

Technical specification of the payment system

for superCASH – version 3.6

Date	Version	Description of changes	Edited by
11.5.2010	2.4	Added possibility to make test settlements by merchants itself	Pavel Vítek
8.6.2010	2.5	Rules for superCASH documents personification	Pavel Vítek
30.6.2010	2.6	Fixed sC_* parameters case	Pavel Vítek
19.1.2011	2.7	Added list of terminals API	Pavel Vítek
14.2.2011	2.8	Added data types	Pavel Vítek
9.3.2011	2.9	Added settlement unique ID in XML statement	Pavel Vítek
9.6.2011	2.10	Added payment channel parameter in XML statement	Pavel Vítek
22.8.2011	3.0	Whole new settlement notification system!	Pavel Vítek
12.12.2011	3.1	Added warning of BASE64 coding in GetRefundListEx output	Pavel Vítek
20.12.2011	3.2	New payment channel EP	Pavel Vítek
27.2.2012	3.3	Fix of default values of >1.000€ payments	Pavel Vítek
12.2.2013	3.4	New payment channel EP, removed Pay+	Pavel Vítek
18.4.2013	3.5	New Sazka logo	Pavel Vítek
19.1.2014	3.6	Corrections within XML output of the GetRefundListEx method	Pavel Vítek

1.	DESCRIPTION OF THE SUPERCASH® SYSTEM	4
1.1	Payments	4
1.2	Settlements	4
1.3	Notifications	5
1.4	Statements	5
2.	HOW TO START	5
3.	TECHNICAL SPECIFICATION OF THE INTERFACE	6
3.1	Payment Creation.....	6
3.1.1	Manual Payment creation	6
3.1.2	Manual entering of Payments	6
3.1.3	Manual entering of Payments with locked data.....	8
3.1.4	Payment interface	9
3.1.5	E-mail and text messages	14
3.1.6	superCASH API	15
3.2	Settlement processing	20
3.2.1	Difference of the paid amount.....	20
3.2.2	Validity.....	21
3.2.3	Multiple settlements.....	21
3.2.4	Manual processing.....	21
3.2.5	Payment settlement notification	22
3.2.6	superCASH API	24
3.3	Processing of statements of payments	29
3.3.1	Actual date of settlement	29
3.3.2	superCASH accounting period.....	30
3.3.3	Cash transfer.....	30
3.3.4	Statement of payments delivery.....	30
3.3.5	Statement of payments formats.....	30
3.4	Seller application.....	32
3.4.1	Logout.....	32
3.4.2	New password setup.....	32
3.4.3	Change of data in the user account.....	33
3.4.4	Overview of payments/settlements.....	34
3.4.5	Settlement creation (sending notification)	35
3.4.6	Manual entering of payments	35
3.4.7	Verification of the payment status	35
3.4.8	Overview of Statements.....	36
3.5	Additional interfaces	36
3.5.1	Closest terminals search	36
4.	IMPORTANT CONTACTS	37

1. Description of the superCASH® system

Thank you for choosing superCASH® as an option to extend the offer of payment methods offered in your system. In this document, you will find all information necessary for a convenient connection of your current system to the superCASH® payment system.

superCASH® is a unique solution in the Czech cash transactions market, combining the safety and privacy of cash payments with the speed of cashless transactions, where it offers significantly shorter times of delivery of a binding notification of payment compared to other systems.

superCASH® is operated by MANUM, s.r.o. in cooperation with the operator of the largest Czech network of terminals, SAZKA sázková kancelář, a.s. (SAZKA), Česká Pošta, s.p. (ČP) and Europay, s.r.o. (EP). Thanks to this partnership, we can offer you more than 8,500 cash terminals throughout the Czech Republic, some of which are available 24 hours a day.



1.1 Payments

Similarly as other payment methods, superCASH® is based on transactions called payments (hereinafter referred to as "Payments"). Each Payment carries information from the seller who creates the Payment, encoding this information using a unique identifier, the superCASH number. Thanks to this conversion, sensitive information on the seller does not appear in any publicly accessible place, as the customer only works with the superCASH number.

Terminals operated by SAZKA use the principle of bar codes. Each payment, including the amount to be paid and other system parameters, is presented to the customer in the form of a bar code and its numerical representation. The customer can print the code or copy the number stated below it. Using this information, the customer settles the Payment at the terminal.

Similar method is used at the terminals at ČP, where the customer also has the possibility to submit only the superCASH number – without the necessity to print out bar codes or their numerical representations. The terminals at ČP also allow payers to increase the amount to be paid, see below.

Terminals operated by EP are service less and offering same functionality as ČP terminals. Accepting cash and in no time also your debit or credit cards. Terminals also allow payers to increase the amount to be paid.

1.2 Settlements

As soon as the terminal accepts the entered information, it allows the attending staff to collect the respective amount of cash from the customer and sends information to the central system of SAZKA, ČP or EP. The system then sends information to the superCASH® system in regular intervals. Immediately after receiving this information, the superCASH® system creates a record of settlement of the Payment, which we call the settlement (hereinafter referred to as the "Settlement"). This record includes, among other information, the amount paid by the customer and the exact time of settlement.

As soon as the Settlement has been processed by the system, information of the settlement of the Payment is sent by the chosen communication channel to the seller. This information is sent within 10 minutes after the respective amount was paid in cash by the customer. As the operator of the superCASH® system, we guarantee this time limit.

In practice, the information is normally sent within 7 minutes following the settlement.

1.3 Notifications

The information on the settlement of Payment is called notification (hereinafter referred to as "Notifications"). Notifications may have different forms according to the chosen communication channel, from an e-mail message to a call to the seller's script with GET parameters. This depends on the configuration and the technical possibilities of the seller's system.

Our system allows sending of notifications on Settlements, [Payment Creation](#), [Use for daily review](#) and regular [Processing of statements of payments](#). All this information may be sent via different communication channels.

A new feature allows users to regularly download a list of all settled payments without the necessity to implement scripts and logic for the processing of Notifications, see [GetRefundListEx](#).

1.4 Statements

The cash collected at the terminals is not available immediately and the time when it is physically delivered to the deposit account of MANUM, s.r.o. differs depending on the partner operating the given terminal. With SAZKA, the collected cash is available within 17 days following the transaction at the latest. That means that if the customer makes the payment, for example, on Monday of the 10th week, the payment is credited to the deposit account in the 13th week.

With ČP, the time limit is similar and the deposited amount is available no later than within 14 days following the transaction.

EP sending deposited amount 2nd day after week period.

We attempt to minimize these limitations and as soon as the collected cash arrives at the deposit account, we immediately process individual receivables and send the respective amounts to the sellers. The outgoing payment is an aggregated sum of all collected payments of the given seller for the selected period, the minimum period being one week, see [Actual date of settlement](#).

For a successful and mutually convenient cooperation, we have to thoroughly check and record individual transactions. Therefore, a Statement of Payments is generated with each transfer order, which includes a proforma invoice and a list of all registered settlements with the amounts corresponding to the margins and all payment identifiers. Such document has a number identical to the variable symbol of the payment that the seller will receive on his bank account.

2. How to start

Each seller who is interested in offering the superCASH® system to its customers receives a draft agency agreement including annexes, if any, and this technical description. These documents can also be downloaded from our internet presentation on www.supercash.cz, where always the latest updated version is posted.

The high degree of internal security applied by MANUM, s.r.o. does not permit using our systems without a valid agency agreement; this also applies to the initial testing. Exceptions can be made in specific cases, for more information obchod@manum.cz.

Upon signing the agreement, a user account is created for the seller in the test instance of superCASH®. The seller receives the necessary data by e-mail. This test instance is used as an auxiliary device for the development and implementation of the technical solution in the sellers' existing systems of individual sellers and is not connected to the terminal network nor does it include any sensitive data. As soon as the testing is finalized, a user account is created for the seller in the production instance and new user data are generated for this user account:

- + Identifier of the seller (normally the company registration number)
- + Password for superCASH API
- + Name and password for the user account for the [Seller application](#)

For the complete setup of your account by the technical administrator, it is necessary to include in the request, or subsequently as a reply to the received login data, the **IP addresses of your servers**, which will communicate with the superCASH® system. This applies to the cases when you wish to use the access to superCASH API. It is also necessary to know the **URL of the scripts**, which the superCASH® system is supposed to call when sending the selected notifications, if you wish to use them. It is recommended that you send these URL together with your request as well, however, they can be set up later together with the set-up of the .

As soon as you have received the login data and the account has been set up, it is possible to commence the testing and access the testing instance. The testing instance has a different third order domain and all its interfaces have an URL [https://test.supercash.cz/...](https://test.supercash.cz/)

Throughout the testing process, you can contact the appointed IT specialist whose contact data you will obtain by e-mail. In the case of emergency, you can contact our IT manager at pavel.vitek@manum.cz.

3. Technical specification of the interface

In order to simplify our payment system and make it available to sellers, we have created several types of interfaces and notification systems to cover the widest possible range of technical solutions, from the simplest that are usually operated manually to the automated ones with advanced security features.

As indicated by the above description of the functioning of the superCASH® payment gate, the entire transaction process can be divided in two steps: the first one is the **creation of Payment**, the second one is the **Settlement processing**.

We would like to recommend that all interfaces be called through a secured SSL connection, i.e. using an address starting <https://>. The production interface includes a valid and trustworthy certificate which is also used for the testing interfaces. However, in the testing interfaces, the certificate is invalid due to a change of the hostname (3rd order domain) and in some implementations it can lead to an error. In the testing process, it is also possible to use unsecured calls as well, however, in regular operation; we strictly recommend using secured connection.

3.1 Payment Creation

The basic step to be made in order to allow your customers to use the possibilities of the superCASH® payment system is the creation of payment. A Payment is an entity above the database, bearing a number of parameters for the identification and processing thereof. This includes particularly the identification of the seller, the amount paid in the transaction, identifier of the transaction and the superCASH number, where the identifier of the transaction is any alpha-numeric chain entered by the seller.

3.1.1 Manual Payment creation

The easiest and most efficient solution, in terms of the number of payments per month, for making superCASH® available to customers is the manual creation of Payments by the seller.

Payments can be created in the **[Seller Application](#)**.

3.1.2 Manual entering of Payments

The interface for manual entering of payments (hereinafter referred to as the MEP) is intended for sellers who do not have or cannot use a technically advanced solution and for whom the solution is sufficient with regard to the number of monthly payments.

The interface can be found on: <https://test.supercash.cz/payform.aspx>

The interface can be called directly from a browser and can be offered to customers as a web link, for example an order confirmation sent by e-mail.

The interface is a web page, where the customer can select the parameters for the given Payment and the seller to whom the Payment will be transferred.

Figure 1 – Manual entering of Payments

Ruční zadání Platby superCASH

Vážený zákazníku, na této stránce Vám bude přiděleno číslo superCASH, které Vám umožní prostřednictvím terminálů společnosti SAZKA pohodlně uhradit cenu nákupu Vašemu obchodníkovi.

Tato služba je přístupná pouze pro obchodníky, kteří mají uzavřenou smlouvu se společností MANUM o poskytování služby superCASH a ruční zadání platby přípouští.

Obchodník

vyberte ze seznamu obchodů obchod, kterému hodláte uhradit Vaši platbu. Pokud se v seznamu obchodů nenachází, pak nelze tohoto způsobu platby využít

Částka

uvedte částku, kterou na příslušný nákup hodláte uhradit. Částka musí být zaokrouhlena na -50 haléřů. Podle Podmínek poskytování služby může být Vaše platba zvýšena o transakční poplatek ve výši 10,- Kč.

Identifikace transakce

uvedte variabilní symbol, který k tomuto obchodu přiřadil obchodník na dokladu, ze kterého při zadání této platby vycházíte

Poznámka

uvedte další identifikační znaky, které jsou podle pokynů obchodníka nezbytné pro tento způsob úhrady ceny nezbytné (například č. objednávky, č. zakázky, apod.). Toto pole nemusí být vyplněno, pokud obchodník další identifikaci nepožaduje.

Pro úspěšné pokračování v této relaci je nutné, abyste se seznámili s Podmínkami poskytování služby MANUM superCASH a stvrdili svůj souhlas s těmito podmínkami.

Souhlas s podmínkami
[Zobrazit podmínky \(otvírá se v novém okně\)](#)

DALŠÍ

ZPĚT

In a drop-down list, customers select the seller to whom the payment is supposed to be directed, then they enter the amount to be paid, identification of the transaction and a note (if necessary). After having read the Terms of the Provision of the Service, customers click the Next button to check the form. If all the entered data are correct, the Payment is created for the customer, the superCASH number is allocated and customers are then redirected to the review form, where the entered data are displayed to be checked and the generated bar code is displayed to be printed or saved. If the customer has made an error, the Back button can be clicked to return to the previous page and correct the data.

The MEP interface is not normally used, and therefore the drop-down list only includes sellers who have expressed their interest in using this interface and are using it actively. In the default setting, MEP is prohibited in the seller's user account and therefore it is not displayed in the menu. If you wish to enable MEP, state this in your application for a user account.

Sellers who use MEP for the creation of Payments usually also use e-mail for sending Notifications of the settlement of Payments. This means that when the customer settles the Payment, the seller receives an e-mail with information on such Settlement. It is also possible to select another method of notifications or a combination of methods, depending on the [seller setup](#).

3.1.3 Manual entering of Payments with locked data

The parameters in the MEP basic interface can be pre-defined and the entered values locked. Locked values cannot be changed in the form. Example:

The seller only wants to allow the customer to enter a note, while other parameters (seller, amount to be paid and transaction identification) remain unchanged.

In such case, the seller calls the interface in the following way:

https://test.supercash.cz/payform.aspx?sC_mid=12345678&sC_amount=1234&sC_bid=TEST001

It is obvious that the interface can be influenced by entering the GET/POST parameters directly in the called URL. The complete list is included in a table below.

3.1.3.1 Mandatory variable symbol

A specific feature allows users to replace the field "Transaction Identification", which is not convenient for all sellers, with the field "Variable Symbol", which is easily understood by the customers, thus reducing the risk of an incorrectly entered Payment identification.

This option can be activated by setting the optional parameter **sC_forceVS** that is equal to 0 in the default setting. When activating the parameter **sC_forceVS=1**, the value entered in the "Variable Symbol" field is transferred as identification of the transaction in the Payment.

However, the seller may still require the Variable Symbol to be entered by the customer, while he wants an unambiguous identification of the transaction. In such case, both the **sC_bid** filled in with the value of the required identification (which the customer does not see) and the parameter of the forced Variable Symbol are transferred during the call to the MEP interface, and the value entered by the customer in the Variable Symbol field will be transferred to the Payment as a simple variable symbol, which can be used in the [Seller Application](#). This method is used, for example, in the cases where the seller enters in the **sC_bid** an identification of the customer and the customer then fills in only the Variable Symbols for different orders, etc.

3.1.3.2 Payment button

The MEP interface also allows the creation of a payment button which replaces a text link and locks the required values in the request, i.e., for example:



3.1.3.3 MEP Parameters Table

Parameter	Description	Example
sC_mid	Seller identification	Usually the company reg. no. (12345678)
sC_bid	Transaction identification	Text chain
sC_amount	Amount	Number – max. 5 characters
sC_cur	Currency	Currently only “CZK”
sC_note	Note	Text chain
sC_lang	Language of the interface	Currently only “CZ”
sC_vs	Variable symbol	Number – max. 10 characters
sC_ss	Specific symbol	Number – max. 10 characters
sC_ks	Constant symbol	Number – max. 4 characters
sC_forceVS	Forced variable symbol	Boolean (0, 1) – 0 default

All parameters of the MEP interface are optional. For parameters **sC_cur** and **sC_lang**, it is not necessary to enter the value, therefore we currently only offer the default values.. Parameters **sC_vs**, **sC_ss** and **sC_ks** are transferred to the Payment entity, when applicable, and it is possible to work with them in the [Seller Application](#) of the superCASH® system.

All parameters, i.e. the entire URL of the MEP interface must be encoded using the URLEncode standard.

The interface accepts parameters in the UTF8 coding, allowing the processing of 7bit ASCII characters.

3.1.4 Payment interface

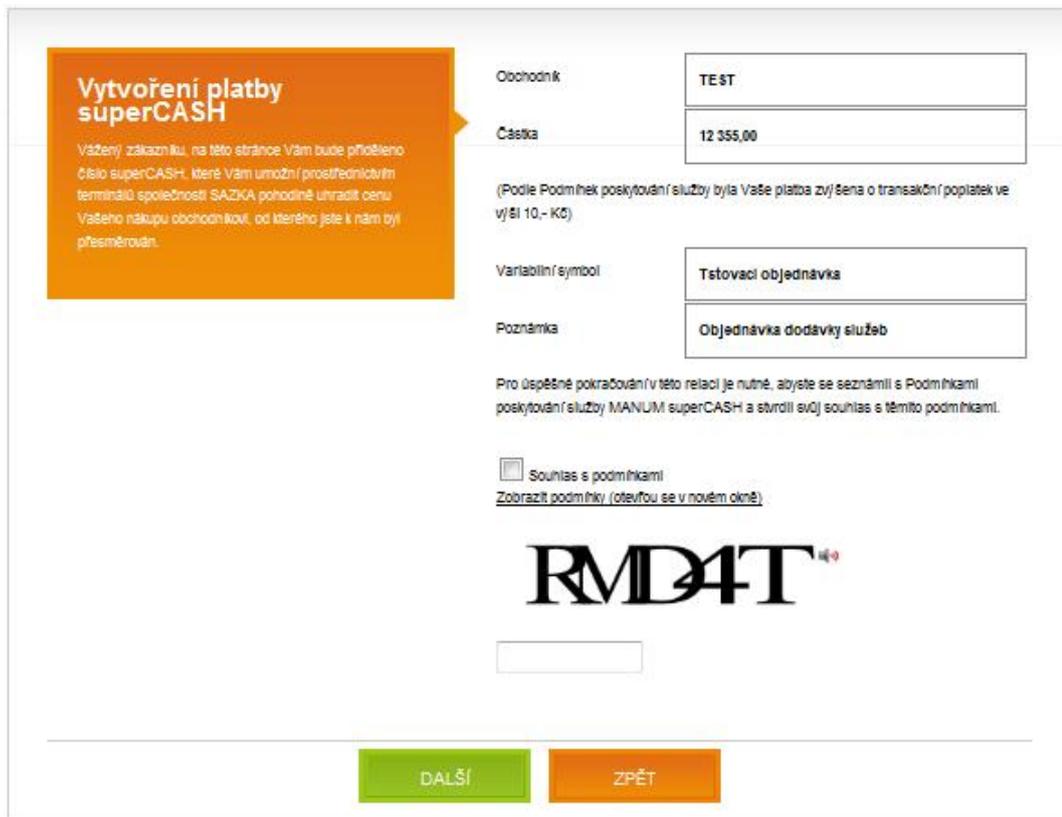
The payment interface is a full-fledged interface of the superCASH® system used to accept the requests for Payment creation. It is a script accepting the GET/POST parameters of the Payment which the seller wishes to create. Customers are redirected to this interface with filled-in parameters from the seller's system. The communication is protected against wiretapping using a SSL certificate.

The basis of the interface is similar to the MEP interface; however, the payment interface does not contain any form that would allow customers to modify the transferred parameters. In the payment interface, the seller has a full control over the parameters transferred to the Payment. The interface also contains additional parameters used for an automatic (systemic) processing of payment creation requests.

Address of the interface: <https://test.supercash.cz/pay.aspx>

The payment interface includes a checkup of HTTP Referer fulfillment and cannot be called directly from the browser. Customers must be redirected to the payment interface for example using a special form.

Figure 2 – Payment interface



Vytvoření platby superCASH

Vážený zákazníku, na této stránce Vám bude přiloženo číslo superCASH, které Vám umožní prostřednictvím terminálu společnosti SAZKA pohodlně uhradit cenu Vašeho nákupu obchodníkov, od kterého jste k nám byl přeposlán.

Obchodník: TEST

Částka: 12 355,00

(Podle Podmínek poskytování služby byla Vaše platba zvýšena o transakční poplatek ve výši 10,- Kč)

Variabilní symbol: Tstovací objednávka

Poznámka: Objednávka dodávky služeb

Pro úspěšné pokračování v této relaci je nutné, abyste se seznámili s Podmínkami poskytování služby MANUM superCASH a stvrдили svůj souhlas s těmito podmínkami.

Souhlas s podmínkami
[Zobrazit podmínky \(otevírá se v novém okně\)](#)

RMD4T

DALŠÍ ZPĚT

The graphic representation is very similar to the MEP interface, the only added feature visible at first sights is the CAPTCHA element used for protection against any attempts to attack the system electronically.

After confirming the data and pressing the “Next” button, the customer continues to the generation of a new Payment, which is finalized by displaying the entered information and the bar code which can be printed or saved.

3.1.4.1 Return addresses

Compared to the MEP interface, the Payment Interface has several new features. Return addresses are one of them. They are optional parameters by which the seller defines for each created Payment the URL to which he wishes to redirect the customer after creating an either successful or unsuccessful Payment.

After finalizing the creation of the Payment, customers are normally redirected to the address stated in the HTTP Referer parameter of the HTTP heading, i.e. to the address from which the customer came to the Payment Interface. This applies to the MEP interface as well. However, in the payment interface this address may be modified by entering the **sC_url** parameter.

If the value of **sC_url** is, for example, <http://www.seznam.cz>, the customer will be redirected to this search engine after either successful or unsuccessful creation of Payment.

An unsuccessful creation of Payment only occurs when the customer selects the “Back” button right after being redirected to the Payment Interface, when the parameters are incorrectly entered or invalid, and in the case of a system error.

The seller can differentiate where the customer will be redirected according to whether the Payment was created or not. In such case, the **sC_url** is not used. The address to which the customer will be redirected after a successful Payment is contained in the **sC_URLsuccess** parameter, while the address for redirecting the customer after an unsuccessful Payment, i.e. when the Payment was not created, is defined in the **sC_URLfailure** parameter.

If the sC_URLsuccess and sC_URLfailure are defined, it is not necessary to transfer the sC_url parameter – the system ignores it.

3.1.4.2 Return values

When redirecting the customer to the given URL address (HTTP Referer, sC_url, sC_URLsuccess or sC_URLfailure), superCASH® fills in the return values, through which the seller can identify the Payment without having to enter his unique identifier in the return address parameters.

The parameters are added using the GET method, always at the end of the return address, which may contain any GET parameters entered by the seller.

In order to avoid any failures to deliver return values back to the seller's system, which may occur when the customer fails to click the "Continue" button in the review form or if he unintentionally closes the browser window after printing the bar code, the superCASH® system calls the URL defined in the respective parameter right after generating the Payment.

It is therefore possible that address defined in the **sC_url**, **sC_URLsuccess** or **sC_URLfailure** parameter will be called twice, once by superCASH® and once when the customer is being redirected.

The return values and the Notification of payment creation are the only ways how to obtain the superCASH number of a generated Payment before the Payment is settled. It is recommended to save the superCASH number from the return value together with the order record in your system and then only use the superCASH number.

3.1.4.2.1 Return Values Table:

Parameter	Name	Description
sC_bid	Identification of the transaction	Returns the value received by the interface with the request for Payment creation.
sC_number	SuperCASH number	A unique identification throughout the superCASH® system. It is used for back queries sent in the system. We recommend to saving this.
sC_result	Result of generating	A number designating the result of payment generating. A negative value designates a fault. 0 ... Payment was created -1 ... The customer declined the payment -2 ... Incorrect parameters (mandatory parameters were not entered, incorrect parameter titles, etc.) -3 ... The system could not create the Payment due to a discrepancy in the settings (incorrect seller identification, prohibited payment interface, prohibited amount or currency, etc.)
sC_info	Description of the result	Text description of the result of Payment generation.

3.1.4.3 Notification of Payment creation

In order to guarantee the delivery of the superCASH number back to the seller and to allow transactions without return addresses, superCASH® offers a system of Notifications, which are sent right after a successful creation of a Payment.

The seller can thus check whether the Payment has really been created and cancel Payments which the customer has not created despite having been redirected. A notification of creation of a Payment is one of two possible methods of saving the unique superCASH number, which will later be used for the [processing of Settlements](#).

Notification of Payment creation can be also used to check the values of the created Payment, for example in case that the customer changed the GET/POST parameters when creating the Payment and thus attempted to reduce the amount to be paid, etc.

Notifications of payment creation may be sent using the following channels:

3.1.4.3.1 **Text message**

The notification is delivered as plain text in a fixed format to the address specified in the Notification setting.

```
[superCASH] Vytvorena platba c. obj. "OBJ001" c. superCASH
"2107873118" na castku 264 CZK

([superCASH] Payment created order no. "OBJ001" superCASH
no."2107873118" amount 264 CZK)
```

Sending of Notifications via text messages is charged according to the applicable price list of services (CZK 1 excl. VAT).

3.1.4.3.2 **E-mail**

A simple Notification in the form in a plain formatted text included in the message.

```
Předmět: [superCASH] Avízo vytvoření platby
Zpráva: V systému superCASH byla vytvořena platba č. obj.
"OBJ001" č. superCASH "2107873118" na částku 264 CZK.

(Subject: [superCASH] Notification of Payment Creation
Message: Payment order no. "OBJ001" superCASH no. "2107873118"
for CZK 264 was created in the superCASH system.)
```

E-mail notifications can be secured by CA MANUM digital signature required for all outgoing messages.

3.1.4.3.3 **Script calling (GET to URL)**

This form of Notification is based on a call to the seller's script or web page, similarly as when opening such web page, passing the Notification parameters using the GET method, i.e. as a part of a free URL.

This is an advanced Notification feature with guaranteed delivery.

The guarantee is not unlimited. It consists in checking the return value of the called script, i.e. the status in the HTTP heading of the reply. The notification is deemed to have been delivered if the called script returns a HTTP 200 reply.

If another status is returned or in the case of a timeout we consider the Notification as undelivered and the superCASH® system attempts once more to deliver the Notification. If the attempt fails, the system notifies the staff member who attempts to deliver the Notification manually (in business hours), i.e. by repeatedly calling the seller's script. If the problem persists, the seller is informed via the defined contact person or hotline.

A normally functioning script may only return the HTTP 200 heading reply, other options are not permissible. In the case of an error of information processing in the Notification, it is up to the seller's system to contact superCASH® using the available methods in order to verify the status of the Payment.

It is not recommended to wait with the script reply until the end of the Notification information verification process. Return HTTP 200 immediately after having received the Notification and put the verification in a queue or call another process, in order to avoid connection timeouts.

Notification setting example:

```
https://www.obchod.cz/platba_sc.php?operace=vytvorena
```

The system adds the query parameter(s) to the address in the Notification setting and performs the following GET:

```
https://www.obchod.cz/platba_sc.php?operace=vytvorena&sC_bid=OB0001&sC_number=2107873118&sC_amount=264
```

where **sC_bid** is the identification of the transaction sent by the seller, **sC_number** is the generated superCASH number and **sC_amount** is the amount to be paid.

3.1.4.4 Interface Parameters

Parameter	Name	Description	Example
sC_mid	Seller ID	A unique identifier allocated to the seller	12345678
sC_bid	Transaction ID	Alphanumeric chain, up to 32 characters – identification of the transaction in the seller's system. It is displayed to the customer.	OBJ0001
sC_amount	Amount	A whole number, up to 5digits without spaces	99999
sC_cur	Currency	Currency code, only CZK until euro is adopted in the CR	CZK
sC_validity	Validity	Validity date of the payment. DD.MM.YYYY HH:MM:SS. It is displayed to the customer.	01.11.2009 23:00:15
sC_note	Note	An alphanumeric chain of up to 256 characters. The note is displayed to the customer.	Garden grill
sC_vs	Variable symbol	Alphanumeric chains of up to 10,10 and 4 characters. They are used exclusively for the identification of the transaction in the superCASH® system. These parameters are not used for the payments outgoing from the superCASH system to the sellers and are not displayed to customers.	0123456789
sC_ss	Specific symbol		0123456789
sC_cs	Constant symbol		0123
sC_lang	Language code	The language of the payment interface code.	CZ
sC_url	Return addresses	Default return URL, does not distinguish between the results of generating	http://obchod.cz?id=XXX
sC_URLsuccess		Return address for a successful Payment creation	http://obchod.cz?stav=OK
sC_URLfailure		Return address for an unsuccessful Payment creation	http://obchod.cz?stav=FAIL

The parameters designated in bold are **mandatory**. For the **sC_cur** and **sC_lang** parameters, it is unnecessary to enter the value, as we currently offer only the default values.

The **sC_vs**, **sC_ss** a **sC_ks** parameters, if specified, are transferred to the Payment entity and can be processed in the **Seller application** in the superCASH® system.

The maximum amount to be paid may be limited by the seller's user setting.

If the sC_validity parameter is filled in, superCASH® generates a code of 32 characters, which is susceptible to errors when being read or copied. Therefore the validity parameter should only be used in necessary cases and only when validity in units of hours or several days at maximum is required.

All transferred parameters, or the entire URL of the MEP interface called must be encoded using URLEncode standard.

The interface accepts the parameters in the UTF8 coding, which allows processing of 7bit ASCII characters.

3.1.4.5 Required registration

According to the amended Money Laundering Act, it is necessary to fill in customers' registration data for Payments exceeding € 1,000. Before generating such Payment, a registration form is displayed and all data required by the law must be filled in before continuing.

3.1.4.6 Example of a Call to the Payment Interface

```
<form id="supercash" action="https://test.supercash.cz/pay.aspx"
method="POST">
  <input type="hidden" id="sC_mid" name="sC_mid" value="12345678"/>
  <input type="hidden" id="sC_bid" name="sC_bid" value="OBJ001"/>
  <input type="hidden" id="sC_amount" name="sC_amount" value="99999"/>
  <input type="hidden" id="sC_url" name="sC_url"
value="http://obchod.cz/supercash.php?akce=platba"/>
</form>
```

After the Payment has been created, the customer is redirected to the following URL:

```
http://obchod.cz/supercash.php?akce=platba&sC_bid=OBJ001&sC_number=01234
01234&sC_result=0&sC_info=OK
```

3.1.5 E-mail and text messages

In specific cases, the superCASH® system allows its users to create a Payment also using an e-mail request or a text message. This method is not used very frequently and text messages are subject to a fee paid by the seller. However, we believe that this method may be useful in specific cases.

Creating a Payment using an e-mail or text message is forbidden in the default setting. If you are considering this method, state this in your application for the creation of your seller account.

After receiving a formatted text message or an e-mail sent to the superCASH® service telephone number or e-mail address, the system creates the Payment.

Telephone number for text messages: **1 99 22 32** or **+420 720 002 232**

E-mail address: payment@supercash.cz

The telephone numbers and e-mail addresses from which requests can be sent must be defined in the seller's user setting and must be known beforehand. Therefore the identification parameter is not necessary, as the author of the request is known.

The following parameters may be used in the message: **sC_amount**, **sC_bid**, **sC_note** and **sC_lang**.

To simplify the entering of the request, the names of the parameters are not stated; however it is necessary to enter the values in the correct order.

The format of the request is a standard **text 7bit**, the values of the parameters are written in small or capital letters. Each part of the request must be separated by a space:

```
Syntax: PSC <sC_amount> <sC_bid> <sC_note> <sC_lang>
```

The parameters written in bold are mandatory; it is not possible to enter a sC_lang without a sC_note.

```
Example: PSC 99999 OBJ001 Test
```

The system replies to each request by a message sent to the sender.

The reply contains the **sC_amount** and **sC_bid** input parameters and the **sC_info** .output parameter. When the Payment has been generated successfully, the reply also contains the superCASH number **sC_number** output parameter (the numeric representation of the bar code) and finally the **sC_code** parameter.

```
Example: REPSC OK 99999 OBJ001 superCASH=2107873118
Sazka=333210787311800025400017
```

3.1.6 superCASH API

The most advanced method of generating a Payment is to use superCASH API, a web service communicating in the SOAP 1.2 standard.

superCASH API is the safest way of communication between superCASH® and the seller's system. It is protected against wiretapping using a SSL certificate, by checking source IP addresses and by a secret password.

The superCASH API interface is available at https://test.supercash.cz/sC_WS.asmx and its definition on: https://test.supercash.cz/sC_WS.asmx?WSDL

When using this method of Payment creation, customers are not redirected to the **Payment interface**, but the creation of the Payment takes place on the background from the system of the seller, who thus receives the bar code and the superCASH number, which he then offers to the customer for printing, etc.

3.1.6.1 GeneratePayment

Requests are created using the **GeneratePayment** public method.

3.1.6.1.1 Method definition

```
int GeneratePayment (string sC_mid, string sC_mpw, string sC_bid,
double sC_amount, string sC_note, string sC_validity, string
sC_vs, string sC_ss, string sC_cs, out string description, out
string sC_number, out string sC_code, string sC_name, string
sC_surname, string sC_birthnumber, string sC_document, string
sC_birthplace, string sC_sex, string sC_residence, string
sC_citizenship, string sC_company, string sC_identification,
string sC_addendum, string sC_businessplace)
```

3.1.6.1.2 Parameters Table

Parameter	Name	Description	Example
sC_mid	Seller ID	A unique identifier allocated to the seller	12345678
sC_mpw	Secret password	Allocated password	BhGY42K5Kb
sC_bid	Transaction ID	Alphanumeric chain, up to 32 characters – identification of the transaction in the seller's system. It is displayed to the customer.	OBJ0001
sC_amount	Amount	A whole number, up to 5digits without spaces	99999
sC_validity	Validity	Validity date of the payment. DD.MM.YYYY HH:MM:SS. It is displayed to the customer.	01.11.2009 23:00:15
sC_note	Note	An alphanumeric chain of up to 256 characters. The note is displayed to the customer.	Garden grill
sC_vs	Variable symbol	Alphanumeric chains of up to 10, 10 and 4 characters. They are used exclusively for the identification of the transaction in the superCASH® system. These parameters are not used for the payments outgoing from the superCASH system to the sellers and are not displayed to customers.	0123456789
sC_ss	Specific symbol		0123456789
sC_cs	Constant symbol		0123
sC_name	Name	Registration data of natural persons for Payments exceeding € 1,000. All the attributes are text chains. If the payer is not a natural person, the registration data below set forth are applied.	Jan
sC_surname	Surname		Novák
sC_birthnumber	Birth ID number or date of birth		790924/1234 or 24.9.1979
sC_document	Number of an ID document		OP123456
sC_birthplace	Place of birth		Czech Republic
sC_sex	Sex		0 (Man) or 1 (Woman)
sC_residence	Address of residence		Ječná 12, Prague, ČR
sC_citizenship	Nationality		Czech
sC_company	Company		MANUM, s.r.o.
sC_identification	Company registration no.	Registration data of business entities for Payments exceeding € 1,000. All attributes are text chains. If the payer is not a natural person, the above data do not have to be stated.	27215555
sC_addendum	Differentiating addendum or another designation		
sC_businessplace	Place of business		Prague

Parameters written in bold are mandatory.

3.1.6.1.3 Return values

The output is a number designating the result of the Payment generation. The **description** output text parameter contains a verbal description of the result.

For payments at the terminals of Česká pošta , s.p. only, it is also possible to distribute to customers only the superCASH number – then it is not necessary to use the bar code.

3.1.6.1.5 **Payment form customization**

To preserve customers awareness and to avoid general problems, which rises by ignorance of one of side customer – terminal, its necessary unite the look and information contained in custom print forms.

Please pay full attention to this part. Avoid unnecessary complications.

Required information:

- + Merchant identification - Name
- + Short description of superCASH payments
- + The amount to be paid
- + Barcode, barcode number, superCASH number
- + Guide to all payment channels with logos (SAZKA, ČP, EP)
- + Notice of cash receipt

Suitable processed sample:

Company, s.r.o.

www.company.cz

Platba superCASH



Vaše platba byla úspěšně zaregistrována v systému superCASH.

Tento návod si prosím vytiskněte nebo poznamenejte a dostavte se k nejbližšímu terminálu, kde jsou přijímány platby superCASH – [zde si můžete vyhledat nejbližší terminál](#).Částka k úhradě: **500 Kč**

Čárový kód pro tištěnou verzi

Číslo superCASH

**3456789012**

0123 4567 8901 2345 6789 0123



Uhradit v hotovosti můžete na kterémkoli terminálu společnost Sázková kancelář, a.s. (SAZKA), vyjma terminálů umístěných na pobočkách České pošty, a.s. Obsluze předejte výtisk tohoto formuláře anebo nadiktujte číslo čárového kódu. Po zadání budete vyzváni k uhrazení požadované částky. **Neopouštějte terminál bez platného pokladního dokladu, jedná se o jediný prostředek případné reklamace.** Pokud obsluha neví, jak platbu zadat, sdělte jí prosím následující postup: **Neloterijní služby > Platba > Platby faktur/poukázek.**



Uhradit je možné na kterékoli pobočce České pošty, a.s. a to jak v hotovosti, tak pomocí Vaší MaxKarty. Obsluze terminálu předejte výtisk tohoto formuláře anebo nadiktujte číslo superCASH, případně číslo čárového kódu. **Pokud to obchodník umožňuje, můžete částku k úhradě navyšovat. Neopouštějte přepážku bez platného pokladního dokladu, jedná se o jediný prostředek případné reklamace.**



Zaplatit lze v hotovosti, v blízké době bude možné platit i Vaší běžnou platební kartou. Na terminálu zvolte superCASH a postupujte dle instrukcí na obrazovce. **Pokud to obchodník umožňuje, můžete částku k úhradě navyšovat.** Nemáte-li přesný obnos nebo terminál nemůže vrátit v mincích, budete na tuto skutečnost upozorněn před vložením obnosu. **Neopouštějte terminál bez platného pokladního dokladu, jedná se o jediný prostředek případné reklamace.**

The above text is only an example of a possible solution to the most appropriate manner. They are highly recommended, however, free to revision. Always give at least sections of text bold.

3.2 Settlement processing

The second step in a transaction is the processing of the information that the Payment was settled by the customer and the transaction can be considered as finalized and the requested goods or service can be sent to the customer.

Settlement is a record in the database created when the system receives the information on Payment settlement from the cash desk (the partner operating the network of terminals). This record is coupled in the 1:N ratio with the respective Payment and the system then processes this information (evaluates the status, calculates the applicable fees, updates the interface, sends Notifications, etc.).

3.2.1 Difference of the paid amount

3.2.1.1 SAZKA Terminals

In the SAZKA terminal network, the bar code or its numeric representation encode the amount to be paid and the terminal accepts only this sum.

In very specific cases, customers pay an amount different from that for which the Payment was created. Although the superCASH® system implements a range of methods and security features to prevent such situations, sellers should take the possibility of such cases into account and take any measures necessary to avoid them. Particularly the following cases are involved:

The bar code has been read incorrectly

The bar code, equally as the superCASH number, is protected by different modules. It is therefore highly improbable that an incorrectly read code should give the correct control sum. However, similar cases have been seen in practice.

The customer modifies the GET/POST parameter when creating the payment

This is clearly a fraudulent attempt. Protection against such attempts is possible through [return values](#), or by implementing [Notification of Payment Creation](#), in both cases, the seller finally receives the actual amount for which the Payment was created.

The customer modifies the bar code.

In these cases, there is no method of prevention, as the Payment was created correctly and the control features are correct. The only way of protection is a thorough revision of the amount paid.

3.2.1.2 Terminals operated by ČP and EP

The processing of Settlements at the terminals operated by ČP and EP has two additional features – online connection and validation of accepted Settlements. That means that before accepting the cash money and issuing the receipt, the Payment is checked in the superCASH® system, which verifies the entered data, and the customer cannot send a payment with a different superCASH number or pay a smaller amount than requested.

For more convenience when using our services at the terminals of ČP and EP, we introduced the possibility to increase the amount to be paid upon the customer's request. .

Such possibility of course depends on individual [Seller settings](#), in which it can be prohibited or a maximum amount of payment can be defined.

The possibility to increase the amount to be paid is particularly convenient for virtual accounts and wallets – it allows customers to top up their account as needed.

3.2.2 Validity

All Payments in the superCASH® system have a default validity period (10 days), which can be modified in the individual setting of each seller. This validity period is also displayed to the customers in the Payment creation form and is applied to each Payment.

However, the validity period does not affect the actual validity of the bar code; it is only used as a reminder of the time limit by which the seller wishes the transaction to be settled.

The settlement of a Payment can thus take place throughout its real validity which is approximately seven years following the creation of the Payment.

However, the superCASH® allows you to limit the validity of the Payment by inserting a time seal in the bar code. In such case, the Payment will be refused by the terminal after the lapse of the given time limit. See the [Payment creation interface parameters](#) section for more information.

3.2.3 Multiple settlements

Despite using the limitation of validity, as the communication between the partners is unidirectional, it is possible to make several payment settlements with one barcode, i.e. for one Payment.

It is obvious that except for the above examples, the amount of each such Settlement will be identical and each such Settlement will be coupled with the same Payment in the superCASH system.

This is not an error but a positive feature of the system.

Multiple payments can be conveniently used for repeated payments for identical or similar goods, e.g. for topping up of virtual accounts, paying monthly fees, etc.

In such case, the customer receives just one bar code, creates one Payment which he or she then uses repeatedly without having to visit the shop and generate new Payments.

This system is currently being used by an increasing number of sellers. Some of them distribute to their customers plastic cards with three bar codes each (used for different amounts – CZK 100, 200 and 500) and the customer selects at the amount to be credited to the respective account at the terminal.

Do not forget the possibility of multiple payments and the measures for their handling during the Settlement processing when creating the communication mechanisms. Although customers are informed of this possibility, a multiple payment can also be caused, for example, by a mistake of the staff at the terminal.

3.2.4 Manual processing

The easiest way of checking the status of one's transactions without intervening in the current system, i.e. without any technical requirements, is to use the seller's interface, i.e. the superCASH® system backend, where's now able to simulate Settlements for any payment channel.

This is an internet application where each seller can check all data related to the superCASH® payment system and the seller's user account, regardless whether the seller is using advance communication methods or not.

Sellers can log in under their user name and password at:

<https://test.supercash.cz/login.aspx>

For more information on the [Seller Application](#), see below.

Username and password aren't sC_mid ans sC_mpw parameters, which you've received in test account creation e-mail. For generating new user please contact IT department.

3.2.5 Payment settlement notification

System Notifications bring a significant degree of automation in the system. As soon as the system processes the information that the Payment has been settled, i.e. the Settlement is correctly assigned to the correct Payment; the system creates an action according to the valid **seller setting**, by which information on the Payment settlement is sent to the seller via the chosen communication channel, including the information used for identification.

As the Notifications are easy to falsify, they are basically considered as untrustworthy. Sellers are obliged to verify all information contained in the Notifications through secured channels, i.e. the Seller Interface and/or superCASH API. Notifications are only used to activate a reverse call.

The following communications channels may be used:

3.2.5.1 Text messages

The notification is delivered as plain text in a fixed format to the address specified in the Notification setting.

```
[superCASH] Platba c. obj. "OBJ001" c. superCASH "2107873118" na castku 264 CZK byla uhrazena castkou 264 CZK
```

Sending of Notifications via text messages is charged according to the applicable price list of services (CZK 1 excl. VAT).

3.2.5.2 E-mail

A simple Notification in the form of a plain formatted text included in the message.

```
Předmět: [superCASH] Avízo uhrazení platby  
Zpráva: Platba č. obj. "OBJ001" č. superCASH "2107873118" na částku 264 CZK byla uhrazena částkou 264 CZK.
```

```
(Subject: [superCASH] Notification of Payment Settlement  
Message: Payment order no. "OBJ001" superCASH no. "2107873118"  
for CZK 264 was settled with the amount of CZK 264.)
```

E-mail notifications can be secured by CA MANUM digital signature required for all outgoing messages.

3.2.5.3 Script calling (GET to URL)

This form of Notification is based on a call to the seller's script or web page, similarly as when opening such web page and passing the Notification parameter using the GET method, i.e. as a part of a free URL.

This is an advanced Notification feature with guaranteed delivery.

The guarantee is not unlimited. It consists in checking the return value of the called script, i.e. the status in the HTTP of the reply heading. The notification is deemed to have been delivered if the called script returns a HTTP 200 reply.

If another status is returned or in the case of a timeout we consider the Notification as undelivered and the superCASH® system attempts once more to deliver the Notification. If the attempt fails, the system notifies the staff member, who attempts to deliver the Notification manually (in business hours), i.e. by repeatedly calling the seller's script. If the problem persists, the seller is informed via the defined contact person or hotline.

The intervals between repeated attempts of delivery are currently set as follows:

```
1-1-1-30-1-1-60-1-1-120-5-5
```

Note: If the Notification delivery is not confirmed, the calling to the script will be repeated three times in one-minute intervals, then three times after thirty minutes in one-minute intervals and the same is repeated after one hour and two hours and at the end there are two attempts with a five-minute interval. This means that the superCASH system attempts to deliver each notification in the course of 2.5 hours.

A normally functioning script may only return the HTTP 200 heading reply, other options are not permissible. In the case of an error of information processing in the Notification, it is up to the seller's system to contact superCASH® using the available methods in order to verify the status of the Payment.

It is not recommended to wait with the script reply until the end of the Notification information verification process. Return HTTP 200 immediately after having received the Notification and put the verification in a queue or call another process, in order to avoid connection timeouts.

Notification setting example:

```
https://www.obchod.cz/platba_sc.php?operace=uhrazena
```

The system completes the query parameters and carries out GET to the following address:

```
https://www.obchod.cz/platba_sc.php?operace=uhrazena&sC?bid=OBJ001&sC_UID=123456789012345
```

where **sC_bid** is the transaction identification sent by the seller and **sC_UID** is unique settlement identification in superCASH system.

3.2.5.3.1 Return values

Parameter	Name	Description
sC_bid	Transaction ID	Given parameter by generating the Payment
sC_UID	UID	Unique, even 15-digit number of settlement in superCASH system

The only return parameter provides sufficient protection against possible abuse of service; it does not contain any sensitive information. The trader is obliged to perform the required inquiry and use this unique identifier guaranteed to receive accurate information of the Payment.

Verification of Payment is done by calling the **Chyba! Nenalezen zdroj odkazů.** method on superCASH API with handover acquired **sC_UID** parameter.

3.2.5.3.2 Reverse checking

The notification delivery, i.e. a successful script call can be supported by a check of the return value of the called script.

The notification setting may include a text value, with which the result of the call to the script by the notification is compared. If the texts (ASCII, UTF-8) are identical, the notification is considered as delivered.

If you wish to implement this check, the script should return, for example, an OK message in the case of a correct record in DB, or a call to another process to be verified, or an ERR message in the case of an incorrect record or call.

The script should generate only the required text value without HTML or other formatting.

A check of the return value is an additional feature to the normal script call, i.e. all the above information applies to it.

3.2.6 superCASH API

As the notifications generated by the superCASH® system are susceptible to different kinds of attacks depending on the technology used, they are not considered as trustworthy. Sellers are obliged to verify all information contained in the Notifications through secured interfaces, such as superCASH API.

superCASH API is the safest communication channel between the superCASH® system and the seller's system. It is protected against wiretapping using a SSL certificate, checking of source IP addresses and a secret password.

The superCASH API interface is available at https://test.supercash.cz/sC_WS.asmx and its definition at: https://test.supercash.cz/sC_WS.asmx?WSDL

3.2.6.1 GetPaymentStatusEx

The **GetPaymentStatusEx** is used for Payment verification. After entering the superCASH number, or the order number **sC_bid**, the system replies with the status of the given Payment, including the amount to be paid and the sum of amounts that were settled.

Using this method is deprecated and it's only for back compatibility.

For getting information about made settlements, use the GetRefundList method.

3.2.6.1.1 Method definition

```
int GetPaymentStatusEx(string sC_mid, string sC_mpw, string sC_bid, out string description, out double amount, out double payed, string sC_number)
```

3.2.6.1.2 Parameters Table

Parameter	Name	Description	Example
sC_mid	Seller ID	A unique identifier allocated to the seller	12345678
sC_mpw	Secret password	Allocated password	BhGY42K5Kb
sC_number	superCASH number	Unique 10-digit number of the transaction	1234567890
sC_bid	Transaction ID	Alphanumeric chain, up to 32 characters – identification of the transaction in the seller's system. It is displayed to the customer.	OBJ0001

Parameters written in bold are mandatory. It is also mandatory to fill in either the sC_number or sC_bid parameter. When sC_number has been entered, the sC_bid parameter will be ignored.

Although the method is able to use both the superCASH number and the order number (sC_bid), it is recommended to use the superCASH number only, as it is a unique number for all transactions processed by the superCASH® system.

3.2.6.1.3 Return values

The output is a number designating the result of the operation performed to evaluate the status of a superCASH payment, a text description of the result is given in the **description** text parameter.

The **amount** and **payed** output parameters contain the amount of payment and the total amount settled by the customer.

The payed output parameter contains the sum of all amounts paid for the given Payment. In the case of a multiple payment, the individual paid amounts are summed up.

To obtain an itemized list of settled amounts for the given payment, use the [GetRefungList](#) method.

	description	Description	amount	payed
0	<sC_bid> – Neuhrzená - K platbě není evidována žádná informace o uhrzení zákazníkem – 0 – 0 (<sC_bid> – Unpaid – No information of settlement of the given Payment by the customer is registered – 0 – 0)	No Settlement was found for the given Payment.	0	0
1	<sC_bid> – Uhrazená - Zákazník platbu plně uhradil – <amount> - <payed> (<sC_bid> – Paid – The customer settled the Payment – <amount> - <payed>)	A settled amount corresponding to the amount of Payment is registered for the given Payment.	<amount>	<payed>
2	<sC_bid> – Částečně uhrazená - Zákazník platbu částečně uhradil (suma úhrad se liší od částky vygenerované platby) - <amount> - <payed> (<sC_bid> – Partially settled – The customer partially settled the payment (the amount paid differs from the amount of the generated payment) - <amount> - <payed>)	The customer paid less, more or made a multiple payment and the sum of the amounts paid differs from the amount of the Payment.	<amount>	<payed>
-1	Identifikace obchodníka nebyla nalezena mezi platnými a aktivními obchodníky s povoleným webovým platebním rozhraním! (The identification of the Seller was not found among the valid and active Sellers with permitted web payment interface.)	The setting of the seller's account does not allow you to make queries about the Payment status or one of the sC_mid and sC_mpw was entered incorrectly.	-1	-1
-1	IP adresa není povolena. (The IP address is not permitted.)	The IP address of the server called by the superCASH API interface is missing or has been entered incorrectly.	-1	-1
-1	Parametry musí být vyplněny! (Parameters must be filled in!)	Some of the mandatory parameters were not filled in.	-1	-1

-2	Platba s číslem <sC_bid> nebyla nalezena mezi platnými platbami obchodníka (The Payment with the <sC_bid> number was not found among valid payments of the seller.)	A Payment with the entered identifier does not exist.	-1	-1
-3	Interní chyba (Internal error)	Unspecified system error. Please, contact the IT department of MANUM, s.r.o.	-1	-1
-4	Nejednoznačné zadání – nalezeno více plateb pro stejné sC_bid <sC_bid>, použijte jednoznačné sC_number pro určení jediné platby. (Ambiguous data – several payments were found for the same sC_bid <sC_bid>, use the unique sC_number to determine a single payment.)	A non-unique sC_bid was entered, for which the superCASH system registers several payments. Please, use the sC_number!	-1	-1

3.2.6.2 GetRefundListEx

At present it is a fundamental method to obtain information on the performed payments. This method is essential for verification of incoming notification with **sC_UID** parameter.

This method allows Seller to periodically check the list of all settled payments against the records in the seller's system in order to avoid unprocessed transactions.

3.2.6.2.1 Use for notification verification

You need to call this method right after receiving of GET to URL notification, where your system gets **sC_UID** unique settlement identification number.

This method, excluding the **sC_mid**, **sC_mpw**, **sC_type** and of course **sC_UID**, is requiring also parameters **from** and **to**.

In case of back notification verification are those two parameters (from, to) ignored. Please fill those with random but valid date and time.

3.2.6.2.2 Use for daily review

The method is recommended for daily review of received payments. Sometimes a notification is not delivered or there is a delay in its delivery due to an error in the cash desk system.

Therefore it is suitable to use this method once a day. Using a selection limited to the previous day, you can obtain a list of all transactions which can be checked with the database.

For a daily checkup, the method should be called the following day after 11 a.m. By this time, the confirmations of all superCASH transactions are finalized and you can be sure to obtain a full list of all your payments.

3.2.6.2.3 Use for periodical queries

This method can partially or fully replace or support the system of notification processing through calls to GET.

The method can be applied in the defined periods, while the time of each call is limited to the length of the call period, so the individual calls follow each other. If there is a call each thirty minutes, always at v X:30, the filter for the method would be set from X:00 to X:30, etc.

The period can be set for up to 10 minutes, complying with the terms of the superCASH® service and ensuring maximum comfort for your customers.

Periodical calls should be combined with daily reviews to fully guarantee the availability of all data.

3.2.6.2.4 Definition

```
byte[] GetRefundListEx(string sC_mid, string sC_mpw, string
sC_number, string sC_UID, DateTime from, DateTime to, int
type, out string description)
```

3.2.6.2.5 Parameters Table

Parameter	Name	Description	Example
sC_mid	Seller ID	A unique identifier allocated to the seller	12345678
sC_mpw	Secret password	Allocated password	BhGY42K5Kb
from	Filter from	Date and time of the filter for the selection of settled payments in the YYYY-MM-DDTHH:NN:SS format	2009-01-01T00:00:00
to	Filter to		2009-05-31T23:59:59
type	Type of output	1 for CSV, 2 for XML format	2
sC_number	superCASH number	Limits the output to the settlements of one Payment	0123456789
sC_UID	Settlement UID	Unique settlement ID in superCASH system	123456789012345

Parameters written in bold are mandatory.

The sC_number and sC_UID parameters only extends the filter defined by from and to, it cannot stand on its own.

3.2.6.2.6 Return Values

Output	description	Description
CSV/XML	Records returned: <počet>	The request was processed successfully.
0x00	Parametry musí být vyplněny! (Parameters must be filled in!)	Some of the mandatory parameters were not filled in.
0x00	Identifikace obchodníka nebyla nalezena mezi platnými a aktivními obchodníky! (The identification of the Seller was not found among the valid and active Sellers.)	The seller's account does not have a permission to receive payments using superCASH API.
0x00	IP adresa není povolena. (The IP address is not permitted.)	The IP address of the server called by the superCASH API interface is missing or has been entered incorrectly.
0x00	Vyžádáno více parametrů, než povoluje limit. (More parameters were requested than permitted by the limit.)	Up to 1000 records can be returned for one call. It is necessary to modify the filter to select a smaller amount of records.
0x00	Interní chyba (Internal error)	Unspecified system error. Please, contact the IT department of MANUM, s.r.o.

3.2.6.2.7 Output file format

The **type** parameter allows you to choose between CSV and XML output format.

Output is coded in BASE64. Please, decode it first.

The division sign for the CSV format is TAB (ASCII 0x09) and each line ends with CRLF (ASCII 0x13 0x10).

In the XML format, each record is contained in the <Refund> element and all records in the <RefundDataSet> root element.

NULL parameters aren't parts of the output.

The following table describes the parameters of individual lines of the output, MSSQL2005 eq:

Name of the XML element	Description of the value	Data type	Example
ID	Internal identifier of the settlement	decimal(15)	247501
Refund_Status_CheckIndex	CheckIndex of the settlement status	tinyint	1
Refund_Status	Description of the settlement status	nvarchar(32)	Uhrazená/Vrácená zákazníkovi (Settled/Returned to the customer)
Merchant	Name of the seller	nvarchar(64)	Novák s.r.o.
Merchant_Business_ID	Order number sC_bid	nvarchar(32)	TEST.01-KOBEREC
ID_Payment	Unique settlement number	decimal(15)	43567
Payment	Payment identifier (ID {superCASH number} payment channel)	nvarchar(98)	163285 {1234567890} Terminály SAZKA
Currency	Currency	nvarchar(8)	CZK
Notice_Amount	Amount to be paid	money	210.0000
Notice_On	Date and time of payment	datetime	2009-05-01T05:52:32+02:00
Notifications_Processed	Status of the sent notification on settled payments	tinyint	1 (notifikace v pořádku odeslány)/0 (nedoručeny) 1 (notifications sent)/0 (undelivered)
Settlement_Amount	Deprecated	money	Always 0
Settlement_On	Deprecated	datetime	1901-01-01T00:00:00.00+00:00
Cancel_Amount	Cancelled amount	money	0.0000
Cancel_On	Date of cancelling	datetime	2009-05-17T17:44:24.52+02:00
Number	superCASH number	nvarchar(32)	1234567890
Channel_Number	Bar code number of the payment channel	nvarchar(32)	333123456789000021000015
Target_To_Pay	Amount to be paid to the seller vi	money	0.0000
Target_Payed	Amount already paid to the seller	money	195,0000
VS	Variable, constant and specific symbols	nvarchar(32)	0123456789
CS			0123
SS			0123
Note	Note	nvarchar(256)	Twenty yellow horses
User_Created	Creator of settlement	nvarchar(65)	SYSTEM
User_Modified	Last inspector of settlement	nvarchar(65)	Pavel Vítek
Created	Date and time of creation	datetime	2009-05-21T11:55:00.587+02:00

Modified	Last status update	datetime	2009-05-21T11:55:00.587+02:00
----------	--------------------	----------	-------------------------------

3.2.6.2.8 Example of a XML output

```

<RefundDataSet>
- <Refund>
  <ID>247501</ID>
  <Refund_Status_CheckIndex>1</Refund_Status_CheckIndex>
  <Refund_Status>Uhrazená</Refund_Status>
  <Merchant>Novák s.r.o.</Merchant>
  <Merchant_Business_ID>TEST-001-01-1</Merchant_Business_ID>
  <ID_Payment>24002</ID_Payment>
  <Payment>163285 {1234567890} Terminály SAZKA </Payment>
  <Currency>CZK</Currency>
  <Notice_Amount>210.0000</Notice_Amount>
  <Notice_On>2009-05-01T05:52:32+02:00</Notice_On>
  <Notifications_Processed>1</Notifications_Processed>
  <Settlement_Amount>210.0000</Settlement_Amount>
  <Settlement_On>2009-05-17T11:44:24.52+02:0</Settlement_On>
  <Cancel_Amount>0.0000</Cancel_Amount>
  <Document_Number>209100021</Document_Number>
  <Number>1234567890</Number>
  <Channel_Number>333123456789000021000015</Channel_Number>
  <Target_To_Pay>0.0000</Target_To_Pay>
  <Target_Payed>195.0000</Target_Payed>
  <Created>2010-02-04T11:44:24.503+01:00</Created>
  <Modified>2009-05-21T11:55:00.587+02:00</Modified>
</Refund>
</RefundDataSet>

```

3.3 Processing of statements of payments

Statements of payments are created and sent to the seller by the selected channel in the form of a proforma invoice and an annex containing a list of all payments settled in the given billing period.

The transfer of money and accounting is performed no later than on the third working day after the money was received from the cash desk.

3.3.1 Actual date of settlement

Individual transactions are accounted as of the date of settlement of the receivables by the payment channel. As individual received transactions are delivered as an aggregated sum for a given period, the superCASH transactions are settled by the system in the order in which they arrive at the deposit account.

3.3.1.1 SAZKA cash desk

SAZKA performs accounting on a weekly basis and sends the collected money usually on the ninth day after the closing of the period, i.e. no later than by the 16th day following the first payment in the given accounting period.

For example, if a Payment is settled and the Payment created on 5 March, i.e. the customer pays the respective amount on 5 March; this receivable will be accounted and credited to the seller at the moment in which it was credited to the deposit account of MANUM, s.r.o., i.e. by 22 March.

The invoice generated by the superCASH system received by the seller will be issued, for example, for the period from 23 to 29 March (if weekly accounting is applied) but will contain payments carried out in the week from 2 to 8 March.

3.3.1.2 ČP cash desk

ČP works with ten-day periods within a month. That means that accounting is done on the 10th, 20th and the last day of the month. Collected money is sent within four working days after closing the period.

For example, if a transaction takes place on 1 January, it is reflected in the accounting carried out on 10 January, the money is delivered to the deposit account on 14 January and it is sent to the seller by 17 January at the latest.

3.3.1.3 EP cash desk

Payment channel EP is working with week periods like SAZKA does. Collected amount of money is sending 2nd day after end of week period.

3.3.2 superCASH accounting period

Depending on the [seller setting](#), it is possible to perform accounting for different periods. The standard, default and lowest value in the current setting is one week. The setting allows you to define a period of almost any length.

This is accounting done between MANUM, s.r.o. and the seller. It includes all payments that were settled by the cash desks. If the statement of payments generated by the cash desk does not correspond to the seller's accounting and some of the payments have not been settled, it will appear in the following accounting according to the selected period.

3.3.3 Cash transfer

Issuing and authorization of transfer orders takes place on the same date as the creation of the accounting statement for the given seller.

If a seller has defined, for example, a 14-day accounting interval, he will receive the total amount of collected cash also in 14-day intervals.

3.3.4 Statement of payments delivery

Right after the statement of payments is created, it is sent to the agreed e-mail address of the seller. Both currently offered formats are part of the e-mail.

The security of the transfer may be enhanced using a digital signature attached to the sent e-mail.

It is possible to agree on delivery of printed documents via mail. In such case, the letter only contains information stated in the PDF document.

3.3.5 Statement of payments formats

In order to allow machine processing of accounting statements with a certain degree of automation, we offer and send the documents in the PDF format suitable for reading and printing and in an XML document with a fixedly defined format.

3.3.5.1 XML format definition

```

<?xml version="1.0" encoding="utf-8" ?>
<sC_Invoice VS="200800007"                Receipt No. (variable symbol)
  Date_From="2008-06-09 12:00:00"         Period from
  Date_To="2008-06-16 12:00:00"         Period to
  Company="MANUM s.r.o."                 Supplier
  C_Street="Vyšehradská 320/49"          Supplier address (street)
  C_Town="Praha 2"                       (city)
  C_ZIP="120 00"                         (zip code)
  C_Identification="272 15 555"          Supplier firm ID
  C_Tax_Identification="CZ27215555"     Supplier Tax ID
  Merchant="Novák s.r.o."               Merchant
  M_Street="U Nováka 15"                Merchant address (street)
  M_Town="Nová Lhota"                   (city)
  M_ZIP="123 45"                        (zip code)
  M_Identification="123456789"          Merchant firm ID
  M_Tax_Identification="CZ123456789"    Merchant Tax ID
  Issue_Date="2008-07-22"              Creation date
  Taxable_Fulfilment_Date="2008-06-16" Date of taxable supply
  Due_Date="2008-07-07"                Due date
  Total_Amount_Incl_Tax="220.00"        Amount of fees
  Currency="CZK">                      Currency
<Refunds>                                1..N settlements
  <Refund Date="2008-06-11 01:22:45"    Date of notification
    sC_bid="obj 01"                      Transaction ID
    sC_number="8161494722"              superCASH number
    Payment="1010.50"                   Amount
    Rate="1"                            Fee rate
    Amount="10.00"                      Fee amount
    Id_Refund="1350"                    Settlement UID (GetRefundListEx)
    Channel="Terminály SAZKA" />        Payment channel
  <Refund Date="2008-06-11 01:22:45" sC_bid="obj 01"
    sC_number="8161494722" Payment="1000.50" Rate="10%"
    Amount="100.05" Id_Refund="1351" Channel="Terminály SAZKA" />
  <Refund Date="2008-06-11 01:27:29" sC_bid="objednávka 25"
    sC_number="3673759357" Payment="1009.50" Rate="1"
    Amount="10.00" Id_Refund="1352" Channel="Terminály SAZKA" />
  <Refund Date="2008-06-11 01:27:29" sC_bid="objednávka 25"
    sC_number="3673759357" Payment="999.50" Rate="10%"
    Amount="99.95" Id_Refund="1353" Channel="Terminály SAZKA" />
</Refunds>
<Requests>                                1..N transfer orders
  <Request VS="200800007"                Variable symbol
    Amount="1800.00"                    Total amount
    Currency="CZK"                      Currency
    Src_Account="35-9962600227/0100"    Source account (supplier)
    Dst_Account="1234567890/1234" />    Dest. account (merchant)
  </Requests>
</sC_Invoice>

```

3.3.5.2 Automatic import of statement of payments

As we use proforma invoices, which are a non-standard form of Statement of Payments, we offer the possibility of an automatic transfer of the invoice to formats which accept third party accounting software.

Currently we offer an automatic import to the Pohoda 2009 accounting software produced by Stormware. If you are using this accounting tool, please contact us, and we will provide you with a XSLT template and instructions for implementation.

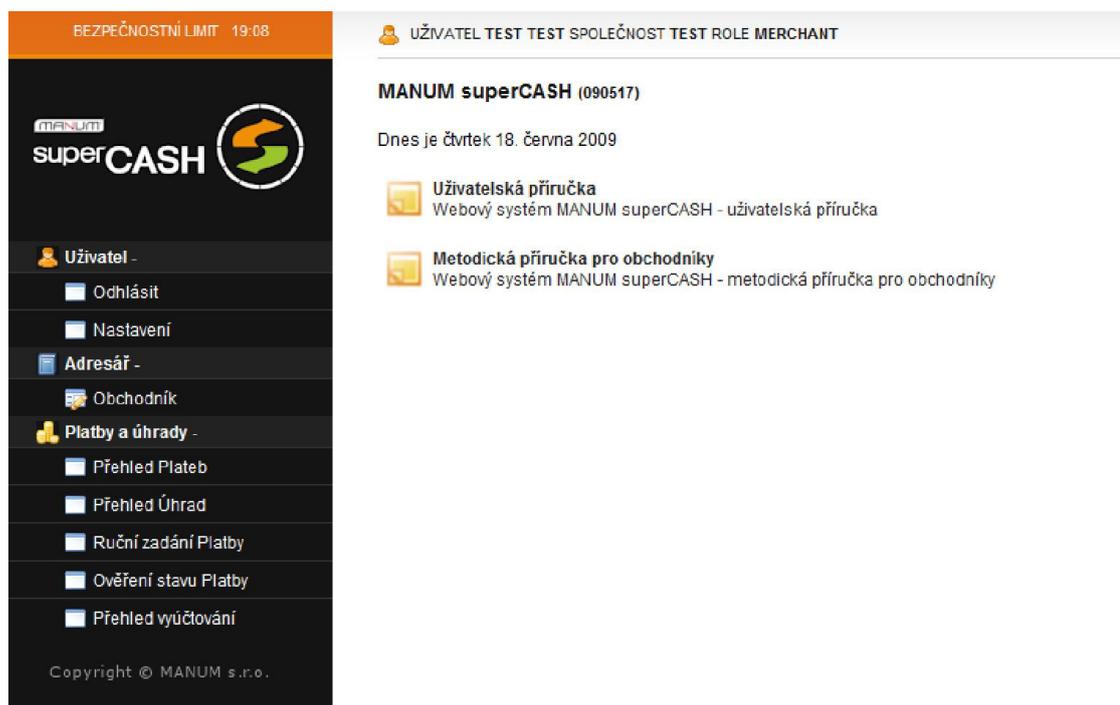
We are now preparing another accounting format - ISDOC, which is supported by all major accounting software producers and is also the recognized format for electronic invoicing exchange within the Czech Republic.

3.4 Seller application

Although all important data in the superCASH® system can be found through specific interfaces and thus all actions and data can be processed automatically, we also offer a simple web application, to which sellers can login and check individual Payments, Settlements, Statements or change their basic data.

The application is available at: <https://test.supercash.cz/login.aspx>

Figure 3 – Initial setting



The initial screen contains a list of links to the User Manual which will show you how to use the seller application and carry out the necessary operations.

3.4.1 Logout

Immediately after logging in, a security limit of 20 minutes starts to run, after which you are logged out automatically. The limit is extended by any action carried out in the system, therefore you cannot be logged out during work.

To log out manually, click the **Odhlásit (Logout)** button.

After finishing the work in the seller application, it is recommended to log out manually and close the browser window in order to avoid any misuse of your account.

3.4.2 New password setup

Whether in a testing or production instance, the first thing every seller should do is to change the password generated or allocated by superCASH.

Despite being complex and therefore safe enough, such password is known to at least one person – the operator who created it. Although we can guarantee the honesty of our employee, it is recommended that you click the **Nastavení (Setting)** link in the left menu right after logging in.

A simple form will open, in which you fill in the current and new password (this is entered twice) and confirm it. For security reasons, you will be logged out immediately and the new login is done with the new password.

Your new password cannot be obtained from the system by anyone including the operator. Should you forget your password, ask the operator to setup a new one and repeat the process of password change.

3.4.3 Change of data in the user account

In the seller application, some data may be changed directly by the seller. These include, particularly:

- + Address of the company's registered office
- + Contact telephone numbers
- + E-mail and web pages
- + A list of permitted IP addresses for the superCASH API interface

Other parameters are locked and can only be changed by a written or digitally sign request sent to the sales department of MANUM, s.r.o.

To open the form with registered data, click the **Obchodník (Seller)** button and select the line with your user account.

The changes you have made are not applied immediately but wait to be approved by the operator of the application. The changes take effect on the day of their approval.

3.4.3.1 User account setup

As already mentioned, only few data in the user account setting can be changed directly. This is to ensure protection of the seller and the superCASH® system operator.

The following additional sets of data that are not displayed on the seller's card can be defined for each account:

3.4.3.1.1 Bank accounts

Each seller has to define at least one active bank account to which the system will send the amount collected at terminals according to the respective **Statements of Payments** in regular intervals.

The system allows users to register several bank accounts, but only one of them can be active. If the bank account to which you wish the collected amount to be sent, inform the sales department which will perform the change after its verification.

3.4.3.1.2 User accounts

Normally, one user account is set for each seller, identified using a unique login name and a secret password.

Each seller can create several user accounts in the superCASH® system and set specific rights and purpose and competences for each of them.

This solution is suitable for companies with more employees, as it is possible to establish access for the director, sales managers, accountants, etc., with different competence area for each user.

3.4.3.1.3 Setup of the payment channel

Sellers can also define a **minimum and maximum amount**, for which the Payment can be created, in order to avoid any attempts of fraud.

It is also possible to set up a default **Payment Validity Time**, which is presented to customers, however this time limit does not influence the actual time of Payment and serves only as a reminder.

For payments made at the terminals of ČP or EP it is possible to cancel the possibility to increase the amount up to the selected limit.

3.4.3.1.4 Notifications setup

The system of notifications sent from the superCASH® system can be modified and different kinds of notifications can be combined.

Notifications can be divided in two groups – notification informing the seller of Payment creation and notifications informing of Payment settlement.

Notifications of Settlement creation:

- + Notification of Payment Settlement – e-mail (summary for a selected period)**

This type of notification can be used for an additional review of all registered Settlements, as it is possible to set up the period for which this notification in the form of a list will be sent. It is thus possible to select a daily summary of all registered Settlements.
- + Notification of Payment Settlement – e-mail**

An e-mail with details of a performed Settlement is sent immediately after its creation.
- + Notification of Payment Settlement – GET to URL**

This is a call to the seller's script and to the predefined fixed URL, to which the superCASH® system fills in the parameters and values for the given Settlement.
- + Notification of Payment Settlement – text message**

This notification contains all necessary information on the performed Settlement and is delivered in a text message sent to a defined telephone number.
This service is subject to a fee of CZK 1/message excl. VAT.

Notifications of Payment creation:

- + Notification of Payment creation – e-mail**

An e-mail with the details of the created Payment is sent immediately after its creation.
- + Notification of Payment creation – GET to URL**

This is a call to the seller's script and to the predefined fixed URL, to which the superCASH® system fills in the parameters and values for the created Payment.
This notification serves for securing the delivery of the information on Payment creation to the seller.
- + Notification of Payment creation – text message**

This notification contains all necessary information on the created Payment and is delivered in a text message sent to a defined telephone number.
This service is subject to a fee of CZK 1/message excl. VAT.

3.4.4 Overview of payments/settlements

After clicking the **Přehled plateb (Payments overview)** or **Přehled úhrad (Settlements overview)** link, you will open a form in which you can view and filter a list of all Payments and Settlements related to your user account.

The displayed filtered list of Payments and Settlements as well as selected individual Payments or settlements can be printed. After pressing the **Tisk (Print) button**, the system asks in which format the export should be carried out. Normally, the PDF format is used for print, the XML, CSV and XLS formats are also available.

Note that there is a superior filter defining the number of displayed records. The default number is 100. If you wish to display more records, increase the number in the field.

Figure 4 – Filter for number of records

Maximální počet záznamů (1 - 10 000)

If the maximum permitted amount of 10,000 displayed items is not sufficient, you can either reduce the selection using individual filters under each column of the table, or print the list after selecting the “Vyexportovat všechny záznamy (bez omezení počtu)” (“Export all records (without limiting their number)”).

Figure 5 – Print of several records

Tisk seznamu - Platby

Vyexportovat všechny záznamy (bez omezení počtu)

3.4.5 Settlement creation (sending notification)

In Seller's Application you have now option to create (simulate) incoming settlements for existing payments.

U can find this on Payment overview (Přehled plateb) form, in bottom part. At first is necessary to choose (click on it) payment to which you want make a settlement.

Figure 6 – Settlement creation

Vytvoření testovací úhrady k této platbě

Platební kanál Částka Datum a čas

Combo-box Platební kanál (Payment channel) is for selection of settlements origin. In test scenario this affects nothing.

Částka (Amount) and Datum a čas (Date and time) is free to edit – it's obvious, that you cannot make a settlement in past or to zero or below merchants limit amount.

By clicking on button Vytvořit (Create) you generate a new settlement with chosen parameters and start all depending process, including sending of notification.

3.4.6 Manual entering of payments

This is a user version of the [MEP interface for customers](#). In this form, you can establish Payments after filling in any valid values.

This is also one of the methods how to create Payments for your customers without using a costly technical solution.

3.4.7 Verification of the payment status

This interface is identical to the [customer interface](#), where the seller can verify whether the given Payment has been settled or not, after entering the numeric representation of the barcode, the bar code itself or the superCASH number.

Any Payment/Settlement can also be searched in the respective [list](#) after entering the filter.

3.4.8 Overview of Statements

The overview of statements form contains a list of all Statements of Payments issued for your user account.

It contains all identification data and each individual Statement can be reprinted and exported to different formats for further processing.

3.5 Additional interfaces

3.5.1 Closest terminals search

Beside our web presentation, where customers are able to find out **closest terminal**, we are offering this option also for merchants, so they are able to implement map of terminals in their systems.

This API is based on PHP script via URL:

<http://www.supercash.eu/terminals.php>

3.5.1.1 Input parameters

Parameter	Description	Example
center	Coordinates of center of search in GlatLng format	(50.072029, 14.417796)
radius	Radius of search circle in km	3.5

3.5.1.2 Output

Interface returns XML with two elements: **Count** and **Marker**. **Count** has always only one occurrence and contains only one parameter **total**, which gains amount of founded places. **Marker** can have more than one occurrence and carry details of founded terminal, specification below:

Name	Description	Example
name	Place description, company name	AMADEO PRAHA spol. s r.o.
id	ID or ZIP	12800
type	SAZKA terminal (1) / CP branch (2) / EP terminal (3)	1
address	Address of terminal or branch	Lazarská 1719, PRAHA 1
mx	Coordinates of terminal / branch	50.079289
my		14.420735
distance	Distance from center of search in km	0.9536547

In case of error, void element Error is returned

Max. amount of returned results is restricted to 100

4. Important Contacts

Department	Name	Telephone	E-mail
IT	Pavel Vítek	+420 724 024 163	it@manum.cz , pavel.vitek@manum.cz
Sales	Petra Balíková	+420 725 582 893	obchod@manum.cz , petra.balikova@manum.cz
Director	Marek Lánský	+420 724 130 688	obchod@manum.cz , marek.lansky@manum.cz
Infoline		+420 840 111 131	info@manum.cz