



B2Bws Manual

Landsbankinn | November 2007 | 2nd edition

B2Bws Manual

B2Bws is a web service based on a collective standard which the Icelandic banks (Landsbanki, Kaupthing, Glitnir and Saving Banks (Sparisjóðir)) have decided on. Its purpose is to enable firms to connect their business systems directly to the service system of the bank. B2Bws should be of use to all firms of all sizes.



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Introduction

Welcome

The most probable reason why you are reading this manual is either you already have B2B web-service or you are contemplating getting it. Either way we hope that this manual will answer your questions and explain the service in sufficient detail.

If you need any further assistance do not hesitate to use our free B2Bws consultancy service through b2b@landsbanki.is.

Corporate Internet Bank
Tel +354 410 9191

About the document

This manual is the 2nd version since August 2007 and is for users of the web services for the banking institutions. There is another one specially for the classic B2B service, whereas their servicesupply is dissimilar in certain ways. The services described here are valid with all the banks, i.e. the same schemas and objects apply with all the banks.

The paper describes the operations that can be performed in the first version of this standard. The operations are described in a manner of the way they are performed, i.e. that each operation is described in a way that depicts all the factors that need to be taken into consideration while performing each operation.

Scattered around the paper you'll find **Notes**, *Usercases* and *Nice to know* boxes. The margins are willingly kept in desirable width to enable comment writing. Backmost you will find a Memo section.

Pictures are used to further explain how objects are connected within each operation. Solid lines in these pictures indicate that the element in question must be entered, but the dotted lines indicate that the element is optional.

NOTE

This document contains diagrams of most of the schemas used. Solid lines indicate values that must be included in the schema while broken lines indicate areas that may be left out. Please note that the schemas themselves include further documentation and definitions of legitimate values. A list of schemas is provided at the end of the document.

Prior versions

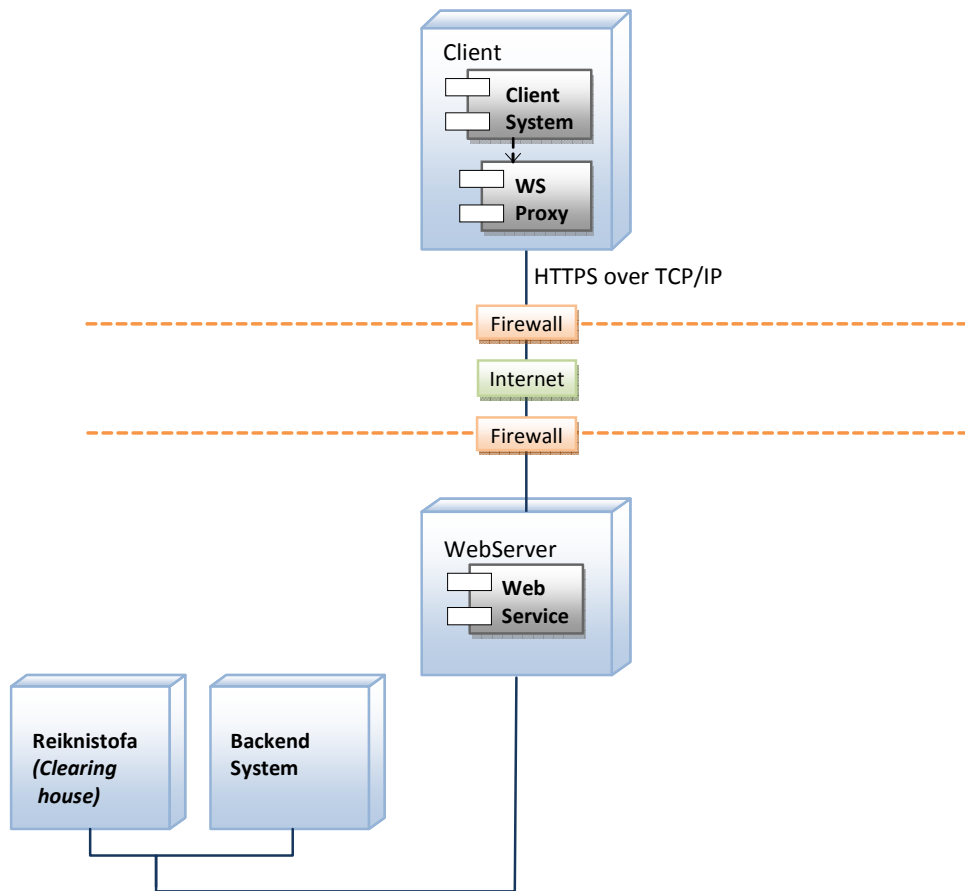
1. version | Published August 2007



Overview

The B2B (Business to Bank) term used in this document refers to digital transactions and requests between companies and Landsbanki Íslands. B2B transactions which take place between Landsbanki and other companies are directed through a webserver which is owned and operated by Landsbanki Íslands. When the webserver receives a request in the form of a XML message using the SOAP protocol is forwarded to a server. The relevant server then forwards the reply message (using SOAP protocol) to the webserver which returns the reply to the original user.

The following is a high level diagram of how a client will communicate with a server which hosts the web service, which then communicates with its back office systems.



MAKING HISTORY

Landsbanki began offering business-to-business (B2B) service in 2002, and within a few years, several hundred companies had joined the user group. A turning point occurred in 2007, when banks and savings banks agreed to offer a single XML standard featuring co-ordinated presentation of the most common operations. This enables companies to engage in XML communications with a number of banks in the most economical way possible. The classic B2B standard will continue to be in full use at Landsbanki, and it will be developed in tandem with the interbank standard, as it contains specialised banking solutions in addition to the primary services.



Technical information

Notice

As further discussed in this manual, the B2B webservice deals with standards in transfer and dissemination of data. **Still, note that *business logic* may vary between banks.** An example of such incident is the handling of Secondary Collection Claims.



If in any doubt of the business logic, please consult with our B2B specialists via b2b@landsbanki.is or contact our *Corporate Service Desk* in +354 410 9191.

Communication protocols and Security

The B2B webservices are implemented as SOAP Web Services, accessible over the Internet through the HTTP secured with SSL (HTTPS) and Web Service Security (WSS) using the Username token and the X509 certificate token profiles.

Connecting to the B2Bws

The prerequisites for access to the B2B webservice of Landsbanki are that the corporate customer needs to be a registered customer of Landsbanki's **Corporate Internet Bank**, *abbr.* CIB (*i.* Fyrirtækjabanki Landsbankans) and have a signed contract accepting the terms for B2B webservice. In order to get access to the services you will have to add them as a web reference in your dev environment <https://b2bws.fbl.is/xsd/IcelandicOnlineBanking-Statements.wsdl> for the banking statements, currency and more.

We recommend that you add the following code on your project to begin with in order to be redirected onto our **test environment**:

NOTE

With this in place you can use the **test user** `L621077B2B`, **passw.** `L6192965`, to connect.

```
statements.Destination = new EndpointReference (new Uri  
("https://b2bws.fbl.is/statements.asmx"), new Uri ("https://b2bws.fbl.is/test/  
statements.asmx"));
```

You will also need to acquire a certificate from **Audkenni** (www.audkenni.is). In order to be able to connect to the B2Bws system a B2Bws user needs to be created even if the user already exists for the Corporate Internet Bank. B2B usernames have **B2B** as a postfix except for credit collection agencies which have **B2BMI** as postfix.

Timestamps

It is necessary to make sure that the clocks are as synchronized as possible on clients and servers. The reason for this is that SOAP messages include a "Time to live", which is important because the system will not perform operations which do not arrive within a reasonable time. The services in this document use a default time of **900 seconds**.





UserNameToken

Each call to the service should include a UserNameToken in accordance with the OASIS WSS UsernameToken Profile 1.0. The token should include the Username and Password tags. The Password@Type attribute references by default the URI „...#PasswordText“ and the password should be sent as clear text.

```
<S11:Envelope xmlns:S11="..." xmlns:wssse="...">
  <S11:Header>
    ...
    <wsse:Security>
      <wsse:UsernameToken>
        <wsse:Username>MyUserName</wsse:Username>
        <wsse:Password>My1ongA$ndDlff9ltP%$phr$se</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
    ...
  </S11:Header>
  ...
</S11:Envelope>
```

A sample of a security header

The Nonce and Created tags are optional and their usage will not be enforced server side.

Signing messages

Digital signature of messages is mandatory. Each banking institution defines its own rules for which types of certificates can be used for the services. This means that certificate which is used at one bank may, or may not, be accepted by other banks.



Landsbanki accepts certificates, whether they are based on smartcards or not.



Security in B2Bws

In order to insure message integrity all messages are signed using a private key. This means that it is impossible¹ to modify the message without the receiver knowing it. Both the request (for the client) and response (for the server) message are signed. SSL is used to enforce message confidentiality, that is only the server and the client can read messages. WS-Security describes how to attach signature and encryption headers to a SOAP message. WS-Security also describes how to attach security tokens. In B2Bws we use the X.509 Token and the Username Token.

```
<S11:Envelope xmlns:S11="..." xmlns:wssse="...">
  <S11:Header>
    ...
    <wsse:Security>
      <wsse:UsernameToken>
        <wsse:Username>MyUserName</wsse:Username>
        <wsse:Password>My1ongA$ndDlff9ltP%$phr$se</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
    ...
  </S11:Header>
  ...
</S11:Envelope>
```

- The simple object access protocol (SOAP)
 - <http://www.w3.org/TR/soap>
- Secure socket layer (SSL)
 - <http://wp.netscape.com/eng/ssl3>
- Web Services Security 1.0
 - <http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-soap-message-security-1.0.pdf>

Certificate

A valid certificate issued by Auðkenni is needed. Auðkenni issues two different types; personal certificate (*persónuauðkenni*) and employment certificate (*starfsauðkenni*). The main difference between the two is that the employment certificate is associated with the employers ID number (*kennitala*).

ON THE WEB

For more information on this matter; go to Auðkenni's website www.audkenni.is.

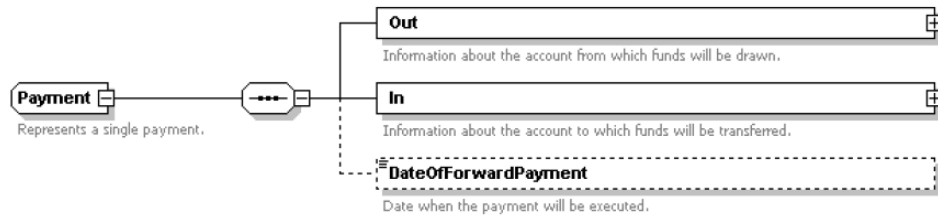
¹ There may in the future be some sort of a breakthrough mathematical that may make it possible.



IcelandicOnlinePayments

Payment(DoPayment)

A description of how single payments are created. The object **Payment** has a list of **PaymentOut** and **PaymentIn**, which are the withdrawals and deposits, along with the date the payment shall be made. If a payment date is not entered, it is generally assumed that the payment shall be performed the very same day.



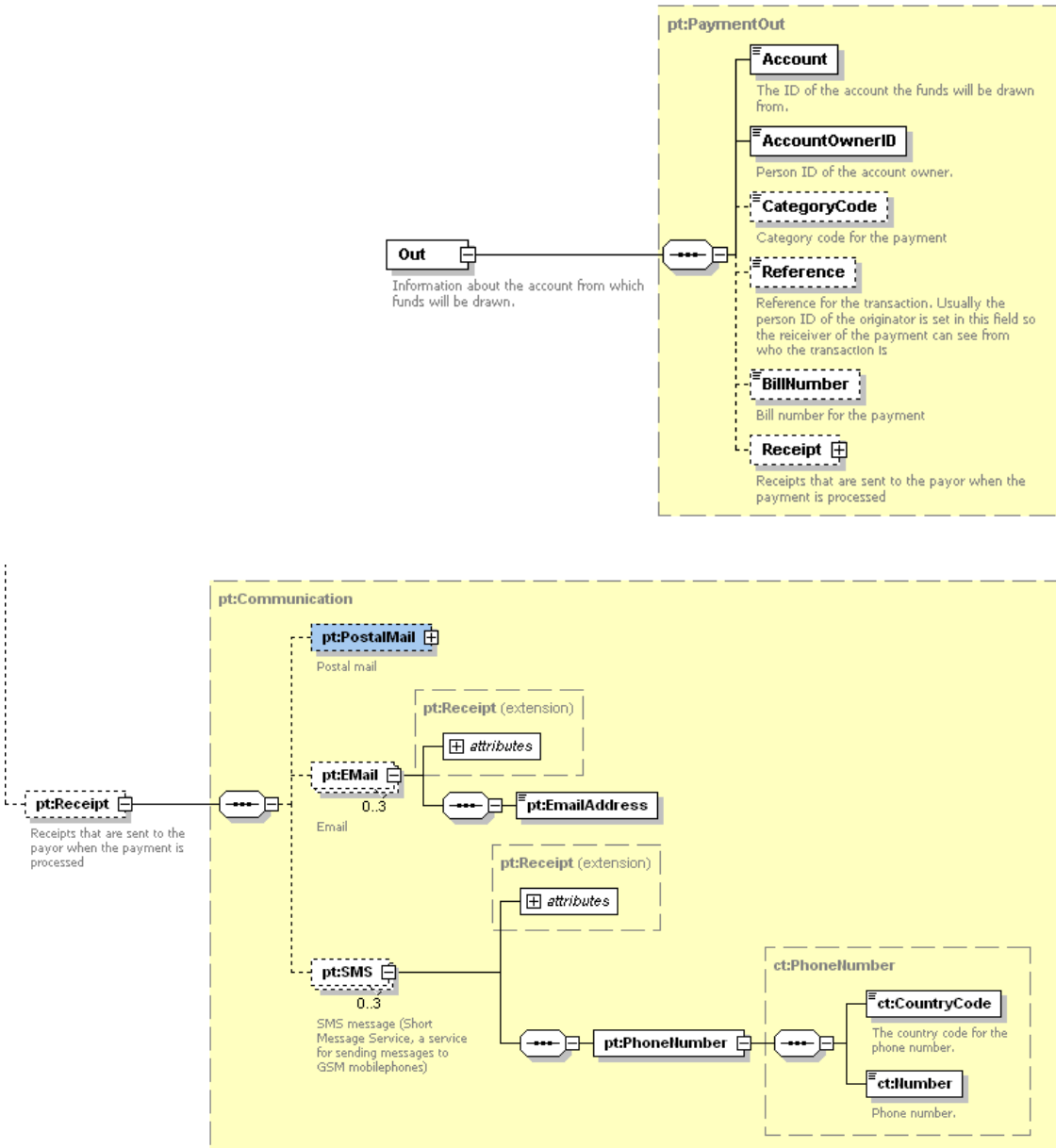
A more detailed description of the sub-items of **Payment** follows on next page:



Out

Here we describe the withdrawal that takes place during payment. The only thing that must be entered here is the account number and the ID of the account owner. Category code, reference number and bill number can be entered and that information will be accessible when account statements are viewed.

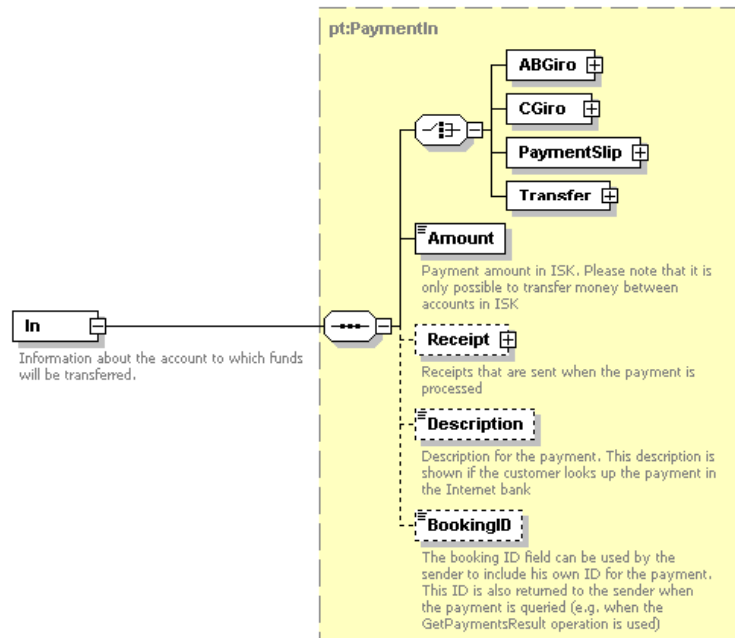
A receipt (intended for the payer) can also be sent in the form of snail mail, e-mail and/or SMS.





In

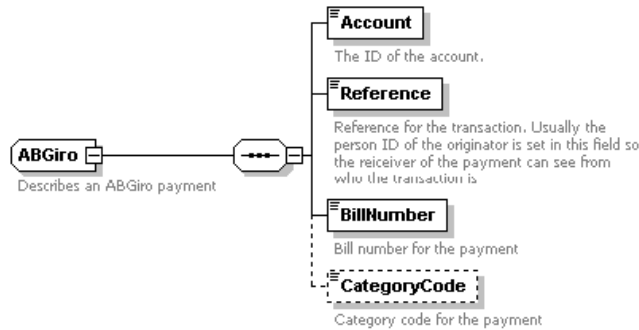
A choice is made between four types of deposits, *AB-giro*, *C-giro*, *Payment bills* and *standard transfers*. One of these must be selected. The amount in question must also be entered, but a receipt and a description of the payment are optional. The **BookingId** is thought as an supplementary field that the users can use to link payments into their own accounting systems.





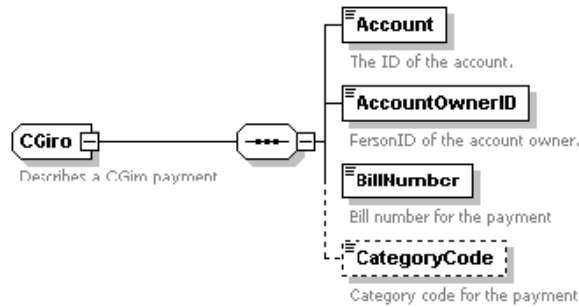
ABGiro

Mandatory fields are the account ID (to which money will be deposited), the reference number for the payment and the bill number of the giro to be paid. The category code field is optional.



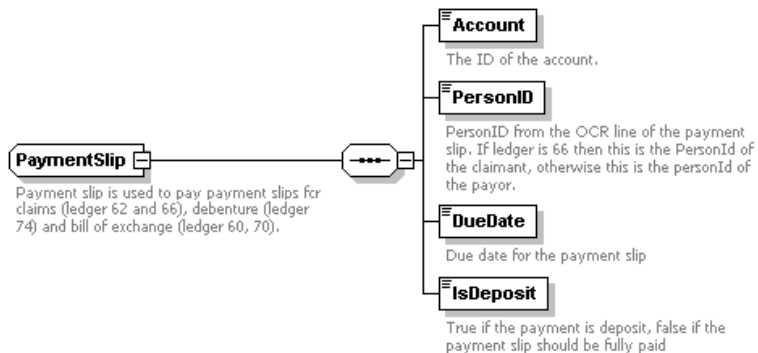
CGiro

Mandatory fields are the account ID (to which money will be deposited), the personal ID of the account owner and the bill number for the giro. The category code field is optional.



PaymentSlip

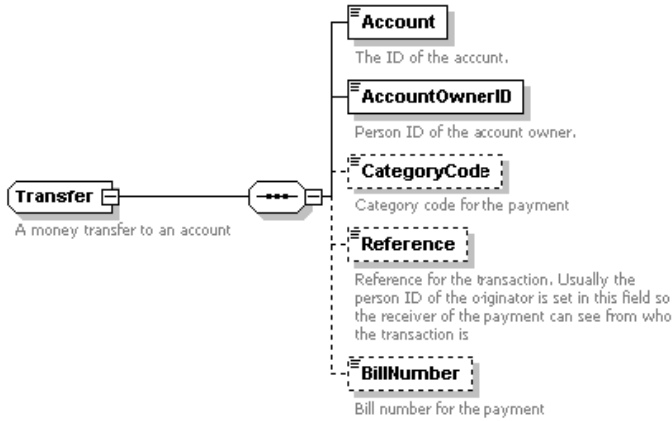
All fields are mandatory, the account (to which funds will be deposited), the ID number of the payer and invoiced (depends on the ledger), the due date of the slip and the IsDeposit fields dictates whether this payment is a partial or complete payment of the slip.





Transfer

A standard transfer to an account. Mandatory are the account number and the ID number of the account owner fields (of the account that funds will be deposited to), and optional fields are for the category code, reference number and the bill number.



NOTE

When a payment batch has been sent from the accounting system, an **unpaid batch is immediately created** in the Corporate Internet Banking and awaits the user. The actual transfer of funds does not occur until the user has confirmed the batch for payment using a security code.



NICE TO KNOW ...

For those who choose it, Corporate Internet Banking also offers a special **payment confirmation process**. This process requires that more than one user approve the payment instructions (that is, the batch for payment) before the actual transfer of funds is made. The company itself determines the number of approving parties required.

It is possible to set up various approval processes, dependent on amounts, and to assign various authorisation levels to employees. Users can therefore have differing approval authorisations for differing payment amounts.

In order to activate the approval process, it is necessary to register the company and its users with the **Corporate Service Desk** by calling +354 410 9191 or sending an e-mail to fyrir-taeki@landsbanki.is.

Illustrations courtesy of Corporate Internet Bank

Eftirtaldir samþykktir þarf		
Heimild	Fjöldi	Vantar
A	2	1

Eftirtaldir aðilar hafa samþykkt bankann			
Notandanafn	Nafn	Heimild	Staðfestur
L491178DYR	Dýrleif Arna Guðmundsdóttir	A	13.6.2007 23:38:30

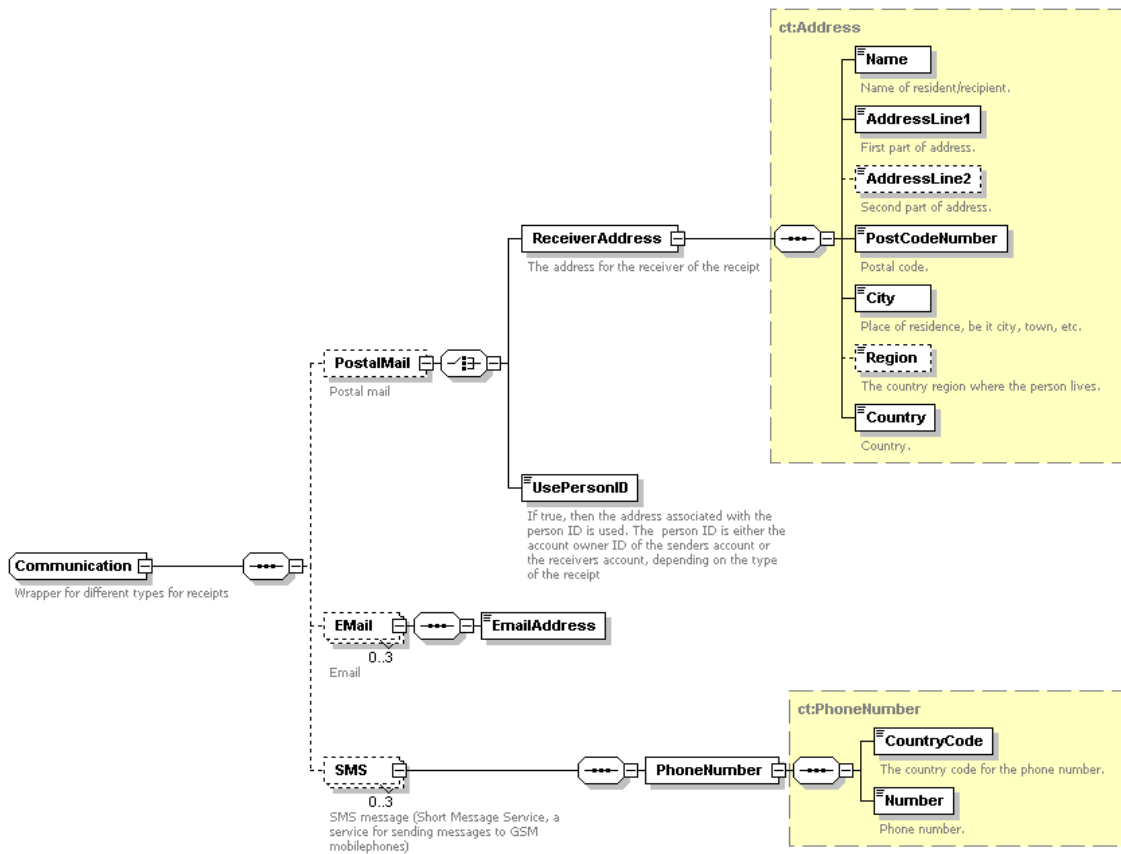
Eftirtaldir aðilar hafa réttindi til samþykktar		
Notandanafn	Nafn	Heimild
L491178GSG	Gylfi Steinn Gunnarsson	A
L491178SV2	Siggeir Vihjálmsón	A
L491178GHS	Gunnar Haukur Sigfússon	A
L491178DYR	Dýrleif Arna Guðmundsdóttir	A
L491178SAS	Sigurður Ámi Svanbergsson	A
L491178HLD	Hjörtur Logi Dungal	A
L491178AHK	Alda Hlin Karisdóttir	A
L491178FB	Frjárik Steinþór Baldursson	A
L491178HGD	Hulda Guðrún Daðadóttir	A
L491178SGJ	Skúli Geir Jensson	A
L491178GBI	Gréta Berg Ingólfssdóttir	A
L491178JSE	Jóhanna Sigríður Esjarsdóttir	A
L491178KON	Kjartan Ólafur Nielsen	A
L491178AOA	Ásgeir Örn Ásgeirsson	A
L491178BBT	Björgvin Bæhrenz Þórbjarnson	A

Til baka Staðfesta



Receipt

Receipts are sent to the payment recipient when it is performed. This is an optional field on both in and out payments. The choice stands between sending PostalMail (a standard letter mail), E-mail and SMS. The options are sending 1 PostalMail, 3 emails and 3 sms's. If PostalMail is selected, then a recipient must either be entered by using the ReceiverAddress or by setting the UsePersonID field as true, in which case a receipt is sent so the recipients home as listed in the national register. The ReceiverAddress consists of a name, two address lines, the postal code, city, region and country. If it is selected to send an email, then only the email address must be entered. If it is selected to send an SMS, then a country code and phone number must be entered.



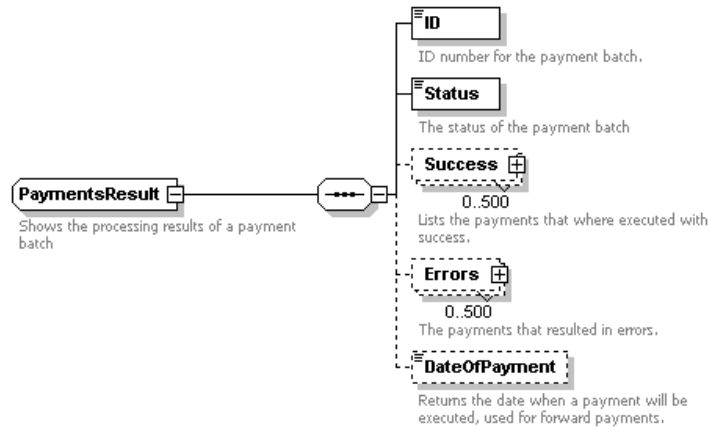


PaymentsResult (DoPaymentResponse)

This is a description of the response to a creation of a single payment (the results for a payment batch). ID is the unique identification for the batch that was created and Status is the batch status. Success and Errors are kept optional, because it is always possible that one of those would be completely empty. In Success and Errors the payments just created are being returned.

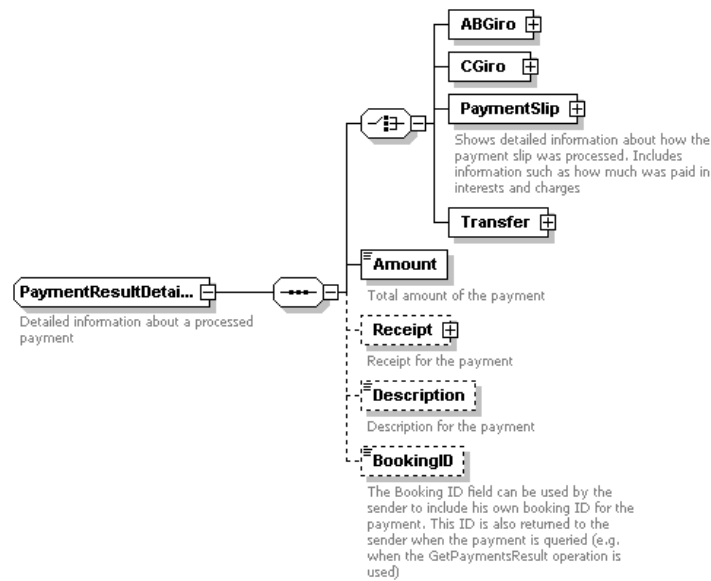
NOTE

If a **future date** for payment was selected in the payment creation, then that date is returned here in *DateOfPayment*, and the status of the batch is put as *OnHold*.



Success

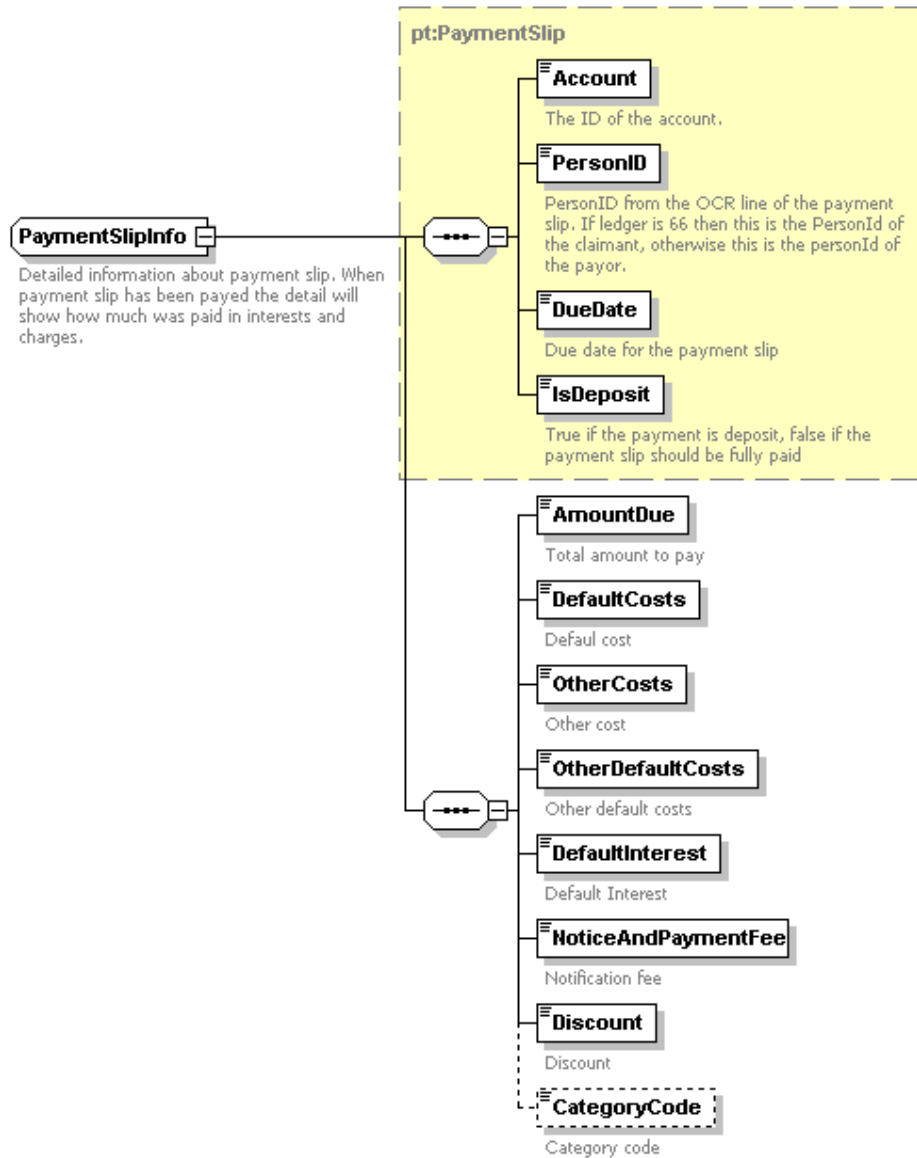
A list of payments that were successfully performed. The amount of the payment is shown. AGiro, CGiro and Transfer are identical to the actual payment, but PaymentSlip changes in the way that more detailed information about the interests and fees for the payment is given.





PaymentSlip (in Success)

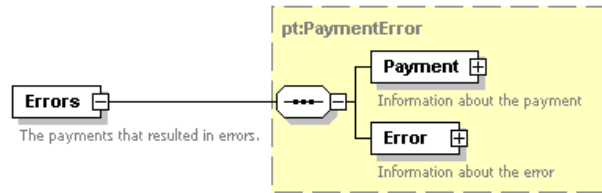
The key in the PaymentSlip that is a part of the payment, is only a little part of the answer, as a part of PaymentSlipInfo. Added to it are details about the payment slip.





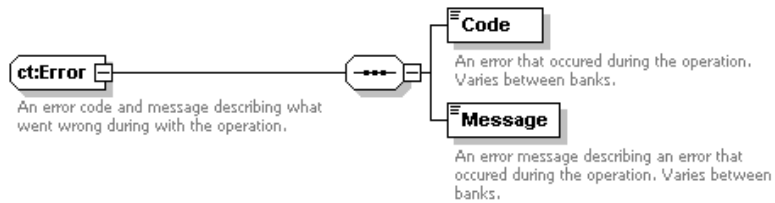
Errors

A list of the payments that an error occurred on and could therefore not be created. The item Payment is identical to the one previously described in this document.



Error

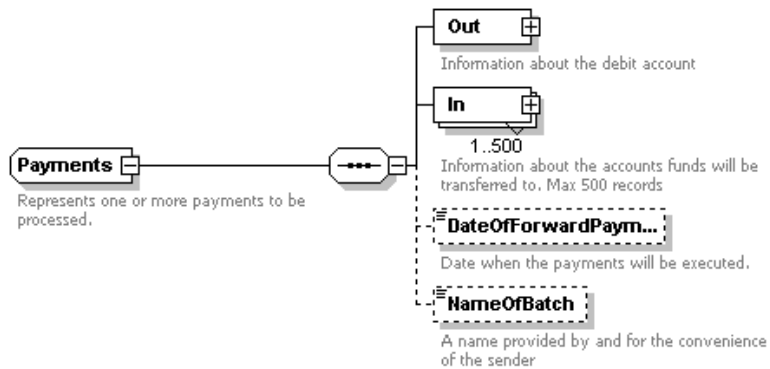
A more detailed description of the error that occurred. Code is the number of the error and Message a description of the error that occurred.





Payments (DoPayments)

A description of how a list of payments is created. The element Payments has one field for a withdrawal and 1 to 500 possible deposits. Payments also has two attributes, RollbackOnError and IsOneToMany. RollbackOnError means that if any one of the payments fails, then all payments are cancelled. IsOneToMany indicates whether one withdrawal should be made for the entire batch or if one withdrawal should be made per deposit. A date for forward payment and a batch name can also be entered, but those elements are optional. In and Out elements are identical to the ones in creation of a single payment.

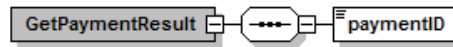


The response to a batch creation is OperationID which is a string variable that is an identifier for the operation.



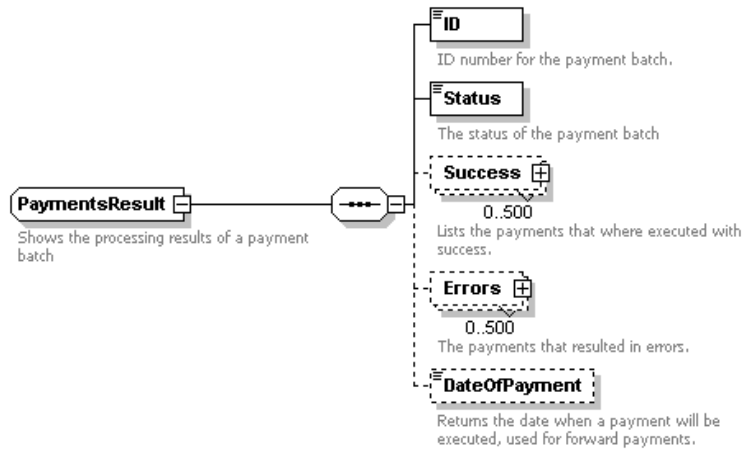
Payment query (GetPaymentResult)

An OperationID (string) is sent for the payment to be fetched.



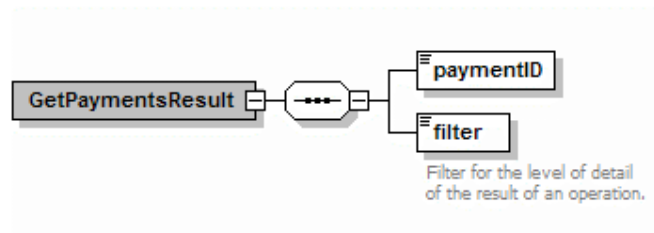
PaymentsResult

The response to the query. Same answer as to the creation of a single payment.



Payments query (GetPaymentsResult)

A query is sent that consists of a paymentID (string), and a filter that contains PaymentStatus. Using the filter, it is possible to get the status of payments (GetStatus), get all payments on errors (GetErrors), get all successful payments (GetOkay) and get all payments (GetAll).



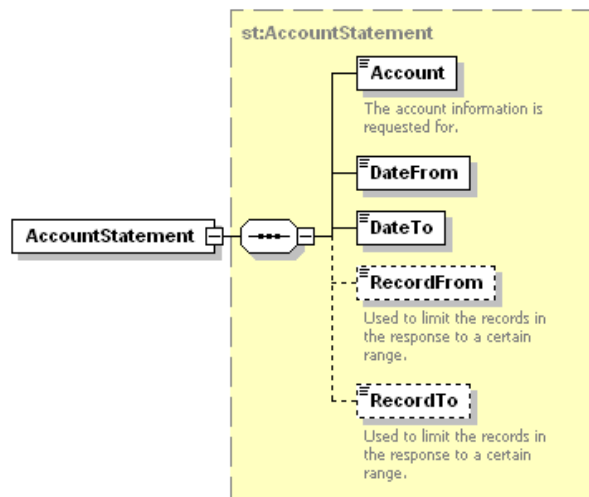
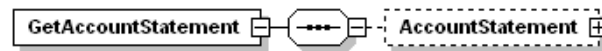
The answer to this query is the same as in GetPaymentResult, except that in this case it is more likely that the lists are used more than in the single payment.



Icelandic Online Statements

AccountStatement (GetAccountStatement)

GetAccountStatement has one element AccountStatement, which is used to perform a query on an account. The mandatory fields for this query are the account number (Account) and the start and end dates of the statement. It is also possible to select specific records from within the statement. This is added for the user, in case there are many entries within the same period.



NICE TO KNOW ...

Landsbanki co-operates with several foreign banks to publish their account statements in the Corporate Internet Bank. Landsbanki's customers, who have foreign bank accounts, can use Landsbanki's Corporate Internet Bank instead of other internet banks to get an overall summary of their bank accounts and thus save a considerable amount of time and effort.

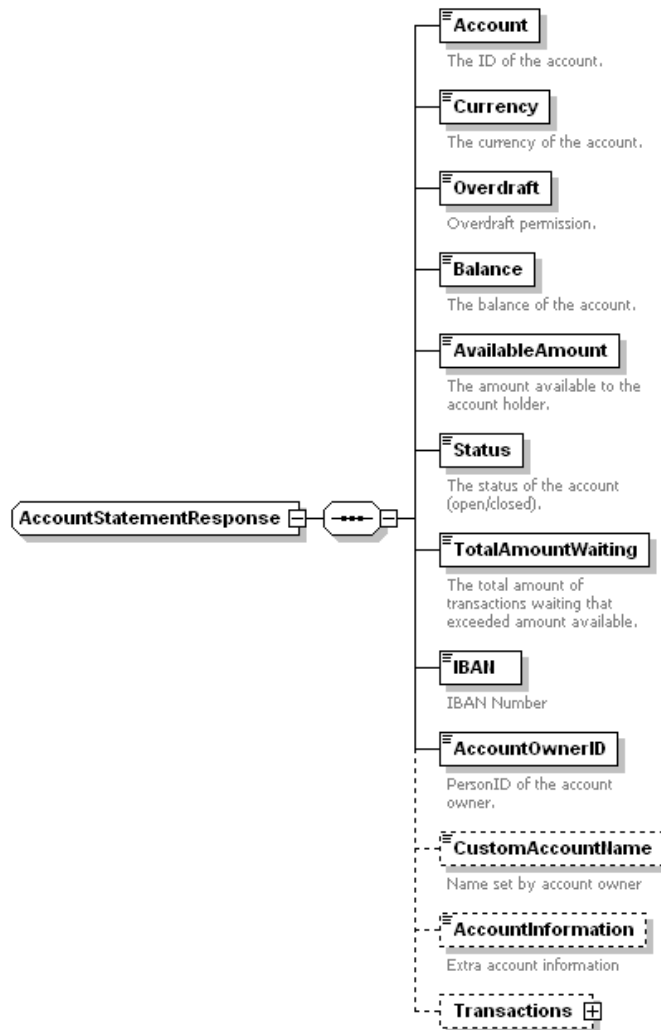
If the company's foreign bank is not already a co-operating partner Landsbanki will seek its co-operation in close relation with the company.

To activate this service please register the company and its users at **Companies' Service Desk**, tel. +354 410 9191 or at fyrirtaeki@landsbanki.is.



Get AccountStatementResponse:

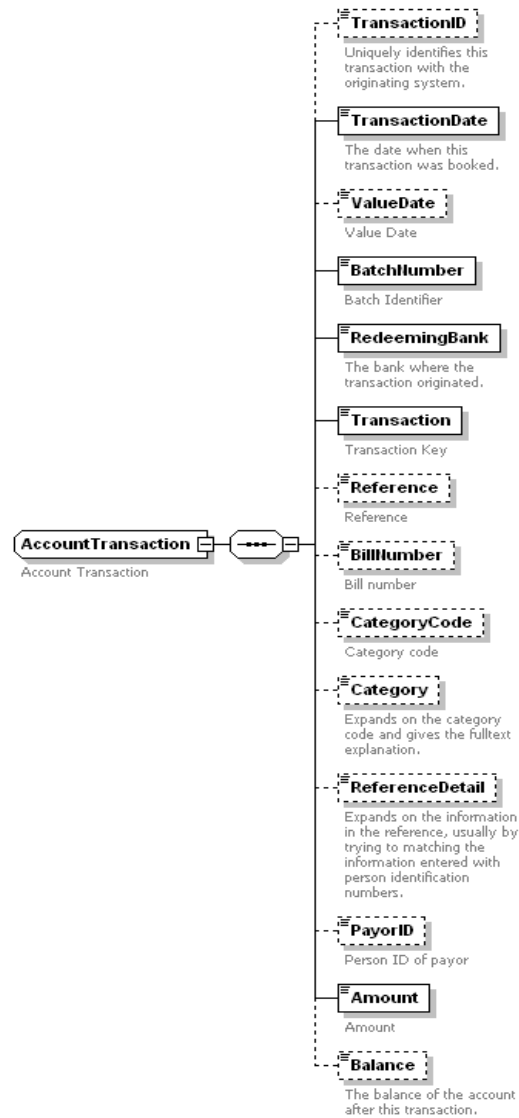
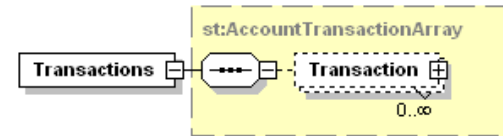
An account statement, contains information about the account itself, as well as all the account entries (Transactions), but that element is not returned if no entries were found.





Transactions

The element Transaction in the account statement contains a list of entries (AccountTransaction-Array). Each account transaction has a detailed description of the information regarding an account statement entry.

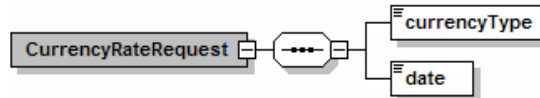




CurrencyRateRequest

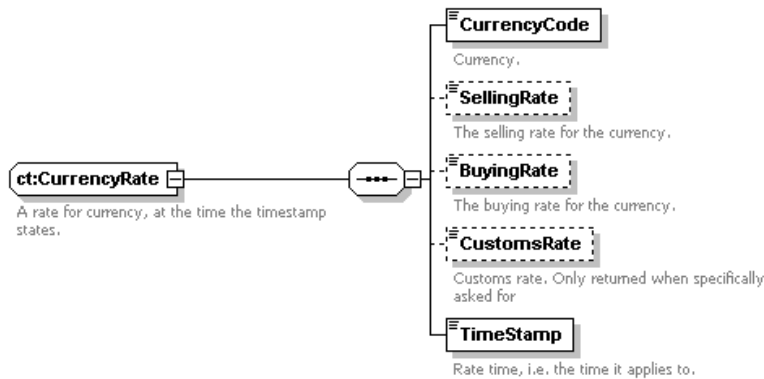
If a query is received regarding the current day's exchange rate, the exchange rate posted most recently is sent. If a customs rate query is sent, then the current customs rate is delivered. An exemption is the monthly date on which the customs rate is changed, when the customs rate cannot be obtained before 12:00hrs. The customs rate is changed on the 28th of each month provided that this date is a banking day. Otherwise, it is changed on a the banking day immediately following, unless that day is in the following month, in which case it is changed on the banking day immediately preceding the 28th day of the month. All currencies are displayed in each query.

When a query is made regarding currency rate, the date of the rate in question is entered, as well as a CurrencyType element which dictates which type of rate is to be fetched.



Currency rate (CurrencyRateResponse)

The response returns a list of CurrencyRate elements. The rate elements are made optional because if the query is made for customs rate, then only the customs rate is returned, and not the selling rate or buying rate. It's the same thing when the query is made for note rate or exchange rate.

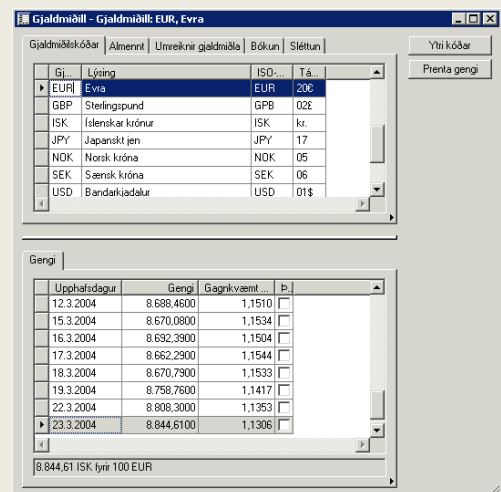
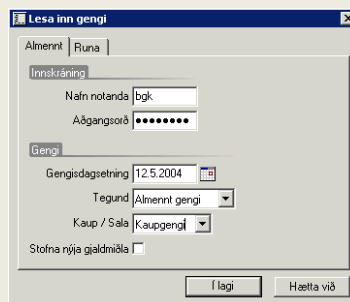


Usercase

Exchange rate handling is an example of a financially **insignificant** operation. For this reason, it is often carried out without a password, so that the accounting system retrieves the exchange rate from the bank (for example, on a daily basis) in a so-called batch job. The employee is unaware that the exchange rate has been retrieved but can verify it in the accounting system's operation summary.

However, the bank recommends that the query window (left-hand screen shot) always be available, in case the company needs to retrieve the exchange rate without prior notice.

Illustrations courtesy of Annata





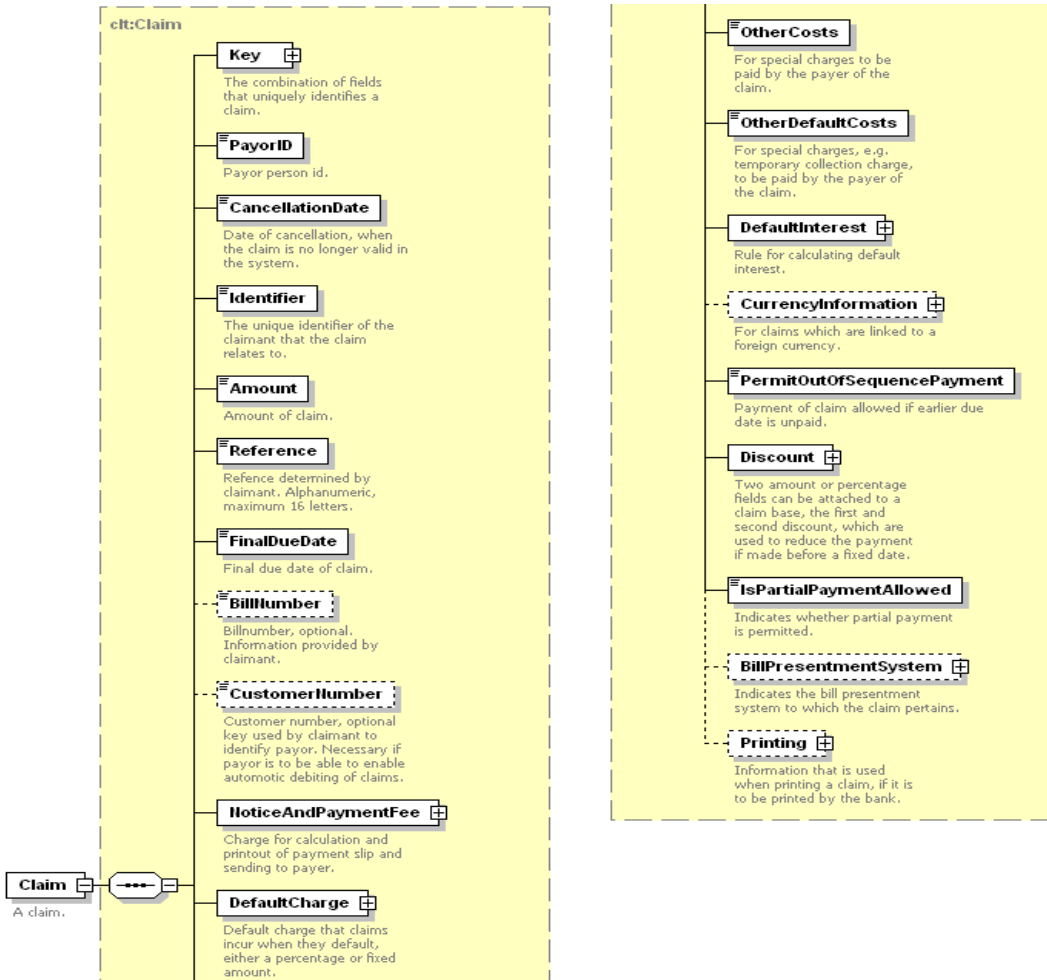
IcelandicOnlineClaims

Claim creation / Claim modification (CreateClaims / AlterClaims)

Receives a list of claims, that consists of Claim elements.

NOTE

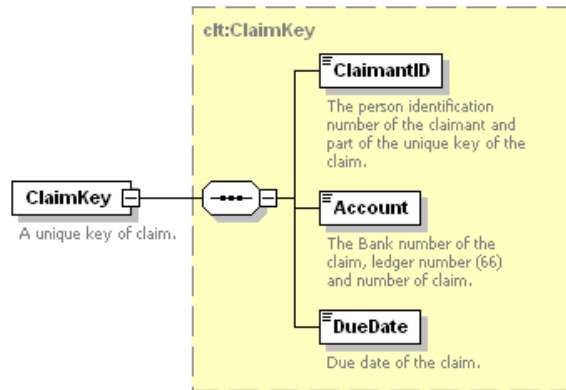
The handling of a single claim is explained later on in this chapter.





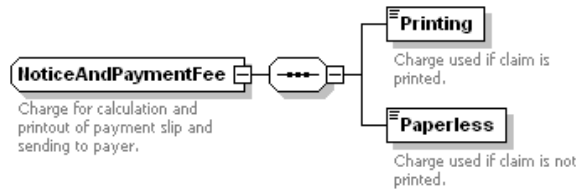
ClaimKey

A unique key for a claim, that consist of the personal ID of the claimant, account (bank, 66, claim-number) and its due date.



NoticeAndPaymentFee

The fee for sending a notice to the payer, but printing out the claim is optional.



Usercase

Payment references play an important role in the handling of all accounts receivable. They are required in order for automatic reconciliation to take place in the accounting system.

If a reference does not exist – for example, when a deposit is made directly to the claimant’s bank account (bypassing the payables pool) – account statements are used for reconciliation and balancing in the accounting system.

Illustrations courtesy of Annata

Færslur viðskiptavina - Fylgiskjal: Vik017955, 21.9.2004, Viðskiptavinalykil: 0000000000

Sýna aðeins opið

Yfirlit Almenn Vidd Greiðsla Jöfnun Vestri og innheimtubréð Innheimtaástar

Vaxlatrietningur

Dagsetning	Reikningur	Gre.	Greiðsluávisun	Upphæð í gjaldmál	Staða	Gjaldni
27.4.2004	Krn064094	IK		0,00		0,00 ISK
30.4.2004	Sin199385	IK	IK0025400405	5.500,00		0,00 ISK
21.5.2004			IK0025400405	187,00		0,00 ISK
21.5.2004			IK0025400405		5.687,00	0,00 ISK
5.8.2004	Krn070560	IK	IK0065810409	11.450,00		0,00 ISK
25.8.2004	Sin227145	IK		159,00		0,00 ISK
25.8.2004					159,00	0,00 ISK
20.9.2004	Sin233968	IK		25.000,00		0,00 ISK
20.9.2004					25.000,00	0,00 ISK
21.9.2004			IK0065810409	187,00		0,00 ISK
21.9.2004			IK0065810409	111,00		0,00 ISK
21.9.2004			IK0065810409		11.748,00	0,00 ISK

Færsluáseti Greiðsla krölu, Innheimtukerfi Upphæð 11.748,00 Staða 0,00

Innborganir - Kröfunúmer: 006241, 4202992499, Bankanúmer: 842

Yfirlit Almenn

V.	Kröfunúmer	Viðskiptavin	IDNumber	Nafn	Greiðsludagur	Tilvisun
	006246	0001902501	0001902501	Finnbeldi að	29.9.2004	IK0063790408
	006497	0002002011	0002002011	Heimildis Límanir Skjalp að	29.9.2004	IK0066350409
	006551	0002002011	0002002011	Þróunslind að	29.9.2004	IK0066890409
	006557	0002002011	0002002011	Laukhláð að	29.9.2004	IK0066950409

Greiðslur

Heildarupphæð greiðslna 1.702.447,00 Greiðsla af krölu 1.702.447,00 Varskilakostnaður 0,00

Fjármunastekjuskattur 0,00 Innheimtukostnaður 0,00 Varskilaveyri 0,00

Heildarupphæð án skatts 1.702.447,00 Seðljald 187,00

Innborganir - Kröfunúmer: 006443, 4512012390, Viðskiptavinalykil: 0000000000

Staða

Upphæð kr.	Elfristóðlar	Tilvisun	Staða krölu
11.450,00	0,00	IK0065810409	ullgreidd

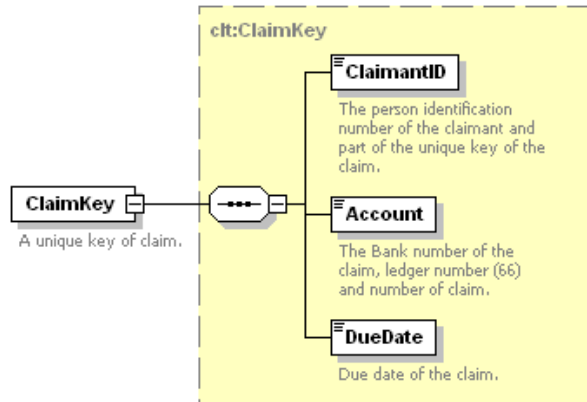
Innheimtukerfi LIB2B Bankanúmer 321 Eindagi 20.9.2004



CancelClaims

Sends in a list of keys for the claims to be cancelled. The claim key is the same as in the creation / modification of claims.

The response to CancelClaims is the same as to creation/modification, i.e. CancelClaimsResponse that contains the string OperationID.



NOTE

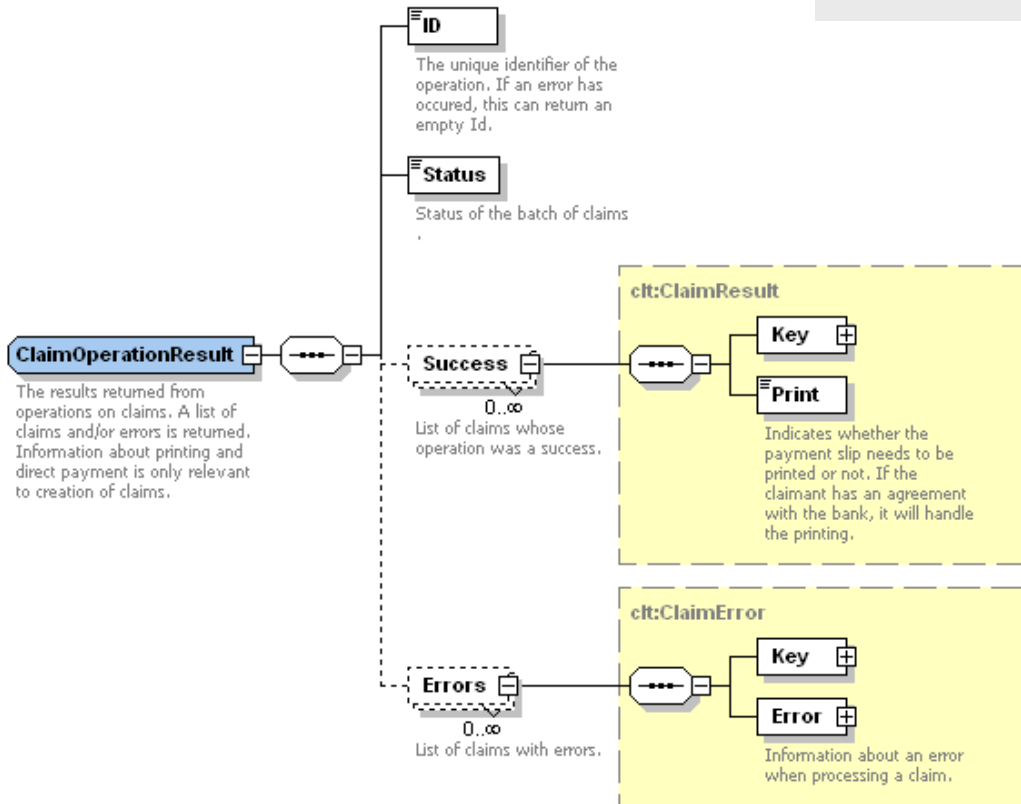
This is the **same ClaimKey** as previously shown.



GetClaimOperationResult

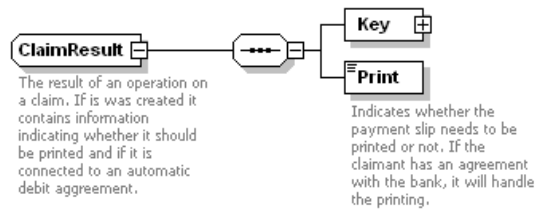
OperationID (string) is sent for the operation that information is to be collected about. The answer: GetClaimOperationResultResponse that contains ClaimOperationResult.

NOTE
This result concerns **multiple** claims, not individual ones.

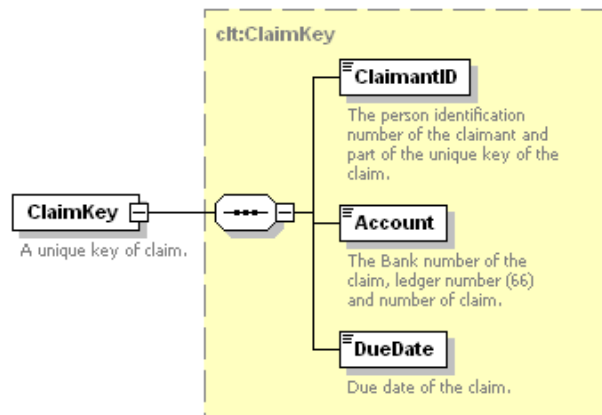




Claims is a list of the claims that were successfully created, i.e. the claim key and information on whether it is to be printed or not.

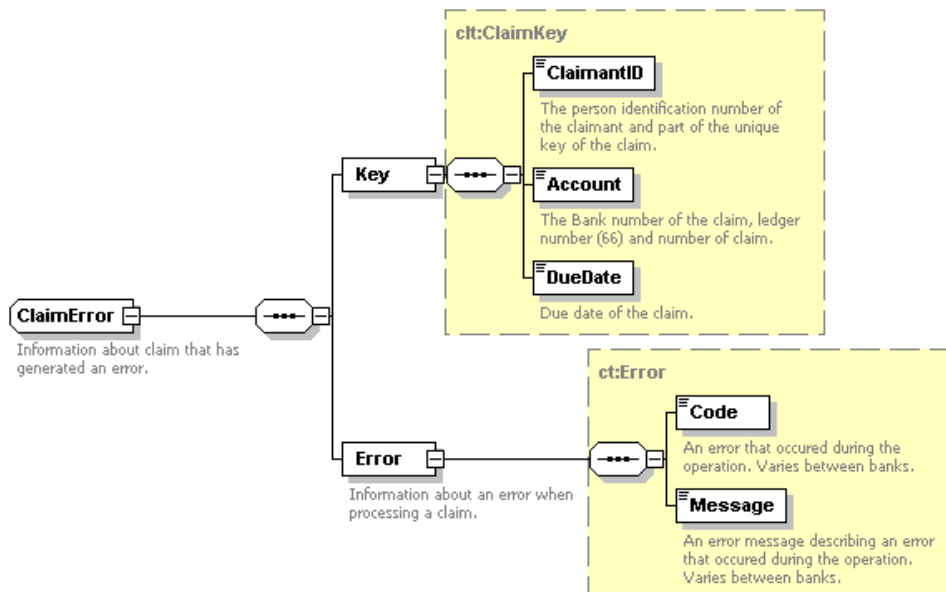


The claim key is its unique identifier. All elements are mandatory.



NOTE
This is the **same ClaimKey** as previously shown.

The list of errors in ClaimsResult is the same type as previously shown, e.g. in payments.





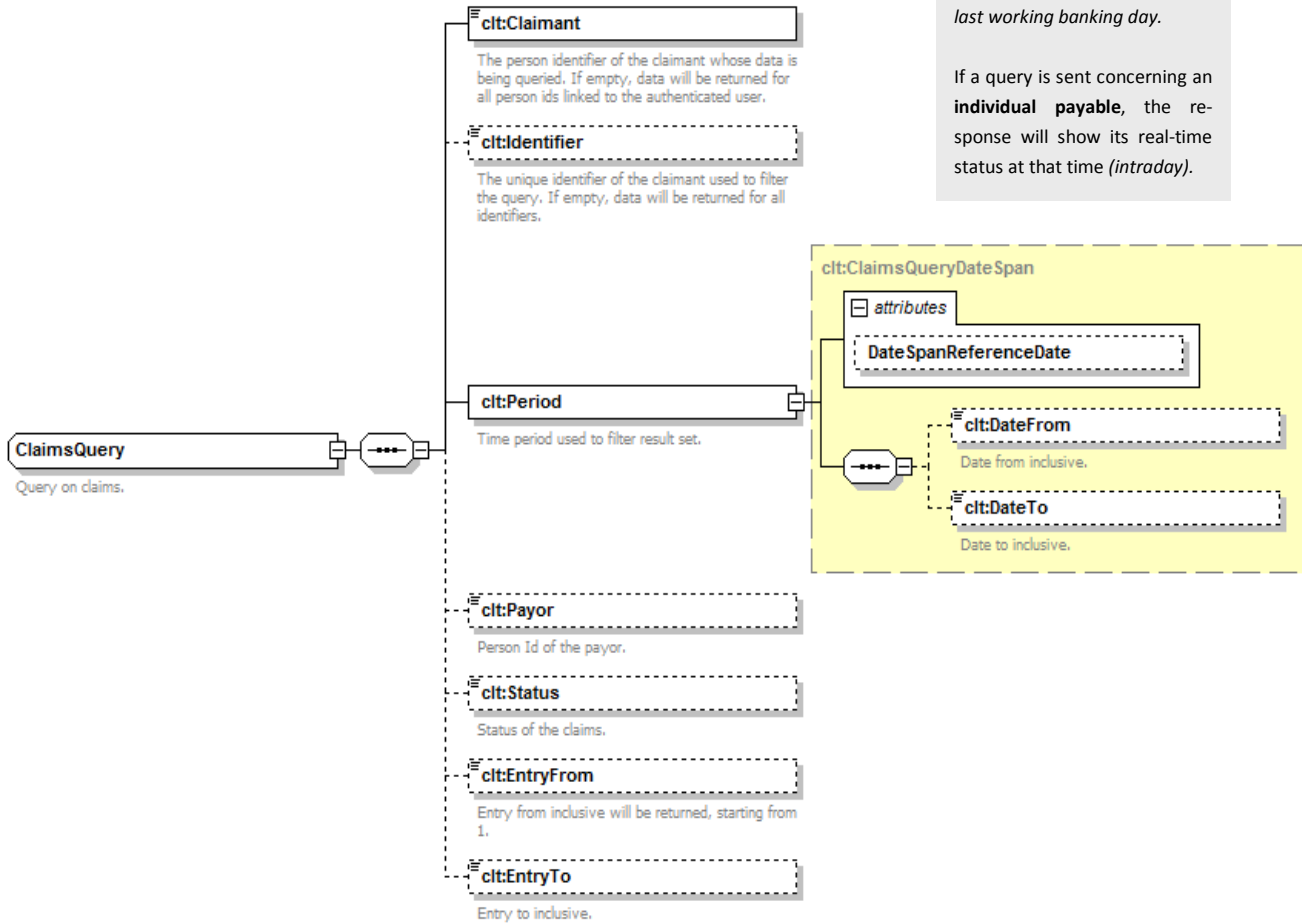
QueryClaims

A query on claim status, which uses the ClaimsQuery type. The only mandatory element is Claimant, which is the claim owner. Other elements speak for themselves, except that it should be noted that specific entries within the result set can be selected, e.g. entries 1 through 10 of all entries found.

NOTE

If a query is sent concerning a set of payables, the response will show deposits made until and including *midnight* on the last working banking day.

If a query is sent concerning an individual payable, the response will show its real-time status at that time (*intraday*).



Usercase

Software companies can link information from their customer systems to the response to the query. It is useful to add columns that show the direct phone number and e-mail address for each payor, or whatever information collections personnel can use from their own systems. This can be tailored to suit the customer's needs and desires.

Illustrations courtesy of Annata

Fyrirspurn krafna

Innskráning: Kennitala kröfuhafa:

Aðgangsorð: Gjaldldagi frá: Gjaldldagi til:

Hreyfingardagur frá: Hreyfingardagur til:

Kröfunúmer: Auðkenni:

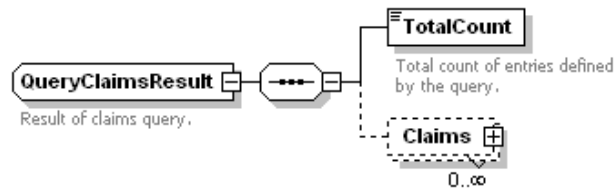
Ástand krafna:

Kröfur í innheimtu - Skýrsla

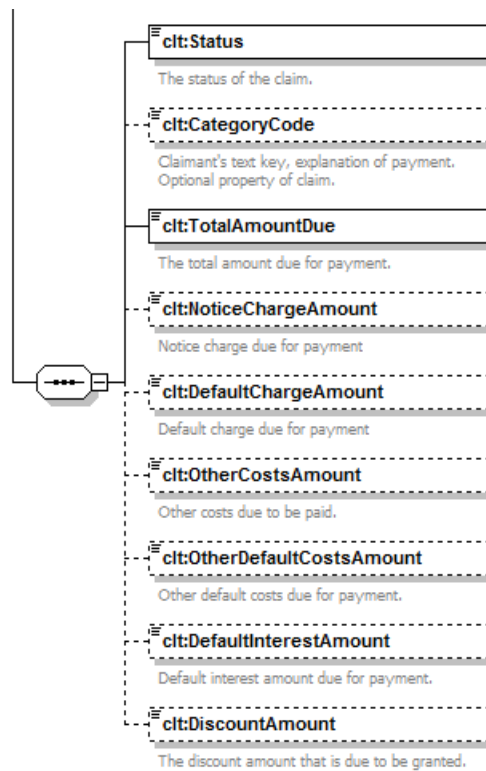
Kennitala	Gjaldldagi	Upphefing	gjaldbúi	Ástand	Sölinúmer	Þrúsanúmer	Endagi
1109732299	1.3.2004	1,00	GREIDD	0000019	000001001420-403	20.3.2004	
1109732299	1.3.2004	191,00	GREIDD	0000021	000001001430-403	20.3.2004	
1109732299	1.3.2004	193,00	NDRFELLD	0000034	000001001430-403	20.4.2004	
1109732299	1.3.2004	4.929,00	GREIDD	0000092	000001002595-043	20.4.2004	
0101722739	1.4.2004	4.304,00	GREIDD	0011704	0000010019430-404	20.4.2004	
0104034769	1.4.2004	918.836,00	NDRFELLD	0001705	000001001844-044	20.4.2004	
0107912769	1.4.2004	5.393,00	GREIDD	0001706	000001001844-044	20.4.2004	
0109834140	1.4.2004	37.746,00	GREIDD	0044302	000001001940-404	20.4.2004	
0111464609	1.4.2004	895.974,00	NDRFELLD	0001708	000001001847-044	20.4.2004	
0201942179	1.4.2004	33.161,00	GREIDD	0001709	000001001950-404	20.4.2004	
0204740779	1.4.2004	114.795,00	GREIDD	0001710	000001001940-404	20.4.2004	
0207920749	1.4.2004	12.511,00	GREIDD	0001711	000001001950-404	20.4.2004	
0303223469	1.4.2004	6.413,00	GREIDD	0001712	000001001951-044	20.4.2004	
0304463669	1.4.2004	163.993,00	NDRFELLD	0001713	000001001952-044	20.4.2004	
0305578039	1.4.2004	26.395,00	GREIDD	0001714	000001001953-044	20.4.2004	
0306293639	1.4.2004	15.520,00	GREIDD	0001715	000001001954-044	20.4.2004	
0307964919	1.4.2004	50.701,00	NDRFELLD	0001716	000001001955-044	20.4.2004	
0309594339	1.4.2004	109.554,00	GREIDD	0001717	000001001956-044	20.4.2004	
0309577419	1.4.2004	5.041,00	NDRFELLD	0001718	000001001957-044	20.4.2004	
0311416279	1.4.2004	4.296,00	NDRFELLD	0001719	000001001958-044	20.4.2004	
0402462599	1.4.2004	5.316,00	GREIDD	0001720	000001001959-044	20.4.2004	
0404672599	1.4.2004	8.162,00	GREIDD	0001721	000001001960-044	20.4.2004	
0404672599	1.4.2004	5.441,00	GREIDD	0001722	000001001961-044	20.4.2004	
0501874469	1.4.2004	7.810,00	GREIDD	0001723	000001001962-044	20.4.2004	
050392289	1.4.2004	2.138,00	GREIDD	0001724	000001001963-044	20.4.2004	
0504602289	1.4.2004	1.149,00	GREIDD	0001725	000001001964-044	20.4.2004	
0511552469	1.4.2004	27.644,00	GREIDD	0001726	000001001965-044	20.4.2004	
0509504179	1.4.2004	9.526,00	GREIDD	0001727	000001001966-044	20.4.2004	
0509502939	1.4.2004	13.430,00	GREIDD	0001728	000001001967-044	20.4.2004	
0511444639	1.4.2004	106.969,00	NDRFELLD	0001729	000001001968-044	20.4.2004	
0612812149	1.4.2004	4.370,00	NDRFELLD	0001730	000001001969-044	20.4.2004	
0702829639	1.4.2004	28.509,00	NDRFELLD	0001731	000001001970-044	20.4.2004	
0705422859	1.4.2004	31.840,00	GREIDD	0001732	000001001971-044	20.4.2004	
0710646579	1.4.2004	62.319,00	GREIDD	0001733	000001001972-044	20.4.2004	
0804624199	1.4.2004	5.231,00	NDRFELLD	0001734	000001001973-044	20.4.2004	
0808323039	1.4.2004	14.911,00	GREIDD	0001735	000001001974-044	20.4.2004	



The answer to QueryClaims is QueryClaimsResponse, which contains QueryClaimsResult.



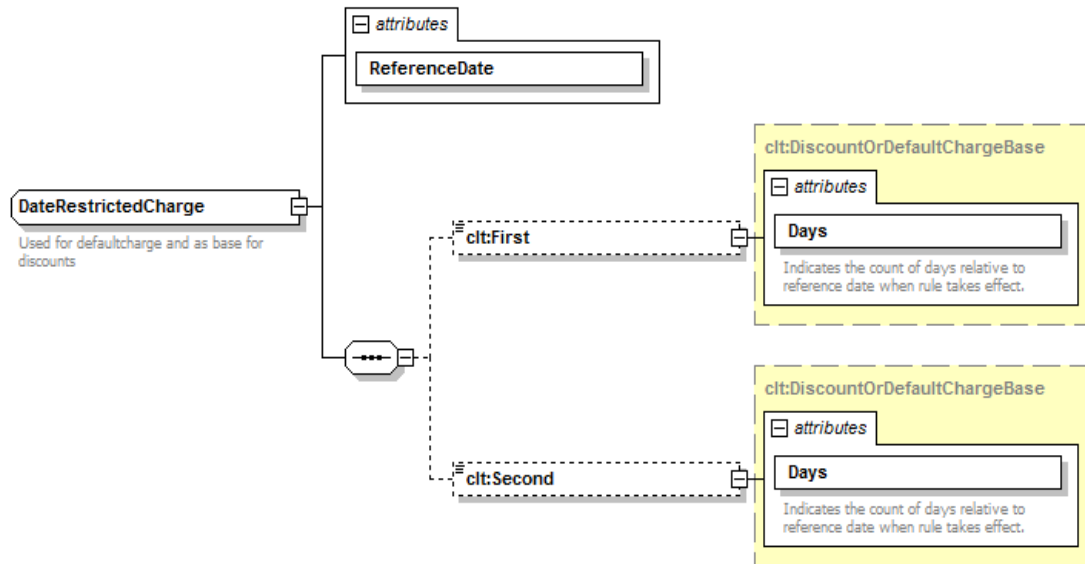
The claims in the list Claims are of the type ClaimInfo, but basically they are the same as the type Claim which has previously been described, with a few added elements. It includes more details about the costs that apply to the claim, e.g. default charge and discount. These additional elements are depicted below.





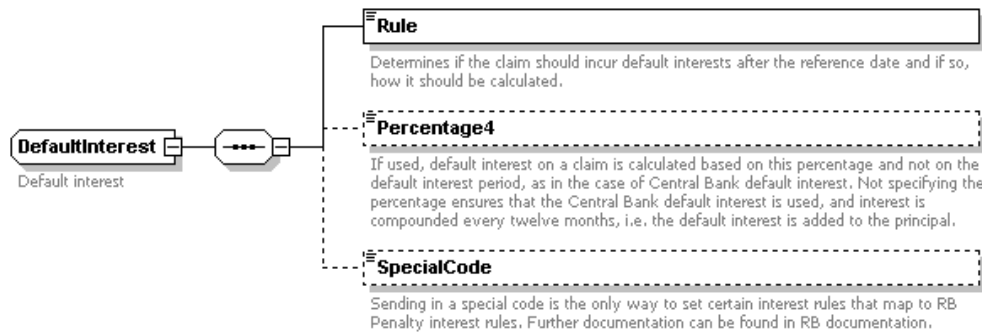
DefaultCharge

A charge that is added to claims once they end up in default. There are 2 different charges, first and second default charge. They both consist of an amount and a percentage.



DefaultInterest

Dictates which default interest rule to use if a claim becomes default.



NICE TO KNOW ...

The Corporate Internet Banking's billing system offers payment deadlines that B2B users can use on the Internet, but not with XML messages.

If an extension of time to pay is authorised, FBL carries out automatic tracking to ensure that the payor remits payment by the agreed deadline, and the system takes action automatically if he does not do so. Response to non-payment could include the following (in part or in whole):

- Calculation of default charges
- Dunning letter
- Warning
- Secondary collection
- Legal collection

Illustrations courtesy of Corporate Internet Bank

Veita greiðslufrest til og með : 24.11.2007 Fresta >>>

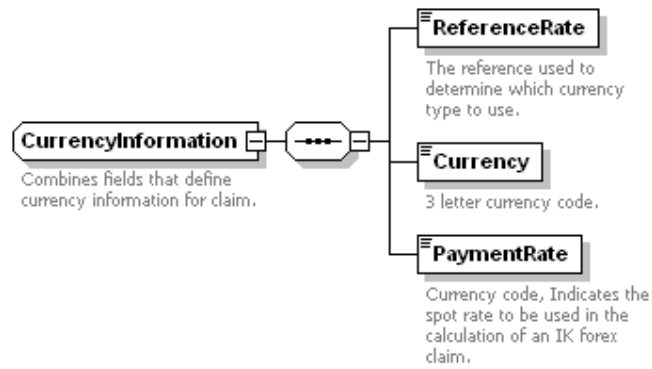
Til baka <<< Prenta út ítrekun Breyta >>>

Users with the classic LÍ scheme can utilise XML payment deadlines. This is described in Landsbanki's B2B manual.



Currency information

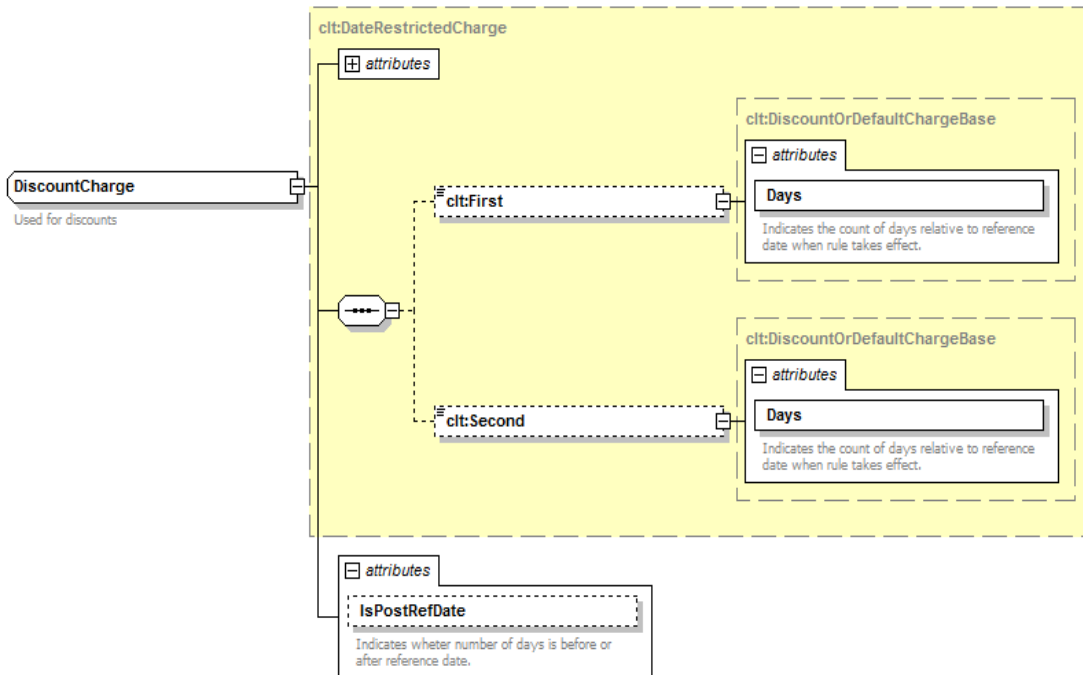
An optional element on a claim, but is used for currency claims.





Discount

Which discounts are given on a claim, and look very similar to the default charge.



NOTE

Discounts are based on five areas:

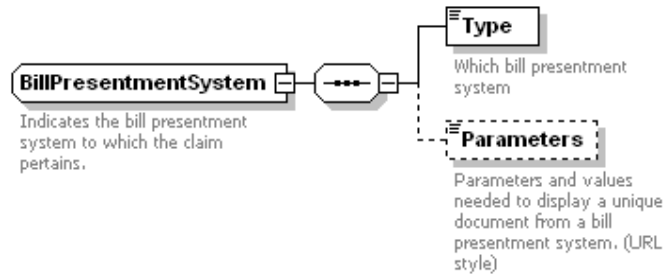
- *First discount*
- *Second discount*
- *Number of days for first discount*
- *Number of days for second discount*
- *Discount code*

The discount code states what date shall be used as a reference when a discount is granted. Further discussion of discounts can be found in the **IKLÍ Handbook**, which can be obtained by sending an e-mail to the **Corporate Service desk**: fyrir-taeki@landsbanki.is.



Bill Presentment System

Which presentment system to use, determined by the Type element, and a reference to specific system using parameters.



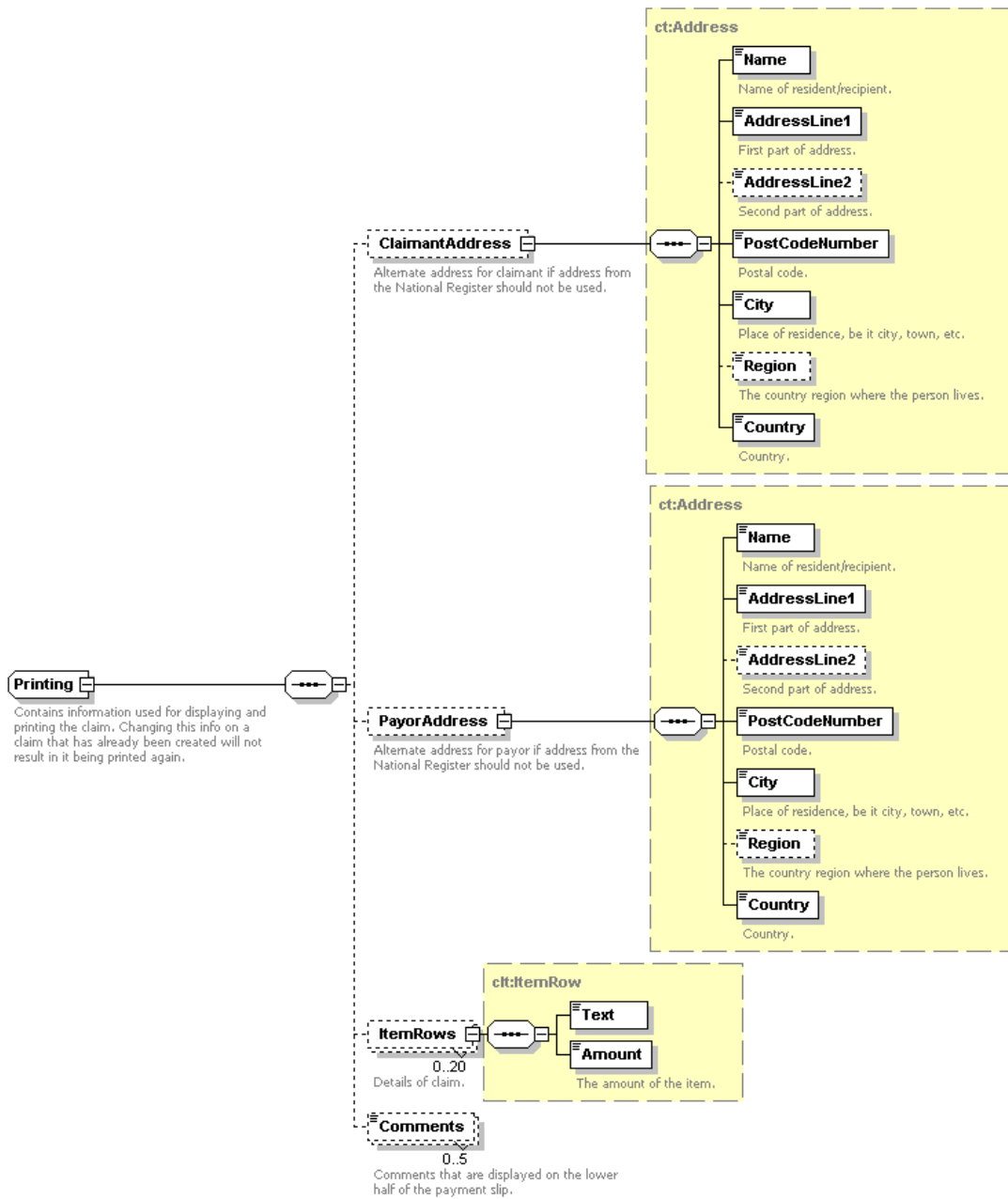
NOTE

Further information on the *Bill Presentment System* is cordially granted at our Corporate Service Desk in +354 410 9191 or fyirtaeki@landsbanki.is.



Printing

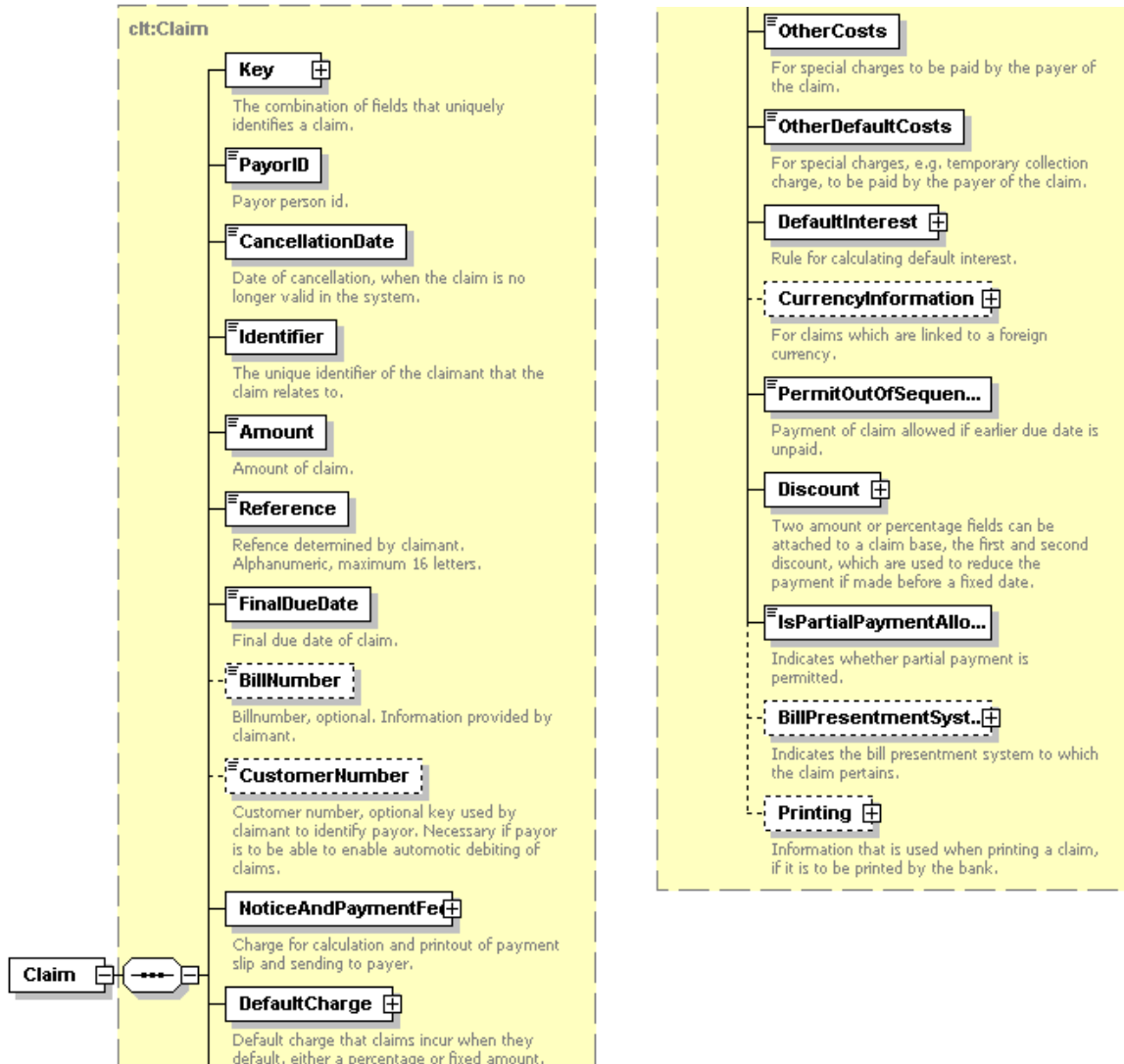
A description of how a claim is to be printed if done so by a banking institution. All elements in the printing section are optional.





CreateClaim/AlterClaim

The creation and the modification of a single claim is the same as in *Claims*, except that here it is always a single claim that is being processed, not a list. The claim itself looks the same, but the answer to creation / modification is a ClaimOperationResult.



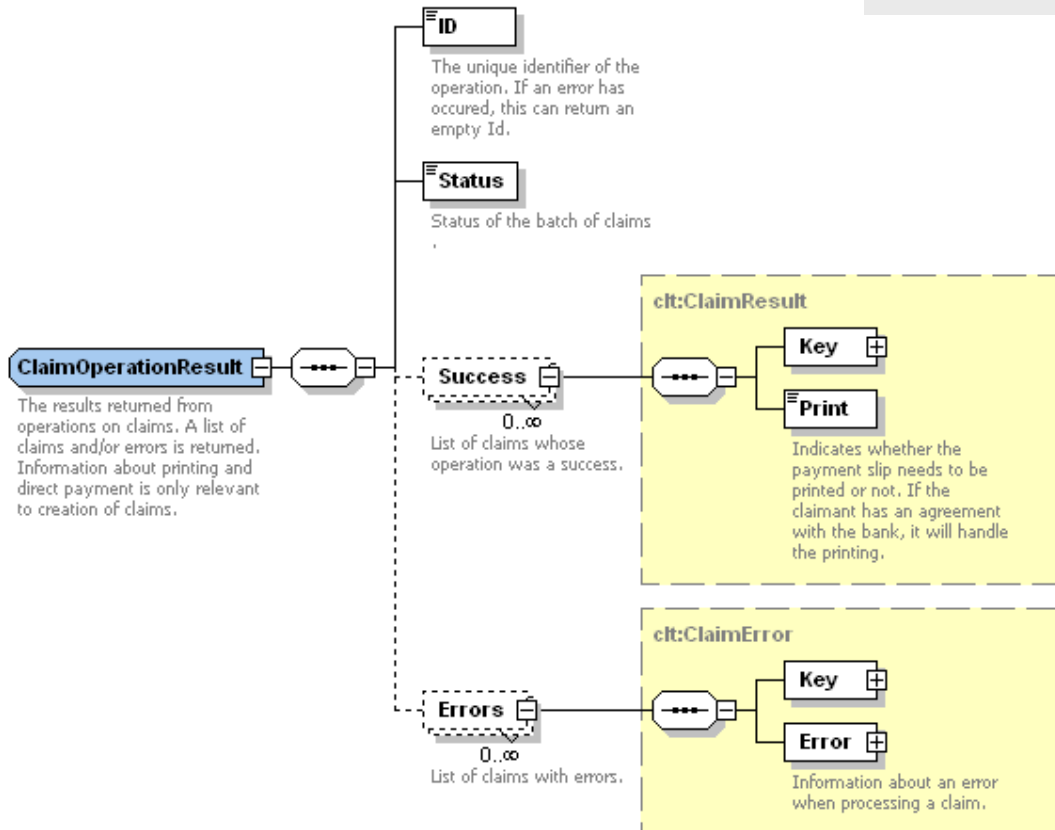


ClaimOperationResult

Information about the result of an operation. A list of claims and/or errors is returned. Information about printing and direct payment only applies when a claim is created.

NOTE

This result concerns an **individual** claim.

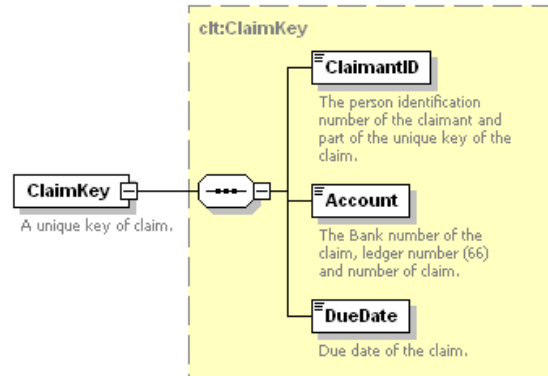




CancelClaim

The cancellation of a claim is the same as in Claims, i.e. the key for the claim to be cancelled is sent, but here it is always a single claim that is being processed.

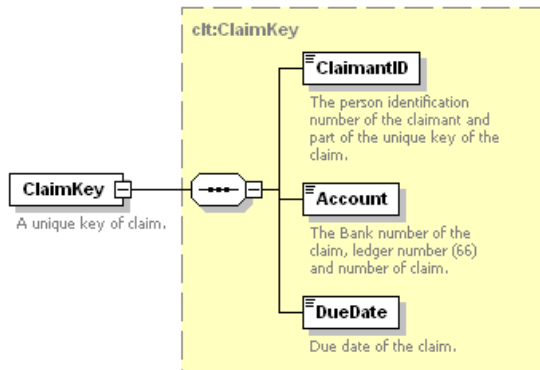
The answer to the cancellation is the same as in the create/alter operation, i.e. ClaimOperationResult.





ClaimQuery

A query on a single claim. Uses the claim key.



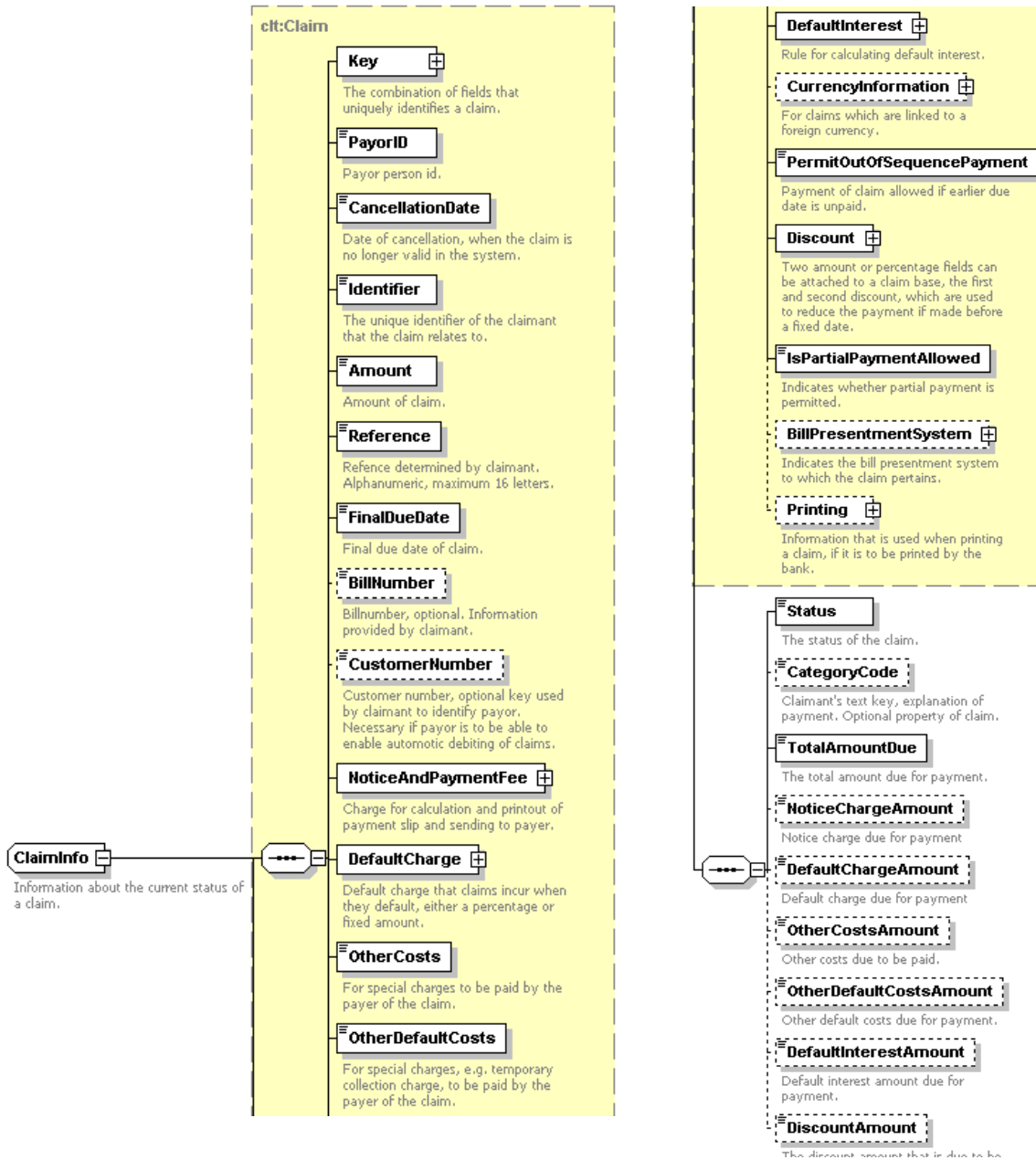
NOTE

If a query is sent concerning a **set of payables**, the response will show deposits made until and including *midnight* on the *last working banking day*.

If a query is sent concerning an **individual payable**, the response will show its real-time status at that time (*intraday*).



The answer to QueryClaim is QueryClaimResponse, which contains QueryClaimResult which is the type ClaimInfo, but that is the same type as returned in ClaimsQueryResult.



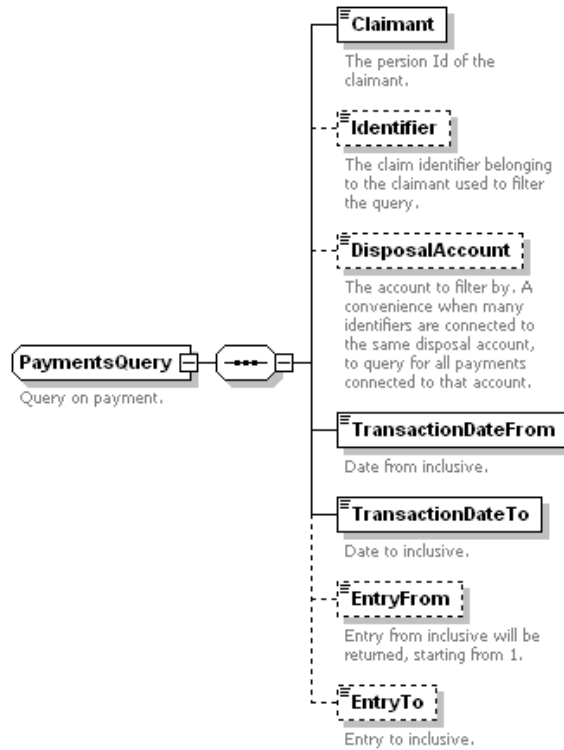


QueryPayments

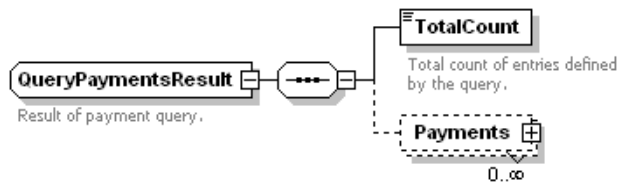
Uses the element query which is of type PaymentsQuery. It is possible to search for specific entries within the result set, as previously done with Claims.

NOTE

Here you are only fetching payments from **payables pool**. The company uses *Icelandic Online Statements* to view all deposits, **including transfers**.

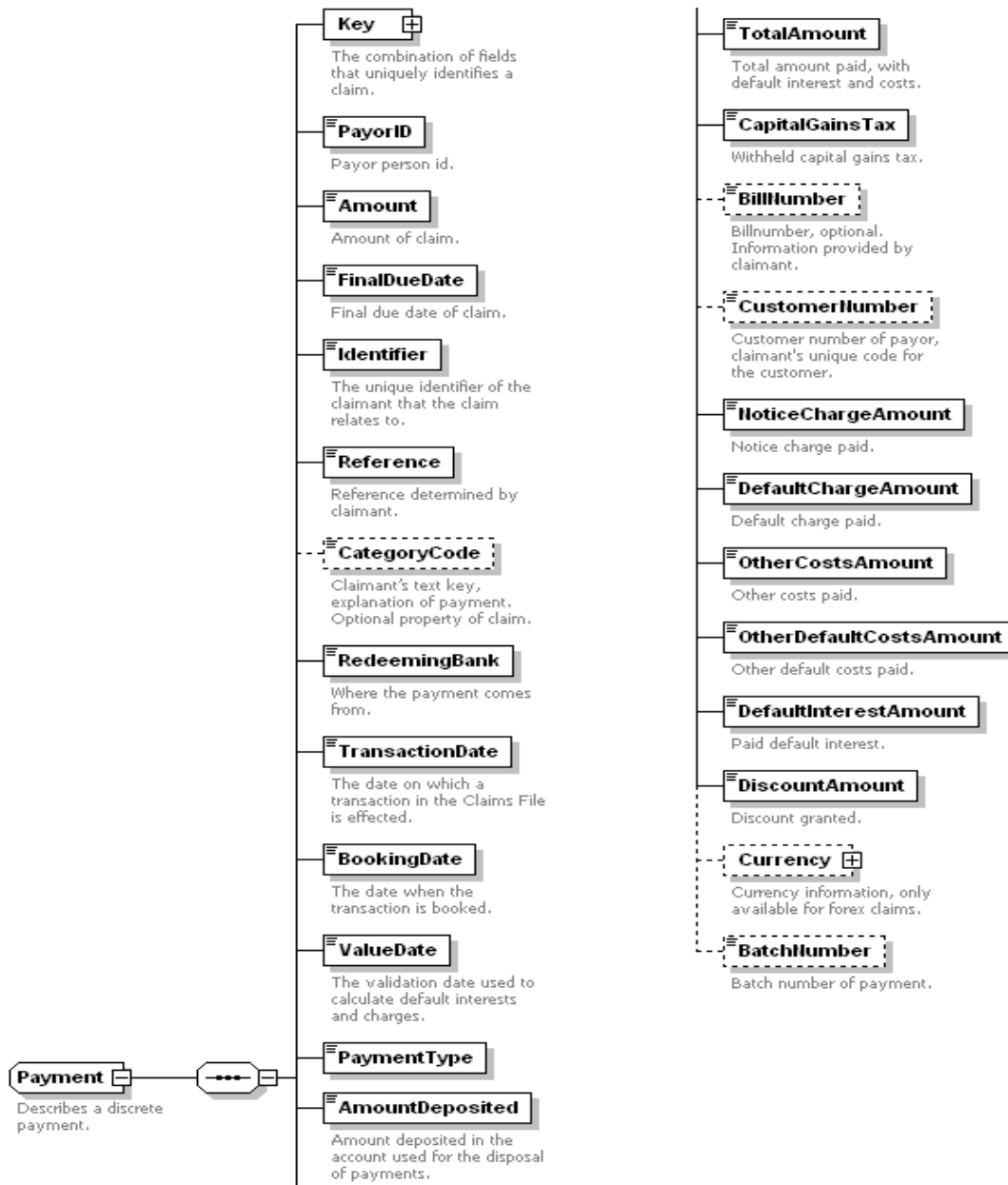


The answer to the QueryPayments query is QueryPaymentsResponse which has the element QueryPaymentsResult which is type QueryPaymentsResult. That contains a list of payments, as well as the total number of payments returned.



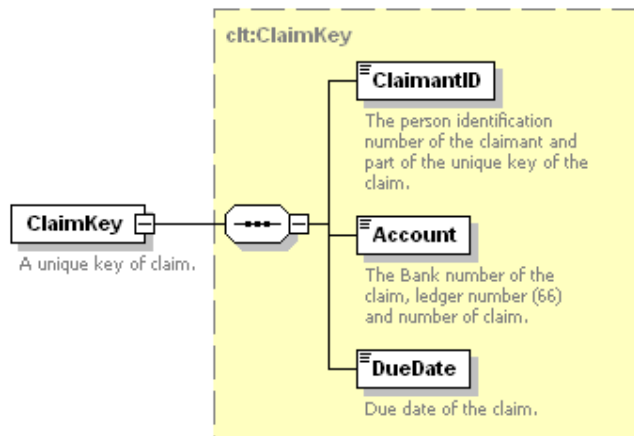


The list Payments contains a list of Payment.





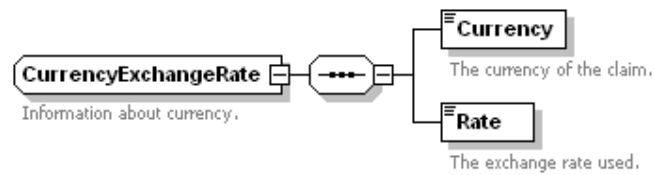
The key in Payment is the same as previously shown, i.e. the claim key.



NOTE

This is the **same ClaimKey** as previously shown.

In addition, currency information is available for currency claims, but that type (**CurrencyExchangeRate**) only contains information about the currency and its rate.



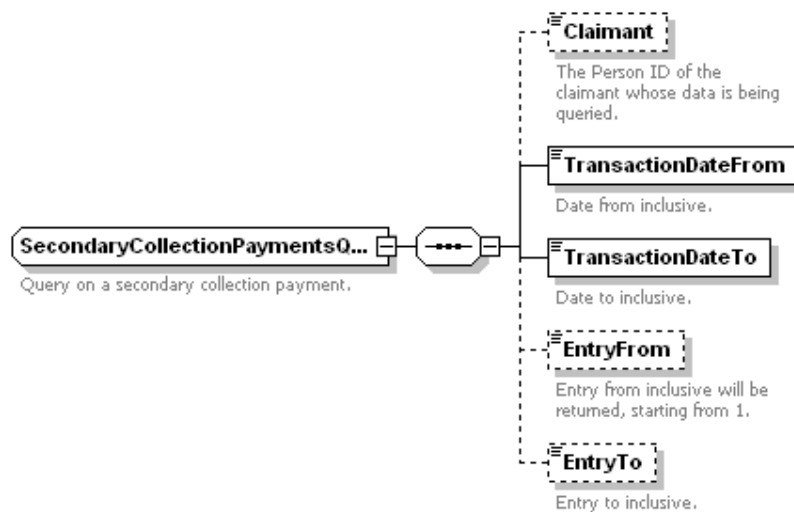


IcelandicOnlineSecondary CollectionClaims

It generally applies to secondary collection companies that they have all the same options on claims as normal companies, with the exception of claim creation. In addition, several specific operations are added for secondary collection companies as well as minor modifications of the queries.

SecondaryCollectionPaymentsQuery

The way for secondary collection companies to query about payments. Fetches the payments that have been processed, where it is possible to retrieve claims sorted by claimants. If that is not done, then all claims within the given time period are fetched.





QueryClaims

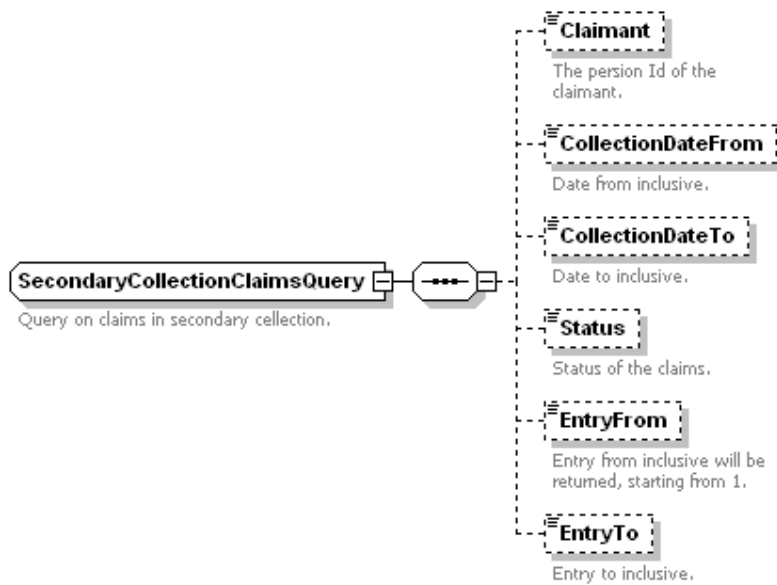
This function is used to fetch all claims that are now available for secondary collection but have not yet been taken into collection by the collection company. In Order to take claims into secondary collection the collection company must use the “alterClaim/alterClaims” method to gain control over the claim.

AlterClaim(s)

The way for secondary collection companies to take ownership of the claims as well as adding additional cost, it uses the same layout as Create-/Alter-Claims on page 35.

SecondaryCollectionClaimsQuery

The way for secondary collection companies to query about claims that they now have control over. All elements in the query are optional, but if none of those are used, than it is assumed that all claims that have come into collection for this company are to be fetched. As it is with the payment query, it is possible to narrow the search down to individual claimants.



Claim return (SecondaryCollectionReturnClaim)

Secondary collection companies have the opportunity to return claims that have reached the secondary collection status. It uses a list of claim keys for the claims that are to be returned.



NOTE

The secondary collection firm returns, through its actions, a **set** of claims and **not an individual** claim to the creditor.



Error messages

General

All communication is prone to exceptions and SOAP has a standard mechanism to communicate exceptions. These SOAP Exceptions are only thrown when it is not possible to complete an operation, usually due to faulty data or other technical reasons. Additionally, some circumstances where the input data does not conform to a given criteria can lead to an exception being thrown. When executing a batch, where it is possible for some operations to succeed but not others, other ways of returning error information is preferred.

Exceptions

Special error messages are returned in the details node of a SOAP exception when the error does not deal with SOAP headers. The different nodes returned in the details node are described in the following table:

Code	Type	Details
GeneralErrorCode	xs:string	Common error code across banking institutions.
GeneralErrorText	xs:string	Text to describe the GeneralErrorCode. ex: "Authentication failed", "Data could not be validated" etc.
BanksErrorCode	xs:string	Error code specific to the banking institution and the error instance.
BanksErrorText	xs:string	Text to describe the BanksErrorCode and/or data to resolve or help troubleshoot problems between banking institutions.

The BanksErrorCode can be used by each individual institution to identify individual error occurrences, e.g. to enable tracking. The GeneralErrorCodes are common error codes and indicate which class of error has occurred.

Code	Text	Details
0001	Service is Unavailable.	Implies that the service is closed for some reason.
1000	An error occurred.	A general error if a more detailed description is not available.
1100	Access to the operation is not present.	
1200	Data could not be validated.	The data could not be validated according to the XML schema.
1300	Business logic error.	Business rules were broken, e.g. dates or amounts were not valid.



Schemas

https://b2bws.fbl.is/xsd/envelope.xsd
https://b2bws.fbl.is/xsd/envelope.xsx
https://b2bws.fbl.is/xsd/IcelandicOnlineBanking.wsdl
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingClaims.wsdl
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingClaimTypes.xsd
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingClaimTypes.xsx
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingPayments.wsdl
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingPaymentTypes.xsd
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingPaymentTypes.xsx
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingSecondaryCollectionClaims.wsdl
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingStatements.wsdl
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingStatementTypes.xsd
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingStatementTypes.xsx
https://b2bws.fbl.is/xsd/IcelandicOnlineBankingTypes.xsd

NOTE

The **schema index** can be found at the following url:
<https://b2bws.fbl.is/xsd>



