

ELTRADE PRINT SERVER

Universal driver for management of fiscal and POS printing devices

The driver's purpose is the management of Fiscal Cash Registers (FCRs), Fiscal Printers (FPs) and POS printers with different interfaces. The software can communicate to an unlimited number of devices from different brands and different models.

The driver software is fully compatible with the sales management software "Detelina" developed by "ELTRADE". The sales module of "Detelina" incorporates the same functionality, but is limited to communicating with up to four devices.

The driver software provides offline interface through text files and online interface via HTTP communication protocol.

- **Supported devices**

The different device models are connected to the driver by use of a communication library. Each library incorporates the specific communication protocol for the device.

Example:

Library "drvFP_EltradeG2_BG.dll" is allowing management of all second-generation fiscal devices manufactured by "ELTRADE". "drvPOS_SerialPrinter.dll" is designed to manage POS printers through serial interface via ESC/POS protocol.

- **Licensing**

The driver requires a registration key, which is unique for each and every fiscal device. If a registration key is not provided or the provided key is not valid, a warning text for unlicensed usage of the driver will appear on every printer receipt.

Additionally an option for registration on installation level is provided. In this case the registration key is generated based on a number, read from the hardware configuration of the computer and applies for all fiscal devices.

Note:

The POS printers are not requiring a registration key.

The sales module of "Detelina" is also not requiring a registration key.

- **Installation and configuration**

The driver does not require special installation – the executable files and the necessary libraries for the particular devices have to be copied on the computer.

The driver is provided with two options:

- Running as a standard application, which is “hidden” next to the Windows clock (Windows tray);
- Running as a service. The installation of the driver as a service can be achieved by starting “EltradePrintService.exe” with parameters *–install* or *–uninstall*. In order to install a service in Windows the user has to have Administrator rights. For ease of installation in the distributive of the driver there are “InstallService.bat” and “UnInstallService.bat” files, which can be used for installation/uninstallation of the service (the “.bat” files must be started with the “Run as administrator” option).

In both its options the driver is using one and the same configuration file. The easiest way for implementation is to run the driver as application, make all the necessary settings and afterwards run it as a service. Note that the application and the service should not be used simultaneously. Another important feature is that the keeping of a log file cannot be turned off when the driver is used as a service.

During the configuration of the fiscal device the user should set:

- Logical name of the printing device;
- Communication library – depending on the type of device;
- Path to the files for printing – non-mandatory parameter. If the path is not set, the driver will not execute tasks from files;
- HTTP communication port – non-mandatory parameter. If a port is not set (the value is 0), the driver will not execute online tasks via HTTP.

It is mandatory to set one of the parameters “Path” or “Port”. The driver can simultaneously execute tasks received via HTTP and via file. The HTTP tasks have higher priority by default.

The communication settings and the settings for the device are depending on the selected library.

- **Working with files**

Over a certain interval of time the driver is checking the set directory for available files with the selected file extension. The files with zero file size are being ignored. The files are processed in the order, in which they were created. After successful printing the files are being deleted from the directory. In case of unsuccessful processing the file extension is changed to “.err”. It is mandatory for the driver to have full access (reading and writing rights) to the file directory. It is strongly recommended to create the file with a different extension and change it to the selected one when the creation is completed.

• Format of the files for printing

All data is in ASCII format. Every command is a line of the file, followed by CRLF (0x0d, 0x0a). A valid command line is every line of the file, which starts with #. The lines that are not starting with # will be ignored. The second symbol in the line indicates the actual command. Following is the data, which depend on the command type. The fields of data in the line are also separated with the # symbol.

Command (line of file)	Description
Main commands for generating of a receipt	
Opening of a receipt #*	Starts with symbols '#*' followed by four parameters: - Type of receipt. An integer number from 1 to 6. Followed by a separator '#'. (1 – comment receipt; 2 – fiscal; 3 – tax invoice; 4 – simplified invoice; 5 – refund receipt; 6 – refund invoice) - Operator number. An integer number from 1 to 999. Followed by separator '#'. - Name of operator. Text, followed by separator '#'. - UNS (Unique Number of Sale). Text, followed by '#'. *All parameters are mandatory if the device is fiscal.
Invoice data #!	Starting with symbols '#!'. Followed by: - Invoice number, followed by separator '#'. - TIN, followed by separator '#'. - VAT number, followed by separator '#'. - Company name, followed by separator '#'. - City of the company, followed by separator '#'. - Company address, followed by separator '#'. - Company legal representative, followed by separator '#'. - Recipient of the invoice, followed by separator '#'. - Free text field 1, followed by separator '#'. - Free text field 2, followed by separator '#'. This command is mandatory if in the opening of the receipt we have sent type 3.4.or 6. The position of the command in the file is not taken into account. Only one invoice data command can be featured per file.
Refund data #&	Starting with symbols '#&'. Followed by: - Fiscal memory number, followed by separator '#'. - Fiscal receipt reference number, followed by separator '#'. - Reason for refund, followed by separator '#'. (0-wrong operator input; 1-return of an item; 2-change of tax group) - Reference receipt date, followed by separator '#'. - Invoice number, followed by separator '#'. The command is mandatory if in the opening of the receipt sent type 5 or 6. The position of the command in the file is not taken into account.
Comment text #:	Starting with symbols '#:'. Followed by: - Command - Free text, followed by '#'. (can be: BOLD; ITALIC; CONDENSED; UNDERLINE; DBSTRIKE; DBWIDTH; BARCODE; QRCODE; SEPARATOR) - Text for printing, followed by '#'. If the command is and empty string, the text is printed with default settings. The commands for management of the font are applicable depending on the printing device. The same applies for the barcode commands. The command SEPARATOR is printing a full line of symbols like the first on from the text field. In case of printing of a barcode the library is selecting the barcode type depending from the length, contents and the capabilities of the printing device.
Item data #^	Starting with symbols '#^'. Followed by: - Item number, followed by separator '#'. - Item name, followed by separator '#'. - Single unit price, followed by separator '#'. - Quantity, followed by separator '#'. - Tax group. An integer number from 1 to 8, followed by separator '#'. When the quantity is negative it is interpret as return of an item. In order for the return to be executed the current total amount for the receipt should be equal or higher than the amount of the returned item/s.

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Command (line of file)	Description
Prints EJ report by date and time #@KD	Starting with symbols '@KD' Followed by: - Start date time (DD.MM.YYYY HH:NN:SS), followed by separator '#'. - End date time (DD.MM.YYYY HH:NN:SS), followed by separator '#'. - Document type (integer number 0 - 1), followed by separator '#'. - Document filter (integer number 0 - 6). Followed by separator '#'. (0:all documents; 1:fiscal receipts; 2: Z reports; 3: Amnt In; 4: Amnt. Out; 5: X reports; 6: service receipts) Supported only by some types of fiscal devices. Only one command is acceptable in a file. Available after version 6.0.2.0 of the driver.
Read EJ report by block #@RB	Starting with symbols '@RB' Followed by: - Start document. Integer number. Followed by separator '#'. - End document. Integer number. Followed by separator '#'. - Document type (integer number 0 - 1). Followed by separator '#'. (0:by document number (receipt); 1:by Z report number) - Document filter (integer number 0 - 6). Followed by separator '#'. (0:all documents; 1:fiscal receipts; 2: Z reports; 3: Amnt In; 4: Amnt. Out; 5: X reports; 6: service receipts) - Report output format (integer number 0 - 3), followed by separator '#'. (0: text; 1: CSV; 2: XML; 3: SDrecs) Supported only by some types of fiscal devices. Only one command is acceptable in a file. Available after version 6.0.2.0 of the driver.
Prints EJ report by date and time #@RD	Starting with symbols '@RD' Followed by: - Start date time (DD.MM.YYYY HH:NN:SS), followed by separator '#'. - End date time (DD.MM.YYYY HH:NN:SS), followed by separator '#'. - Document type (integer number 0 - 1), followed by separator '#'. - Document filter (integer number 0 - 6). Followed by separator '#'. (0:all documents; 1:fiscal receipts; 2: Z reports; 3: Amnt In; 4: Amnt. Out; 5: X reports; 6: service receipts) - Report output format (integer number 0 - 3), followed by separator '#'. (0: text; 1: CSV; 2: XML; 3: SDrecs) Supported only by some types of fiscal devices. Only one command is acceptable in a file. Available after version 6.0.2.0 of the driver.

Note: The opening of the receipt cannot be used simultaneously with any of the additional commands in a single file. If the receipt is an invoice or a refund all the additional data has to be present in the file.

Examples

Examples	
Comment receipt <i>Examples of different fonts and barcode</i>	<pre>#*1#1#Cashier No: 1## #:#SEPARATOR#-# #:#SERVICE RECEIPT# #:#SEPARATOR#-# #:#Sample text 1# #:#Sample text 2# #:# # #:#DBWIDTH#Test DBWD# #:# # #:#DBSTRIKE#Test DBST# #:# # #:#BOLD#Test BOLD # #:# # #:#Barcode# #:#BARCODE#*1234567890120*# #:# # #:#QR code# #:#QR CODE#1234567890120# #:#SEPARATOR#-#</pre>
Fiscal receipt <i>Example with a sale of an item and return of an item</i>	<pre>#*2#11#Cashier No: 1#ED123123-1234-1234567# #:#System No:5259# #^3364#Monthly fitness subscription#30.00#1.000#2# #:#SEPARATOR#-# #:#Discount 3.00%# #^#Turnover discount#0.90#-1.000#2# #:#SEPARATOR#-# #\$1#IN CASH#1.0000#29.10#</pre>
Invoice <i>Example for invoice with two types of payment and change</i>	<pre>#*3#11#Cashier No: 11#ED123123-1234-1234567# #!9000000001#123456789##Comp.Name#City#Address#Legalrepr.#Recipient# #:#System No:5265# #^3367#COCA-COLA 0.5#1.50#1.000#2# #^3366#KINLEY SODA 0.25#0.45#1.000#2# #^3369#MINERAL WATER 0.5#0.65#1.000#2# #\$2#CARD PAYMENT#1.0000#1.00# #\$1#IN CASH#1.0000#2.00#</pre>
Return of an item	<pre>#*2#11#Cashier No: 41#ED000001-0041-0000013# #:#System No:0052# #^0002#Calendar#5.00#1.000#2# #:#SEPARATOR#-# #^#Notebook#2.00#-2.000#2# #:#SEPARATOR#-# #\$1#IN CASH#1.0000#01.00#</pre>
Refund receipt	<pre>#*5#11#Cashier No: 41#ED000001-0041-0000012# #&44000001#214#1#27.02.2019# #^0001#Calendar#5.00#2.000#2# #:#SEPARATOR#-# #\$1#IN CASH#1.0000#10.00#</pre>
Refund invoice <i>Credit</i>	<pre>#*6#11#Cashier No: 41#ED000001-0041-0000012# #&44000001#247#1#27.02.2019#0000000004 #!0000000015#123456789##Comp.Name#City#Address#Legalrepr.#Recipient# #^0001#Calendar#5.00#2.000#2# #:#SEPARATOR#-# #\$1#IN CASH#1.0000#10.00#</pre>

• HTTP communication

The driver is receiving requests via HTTP on the dedicated port. There is no difference if the request type is GET or POST. In both cases the result is the same. For ease during the development the driver can keep a log file with the full communication.

The commands to the driver are sent as a document plus parameters through URL. The data is in the body of the request in RAW format. The supported encoding is UTF-8. In case of invalid format of the request or the parameters, the driver will return an error HTTP:500 and description of the error itself. If the format of the command is correct, the error code is returned in the body of the response. Upon successful execution the code of the error is 0. The data, which is returned by the driver in the body of the response is in format Key=Value.

Command	Info
Description	The command is returning information regarding the device. This command is not checking the physical connection with the device. The response is data, buffered by the driver. This command may return a result even in cases where the printer is currently busy (executing another task). The Status command may be used to check the physical connection.
Request	http://localhost:4001/info The command does not have parameters.
Result	ErrCode =0 – Error code (0 upon successful execution) Title =ELTRADE Http PrintServer – Name of application (driver) AppName =EltradePrintServer.exe – Name of the executable file AppVer =6.0.0.0 – Driver version PcName =PC – Name of PC (HostName) DrvName =drvFP_EltradeG2_BG.dll – Name of the communication library DrvVer =6.0.0.0 – Version of the communication library PrnNumb =1 – Logical number of the printer PrnName =Printer 1 – Logical name of the printer PrnRegistered =1 – If the printer is registered (licensed) SprtCopyRcpt =1 – If a copy of the last issued receipt is supported SprtInOutAmnts =1 – If service deposit and withdraw is supported SprtExecRpts =0 – If issuance of X and Z reports is supported SprtGetRpts =0 – If reading of data for reports (X report) is supported SprtClock =1 – If keeping of real time is supported (reading and setting) PrnRunning =1 – If the driver is active (executing tasks from the queue) PrnLineLngth =30 – Maximum length of the comment line of the printer PrnPluLngth =30 – Maximum length of the item name for the printer PrnFiscal =1 – If the printer is fiscal PrnSerial =ED272101 – Serial number of the printer PrnMFM =44272101 – Fiscal memory number of the printer OwnrEIK =832076302 – TIN of the device owner OwnrVAT =ЗДДС N BG832076302 – VAT number of the device owner OwnrName =ЕЛТРЕЙД ООД – Name of the owner (company) OwnrAddr =БУЛ.ГОЦЕ ДЕЛЧЕВ Бл.102 – Address of the owner (company) LocName =Тестов Обект – Name of the sales outlet LocAddr =БУЛ.Г.ДЕЛЧЕВ Бл102 BxB – Address of the sales outlet PrnCrr =-1 – Device status for operation with various currencies (Appendix 2)
	All parameters after PrnFiscal are returned only if the device is fiscal. The response also contains information if a certain function is supported by the library. In case a not supported function is executed, an error message will be returned.
Command	Status
Description	The command is checking the physical connection to the printer. The printer itself is going through a process of initialization to guarantee readiness for printing. If the printer is currently busy (printing), the command will return an answer immediately (not waiting for conclusion of the printing to attempt initialization).
Request	http://localhost:4001/status The command does not have parameters.
Result	ErrCode =0 – Error code (0 upon successful execution) PrnNumb =1 – Logical number of the printer PrnName =Printer 1 – Logical name of the printer PrnFiscal =1 – If the printer is fiscal PrnSerial =ED272101 – Serial number of the printer PrnMFM =44272101 – Fiscal memory number StatLowPaper =1 – Near end paper sensor activated (see description below) PrnOnline =1 – If the printer is at standby PrnPrinting =0 – If the printer is currently busy (printing)

	Through this command the software is checking if the printer is ready for execution of commands. Status flags are visible in the response only if they are set (value = 1) Status flags appears in the response of all commands (if they are set) Possible status flags: StatOpenCvr – printer cover is opened (only for devices equipped with such sensor) StatLowPaper – near paper end (only for devices equipped with such sensor) StatLowKLEN – electronic journal memory is near to its capacity (EJ < 10MB) StatLowFM – fiscal memory is near to its capacity (FM < 50 records left)
Command	Print
Description	Command for a synchronized printing of a document (task). The command is adding a task to the queue and awaiting, until it is completed or until a certain timeout is reached. After this a result from the execution is returned – error code. The execution of the command may need some time, if the task is larger or there are too many tasks already in the queue. It is a good practice to use suitable timeout in the client application.
Request	http://localhost:4001/Print?name=Rec1.prn http://localhost:4001/Print?name=Rec1.prn&timeout=20 The name of the task (in analogy with the file name) is a mandatory parameter for the command. It is highly recommended to send different name for the tasks, so that they can easily tracked in the log files. The timeout (in seconds) is an optional parameter. This parameter determines after what time the driver will return an error if the printer is busy and has not started executing the task. This case can appear if there are too many tasks already awaiting in the queue.
Data	The printing data is sent as RAW text in the body of the HTTP request. The encoding is UTF-8. The data format is identical to the one of the files described in the current document.
Result	ErrCode=0 – Error code (0 upon successful execution) PrnNumb=1 – Logical number of the printer PrnName=Printer 1 – Logical name of the printer PrnFiscal=1 – If the printer is fiscal PrnSerial=ED272101 – Serial number of the printer PrnMFM=44272101 – Fiscal memory number StatLowPaper=1 – status flag for near paper end (see Status command for details) Name=Rec1.prn – Name of the task ResNREC=45 – Execution result (Receipt number) ResNINV=0 – Execution result (Invoice number, if an invoice has been processed).
	The parameters starting with Res , are being returned by the communication library and can be more than the ones described in the current document.
Command	AddTask
Description	Command for non-synchronized printing of a document (task). The command adds a tasks to the queue and immediately returns result without waiting for the task to be executed. The status of the task can be checked through the GetTask command.
Request	http://localhost:4001/AddTask?name=Rec1.prn The name of the task (in analogy with the file name) is a mandatory parameter for the command. It is highly recommended to send different name for the tasks, so that they can easily tracked in the log files.
Data	The printing data is sent as RAW text in the body of the HTTP request. The encoding is UTF-8. The data format is identical to the one of the files described in the current document.
Result	ErrCode=0 – Error code (0 upon successful execution) PrnNumb=1 – Logical number of the printer PrnName=Printer 1 – Logical name of the printer PrnFiscal=1 – If the printer is fiscal PrnSerial=ED272101 – Serial number of the printer PrnMFM=44272101 – Fiscal memory number StatLowPaper=1 – status flag for near paper end (see Status command for details) Id=1 – Internal number of the task. Through this number the task can be located afterwards. Name=Rec1.prn – Name of the task
Command	GetTask
Description	Command for non-synchronized reading of result for a task. If the task has been found in the queue, its status is returned. After reading of the status, if the task has been executed it will be removed from the queue. A task can also be removed from the queue in case more than five minutes have passed since it was initially added.
Request	http://localhost:4001/GetTask?Id=3&name=Rec1.prn The name and number of the task are mandatory parameters. The number of the task Id is returned by the AddTask command.

Result	ErrCode=0 – Error code (0 upon successful execution) PrnNumb=1 – Logical number of the printer PrnName=Printer 1 – Logical name of the printer PrnFiscal=1 – If the printer is fiscal PrnSerial=ED272101 – Serial number of the printer PrnMFM=44272101 – Fiscal memory number StatLowPaper=1 – status flag for near paper end (see Status command for details) Id=1 – Internal number of the task. Through this number the task can be located. Name=Rec1.prn – Name of the task ResNREC=47 – Execution result (Receipt number) ResNINV=0 – Execution result (Invoice number, if an invoice has been processed).
	ErrCode=11 – Error code ErrMsg=Print job not started yet! Id:3 PrnNumb=1 PrnName=Printer 1 Id=3 Name=Rec1.prn – Name of the task
	If the task has not been executed yet, an error code 11 or 12 is returned. If the task has been removed from the queue (its status was read or it was sent long ago), an error code 10 is returned.
Command	Command - GETTIME
Description	Read printer's clock. Only fiscal devices support this command
Request	http://localhost:4001/Command?name=GETTIME http://localhost:4001/Command?name=GETTIME &timeout=20 The name of the command is a mandatory parameter. In this case GETTIME is command for retrieving device clock. The timeout (in seconds) is an optional parameter. This parameter determines after what time the driver will return an error if the printer is busy and has not started executing the task. This case can appear if there are too many tasks already awaiting in the queue.
Result	ErrCode=0 – Error code (0 upon successful execution) PrnNumb=1 – Logical number of the printer PrnName=Printer 1 – Logical name of the printer PrnFiscal=1 – If the printer is fiscal PrnSerial=ED272101 – Serial number of the printer PrnMFM=44272101 – Fiscal memory number StatLowPaper=1 – status flag for near paper end (see Status command for details) Time=22.07.2019 08:44:27 - current Date Time of the device. Format DD.MM.YYYY HH:NN:SS
Command	Command - SETTIME
Description	Set printer's clock. Only fiscal devices support this command
Request	http://localhost:4001/Command?name=SETTIME http://localhost:4001/Command?name=SETTIME &timeout=20 The name of the command is a mandatory parameter. In this case SETTIME is command for setting device clock. The timeout (in seconds) is an optional parameter. This parameter determines after what time the driver will return an error if the printer is busy and has not started executing the task. This case can appear if there are too many tasks already awaiting in the queue.
Data	The data for date and time is sent as RAW text in the body of the HTTP request Format: DD.MM.YYYY HH:NN:SS. If data is empty, the driver will get current time from the computer. Sample: 22.07.2019 08:47:17
Result	ErrCode=0 – Error code (0 upon successful execution) PrnNumb=1 – Logical number of the printer PrnName=Printer 1 – Logical name of the printer PrnFiscal=1 – If the printer is fiscal PrnSerial=ED272101 – Serial number of the printer PrnMFM=44272101 – Fiscal memory number Time=22.07.2019 08:47:00 - current Date Time. Format DD.MM.YYYY HH:NN:SS

	Additional commands supported by this interface: OPENDRAWER: Open cash drawer DISPLAY: send text to customer display of then printer. Format: Line 1 Text Line2 Text COPYBON: Copy of the last receipt. No parameters. SUMINOUT: Amount input/output. Format: OperNum;OperName;PayType;PayAmnt; ZREPORT: Printing Z report. No parameters. XREPORT: Printing X report. No parameters. XINFO: Retrieving X report. No parameters. FMREPORTN: Printing report from fiscal memory by number. Format: StartN;EndN;RType; FMREPORTD: Printing report from fiscal memory by date. Format: StartD;EndD;RType; FMREPORTI: Fiscal memory information. No parameters. KLREPORTN: Printing report from electronic journal by number. Format: StartN;EndN;RType;RFilter; KLREPORTD: Printing report from electronic journal by date and time. Format: StartDT;EndDT;RType;RFilter; KLINFON: Retrieving report from electronic journal by number. Format: StartN;EndN;RType;RFilter;RFmt; KLINFOD: Retrieving report from electronic journal by date and time. Format: StartDT;EndDT;RType;RFilter;RFmt; Parameters within commands are sent as raw text in the body of the http request with semicolon separator (;) For details on the meaning of the parameters, refer to the file format section. These commands duplicate the functionality via file
Errors	Error codes 0 – The command was executed successfully – there is no error. 1 – unexpected system error. For additional information the log of the driver should be checked. 2 – The printer is busy – the task has stayed in the queue for too long. The task was not executed and is removed from the queue. 3 – Unsuccessful initialization of the printer. No connection with the device. 4 – Error during execution of a command. 5 – Invalid input data. 6 – Unsuccessful execution of the task. Unsuccessful execution of a command from the task. 7 – The command is not supported by the printer. This error is occurring when we are sending a command that is not included in the communication library. 10 – The task is not in the queue (Http: GetTask) 11 – The task is awaiting for execution in the queue (Http: GetTask) 12 – The task is being executed currently (Http: GetTask) 20 – The printer is not active currently – the driver is not able to complete the initialization. 21 – The printer has been paused – the user has temporary blocked the printing of receipts. 22 – The printer is currently in configuration or reporting mode.
Parameters	Parameters returned by the communication library All parameters that are starting with Res are being returned from the communication library. Their number and function might be different depending on the type of device and version of the library. Here only the main parameters are described.
Receipt data	ResNREC=47 – Receipt number ResNINV=0 – Invoice number
Data for X report	ResXTOTS=0.00;407.40;0.00;0.00;0.00;0.00;0.00;0.00 – Amounts per tax groups ResXPYS=407.40;0.00;0.00;0.00;0.00;0.00;0.00;0.00;0.01;0.15;0.00 – Amounts per payment types ResQTY=1 – Number of receipts ResTOT=407.40 – Total amount of the report ResXFREC=0 – Number of last record in the fiscal memory
Data for the fiscal memory/ electronic journal #@FI	ResKLENB=1 – whether there is active electronic journal ResSTART=43454.4930787037 – first record in the electronic journal (date and time as real numbers) ResEND=43945.0000231481 – last record in the electronic journal (date and time as real numbers) ResCNTR=91 – number of reports in the fiscal memory ResCNTD=2307 – number of documents (cash receipts) in the electronic journal ResSTARTD=20.12.2018 – first record in the electronic journal (date) ResSTARTT=11:50:02 – first record in the electronic journal (time) ResENDD=24.04.2020 – last record in the electronic journal (date) ResENDT=00:00:02 – last record in the electronic journal (time)

- **Annex 1**

Default tax groups for fiscal devices	
When sending of commands for sale of an item. According to the Bulgarian Ordinance H18.	
1	A - 0% VAT – For tax exempted goods and services
2	Б - 20% VAT – For all standard goods and services
3	В - 20% VAT – Fuels and petrol products
4	Г - 9% VAT – Hotel services
Default payment types for fiscal devices	
When sending a payment command. According to the Bulgarian Ordinance H18. (Some fiscal devices are allowing changes in the payment types)	
1	В БРОЙ ЛВ. / In cash
2	С Чек / Check
3	Талони / Coupon
4	Външни талони / External coupon
5	Амбалаж / Wrapping
6	Вътрешно обслужване / Internal services
7	Повреди / Damages
8	Кредитни/дебитни карти / Credit/debit cards
9	Банкови трансфери / Bank transfers
10	НЗОК / Payment from the National Healthcare Fund
11	Резерв 2 / Reserved 2

- **Appendix 2**

Changes related to the transition of fiscal devices to EUR

Fiscal devices legalized under Regulation N18 dated 23.05.2025 have the option to switch over from BGN to EUR. According to the regulation, the transition has to be made in several stages. These stages are completed by switching over the currency mode of the device. Automatic switching over the modes at a certain time is envisaged.

Operating modes of fiscal devices for currency transactions:

3 operating modes are envisaged pursuant to Regulation N18:

- (0) – Currency conversion is not enabled (the old method remains in use)
- (1) – The fiscal device operates in BGN, and the total amount is to be stated in EURO; payments in other currencies are not permitted
- (2) – The fiscal device operates in EUR, and the total amount is to be stated in BGN; payments in other currencies are accepted (for example, in BGN) and are recalculated to the main currency (EUR). In this mode, it is possible to have the option to automatically convert from BGN to EUR by entering a negative exchange rate in the payment command. In this case, the FM assumes that the payment is in BGN and uses the fixed exchange rate recorded therein to make the conversion.
- (3) – The fiscal device operates in EUR, the total amount is **not** stated in BGN. (We have now definitively switched to EUR). Additional currencies are allowed in this mode, and the exchange rate and currency name have to be entered in the payment command.

The current operating mode can be read via the **info** command to the driver (<http://localhost:4001/info>). Currency mode data will be returned into the **PrnCurr** parameter. The current operating mode (0..3), activation date of mode 1; activation date of mode 2; activation date of mode 3 are returned into this parameter; If there is no such parameter in the response to the **Info** command, the print server version is old. If there is no data in the parameter, then the version of the fiscal device or the fiscal device control library is old. If the driver and the fiscal device support the above functionality, the current mode will be returned.

In mode 0, the old method remains in use, but the fiscal device and driver are ready for switching over to EUR.

The fiscal devices must automatically switchover to modes 1,2,3 on the respective dates that are returned into the parameter.

Note: If the fiscal device is in mode 3, or the automatic switchover dates are not programmed, then the latter will not appear in the **PrnCurr** parameter (only the current mode number will be returned). A semicolon is used to separate the mode and dates. The format of the dates is: „DD.MM.YYYY HH:NN:SS“

Payment in a different currency

In modes (2) and (3), the fiscal devices are able to process payments in different currencies and the amount is recalculated to the main currency at the submitted exchange rate. The payment type must be 1 (IN CASH). In case of other payment types, currency conversion is not possible!

A currency name must be added to the payment command (**#\$**) in order to be displayed by the fiscal device. The currency conversion is done at the exchange rate specified in the command. If the fiscal device does not support this functionality (has not been updated) or said functionality is not enabled, then the driver will process the submitted exchange rate and send the calculated amount to be paid to the fiscal device. In this scenario, the currency name and the exchange rate will not be printed.

The exchange rate is processed with an accuracy of up to 6 decimal places.

The currency name is mandatory in cases of currency conversion.

Note: In the transition period, when switching over to EUR, payments in BGN are also accepted. The conversion from BGN to EUR can be done automatically by the fiscal device by sending a negative number (-1) for the exchange rate, without stating the currency name. In this scenario, the fiscal device receives an indication that the amount is in BGN and will automatically perform the conversion at the exchange rate set therein.

Example	
Fiscal receipt <i>Example of a sale and return of an item. The prices of the items are in EUR, the payment is in BGN</i>	<pre>#*2#11#Cashier No: 1#ED123123-1234-1234567# #:#System No:5259# #^3364#Monthly fitness subscription#15.00#1.000#2# #:#SEPARATOR#-# #:#Discount 3.00%# #^#Turnover discount#0.45#-1.000#2# #\$1#IN CASH#0.511292#29.10#BGN#</pre>
Fiscal receipt <i>The prices of the items are in EUR, the payment is in BGN, and the currency conversion is done by the fiscal device (exchange rate <0)</i>	<pre>#*2#11#Cashier No: 1#ED123123-1234-1234567# #:#System No:5259# #^3364#Monthly fitness subscription#15.00#1.000#2# #:#SEPARATOR#-# #:#Discount 3.00%# #^#Turnover discount#0.45#-1.000#2# #\$1#IN CASH#-1#29.10#</pre>