 + -15 C
- PKS normally changing current frequency must fulfill its functions with a standard electrical network of 50 (+1) Hertz and 220 V (+ 10%, -15%) voltage. Token should take energy from SCS. The voltage required for this is 5V (+ 5%), the current must be 0.5 A.

- Requirements for software cash register systems (Group 1) -SCS must comply with all of the above listed requirements. The SCS should have a metal cash box with a variety of precious bonds and a cash register for metal money (coins).
- Requirements to software cash register systems (Group 2) -SCS must comply with all of the above listed requirements.
- Requirements for software cash register systems (Group 3) -SCS must comply with all of the above listed requirements. The SCS should be equipped with an autonomous source of energy that ensures the SCS continued functioning at least 4 hours without connecting to external energy sources.