ÀLANDSBANKEN

E-payment

Technical service description

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E-payment - Technical service description

1. Revision list

Most recent change	What was changed
08.08.2013	Updated seller's account to AN34
13.12.2013	Translated process description, corrected data
31.3.2016	Updatedvalue for field 4 AAB_RCV_ACCOUNT to IBAN account

2. Introduction

The e-payment service, delivered by the Bank of Åland Plc through Crosskey Banking Solutions Ab Ltd, is a service that enables the buyer to buy and pay his/her purchases during an internet session. When the buyer has confirmed the payment the money is immediately transferred to the seller's account.

This document describes the e-payment process, the functionality and the needed data. Lastly, a way for testing the service within the production environment is described.

3. Process description
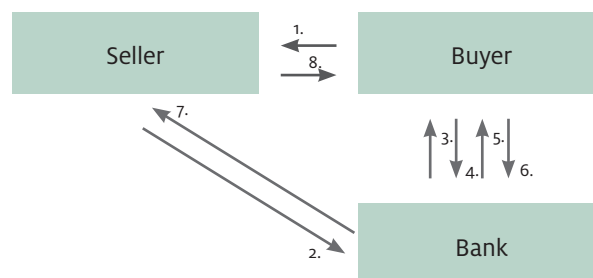
1. The buyer visits the seller's web shop and chooses what products and/or services to purchase. The buyer also chooses to make the payment through the bank's e-payment service.

2. The seller creates a foundation for payment and transfers the buyer to the bank's e-payment service.

3. The bank's e-payment service controls that the transferred seller information meets the requirements laid out in this service description. It also checks that the data is not manipulated.

4. The buyer identifies him/herself in the e-payment service with the bank's internet bank codes.

5. The service displays the payment information for the customer.

6. The buyer confirms the payment with a one use only code or terminates the payment.

7. After confirmed payment the bank examines the payment and the buyer is automatically sent back to the seller's web shop.

8. The web shop displays a webpage where it is shown that the payment is confirmed.

4. Required information and form description

4.1 Form description

The form that is sent to the bank must be coded in html. The design must be as shown below.

<form action="https://.../service/paybutton" method=post>

                <input name=". . ." type=". . ." value=". . .">

                <input name=". . ." type=". . ." value=". . .">

                . . .

                ...

                ...

</form>

The Bank of Åland payment button can be copied from
https://online.alandsbanken.fi//images/betalknapp/betalknapp.gif

4.2 Mandatory and optional information

Field	Information	Information name	Value	Form	M/O
1	Payment version	AAB_VERSION	'0002'	AN 4	M
2	Payment code	AAB_STAMP	Code which identifies the payment	AN 15	M
3	Invoicer ID	AAB_RCV_ID		AN 15	M
4	Seller's account	AAB_RCV_ACCOUNT	IBAN account	AN 34	M
5	Seller's name	AAB_RCV_NAME		AN 30	M
6	Payment language	AAB_LANGUAGE	1 = Finnish 2 = Swedish	N 1	M
7	Amount	AAB_AMOUNT	Ex. 123,45	AN 19	M
8	Reference	AAB_REF	According to standard	AN 20	M
9	Due day	AAB_DATE	'EXPRESS' = Immediate payment.	AN 10	M
10	Message	AAB_MSG	Message on transaction	AN 245	O
11	Return-link	AAB_RETURN	URL Return link after payment		M
12	Cancel-link	AAB_CANCEL	URL Return link after cancellation		M
13	Reject-link	AAB_REJECT	URL Return link after rejected transaction		M
14	Control code	AAB_MAC	Security code (MAC-Kod)	AN 32-64	M
15	Confirmation	AAB_CONFIRM	YES	AN 3	M
16	Key version	AAB_KEYVERS	Ex. 0001	N 4	M
17	Currency code	AAB_CUR	'EUR'	AN 3	M
18	Algorithm	AAB_ALG	01=MD5 03=SHA256	N2	M

4.3 Field description

| AN = Alphanumeric data | M = Mandatory |
| N = Numeric data | O = Optional |

Field 1	E-payment version number.
Field 2	Code given by seller. Code can be a reference, a customer number, or a combination of ex. date, time, reference etc.
Field 3	Invoicer's ID, a customer code given from the bank and found on the agreement
Field 4	Seller's account
Field 5	Seller's name
Field 6	Language code for the service. States which language the seller uses in the web shop. The e-payment service opens in this language.
Field 7	The e-payment amount. As decimal separator a comma (,) is used. Please note that a dot (.) is not allowed.
Field 8	Reference must be a numeric value without the groups and spaces from the reference standards
Field 9	Due day for the payment. Must be "Express" if the desire is for the transaction to take place immediately.
Field 10	The payment message must be given in the same way as on the account extract (max. 7 rows at 35 characters). The message is only transferred to the buyer.
Field 11	The address to where the buyer will continue after the payment. Must be a complete URL address in HTML language with a query string or parameter information.Parameter values in the URL needs to be URL encoded. Ex.: VALUE="http://tuote.kauppa.fi/tilaus/vahvistus.htm?parm=prod%20one"
Field 12	The address to where the buyer will continue after cancelation of payment. Parameter values in the URL needs to be URL encoded. Ex.: VALUE="http://tuote.kauppa.fi/tilaus/keskeytys.htm"
Field 13	The address to where the buyer will continue if a technical error occurs in the e-payment service. Parameter values in the URL needs to be URL encoded. Ex.: VALUE="http://tuote.kauppa.fi/tilaus/virhe.htm"
Field 14	The payment's control code, calculated with help of the algorithm chosen in field 18 in the following way: 1. A character string is created based on the fields: AAB_VERSION& AAB_STAMP& AAB_RCV_ID& AAB_AMOUNT& AAB_REF& AAB_DATE& AAB_CUR& Seller security code& The character string does not have spaces and the & character is included in the calculation. The e-payment version is 0002 and the information must be in the same order as above. 2. Based on the character string above a hash value is calculated with the chosen algorithm. The value is then translated into hexadecimal form. The received hash value is put in Field 14 Control code. With help of the control code the receiver of the message controls the sender and that the message is not manipulated. Seller security code is given when the service is connected and agreed upon.

Note! When SHA256 is used the security code needs to be converted from hexadecimal to string before it is used in the calculation.

Field 15	Seller receives information regarding the handling of the payment in the return link.
Field 16	Version number of the security code used in the calculation of the MAC code.
Field 17	Transaction currency must be EUR.
Field 18	Chosen algorithm, 01=MD5, 03=SHA-256

5. Return information

Field	Information	Information name
1	Payment version	AAB-RETURN-VERSION
2	Payment code	AAB-RETURN-STAMP
3	Payment reference	AAB-RETURN-REF
4	The bank's archive code	AAB-RETURN-PAID
5	Calculated control code	AAB-RETURN-MAC

5.1 Mandatory and optional information

Field 1	Returns the e-payment version number
Field 2	Returns the information/code given by the seller in the field AAB_STAMP. The code can be a reference, a customer number, or a combination of ex. date, time, reference etc.
Field 3	Returns the reference given by the seller when creating the e-payment
Field 4	The archive code created by the bank
Field 5	The return control code is calculated the same way as the payment control code. It uses the chosen algorithm and the following information: AAB-RETURN-VERSION& AAB-RETURN-STAMP& AAB-RETURN-REF& AAB-RETURN-PAID& Seller security code& The character string does not have spaces and the & character is included in the calculation. Example of return link with control code: Original return link: VALUE="http://tuote.kauppa.fi/tilaus/vahvistus.htm" Contents in return-url: http://tuote.kauppa.fi/tilaus/vahvistus.htm?AAB-RETURN-VER-SION=0002&AAB-RETURN-STAMP=1234567890&AAB-RETURN-REF=123&AAB-RETURN-PAID=20020912600290018867&AAB-RETURN-MAC=69E6574CDC3498F32C43E0DD39C3B21A

6. Testing

Test customers

To make it possible to test the e-payment service in the production environment there is a test seller and a test customer implemented in the system. Please note that it is only possible to test with these two test customers, in other words it is not possible to use a real customer against test seller or test customer against real seller. The test customer has a static username, password and PIN-code, as indicated below.

Production link: https://online.alandsbanken.fi/service/paybutton

Test customers:

Seller	
AAB_RCV_ID :	AABESHOPID
AAB_MAC:	PAPEGOJA
AAB_RCV_ACCOUNT	FI77 6601 0001 1308 55
Customer	
User id (Användar-ID/ Käyttäjätunnus):	12345678
Password (Lösenord/ Salasana):	123456
PIN (Ange kod/ Anna tunnusluku):	Any number containing 4 figures