# EDI Web Services

in



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## O. Background

Danske Bank has implemented the EDI Web Services channel for Sampo Bank in 2009 and for the entire Danske Bank Group in 2012. The EDI Web Services is built on the Finnish specification and is described in this document in details. Even though this document interprets on the original specification, the EDI Web Services uses the original WSDL-file defined by Sampo Bank, Nordea and OP-Pohjola Group.

The reader of this document (integrator) is expected to be familiar with technologies like PKI, XML (including schemas and WSDL files), SOAP, Web Services, XMLDSIG, XML Encryption base64, canonicalization, basic Internet communication (http/https) and Application Development using for instance Microsoft .NET and C#.

In order to use the EDI Web Services a set of PKI Certificates have to be issued. To acquire PKI Certificates for EDI Web Services the Company has to have a Business Online Agreement with EDI Web Services Module. In addition to that The Customer has to sign the User Authorisation to grant access for the user to the EDI Web Services.

The PKI certificates are created using the PKI Web Services. Please refer to <a href="https://www.danskebank.com/integrationservices">www.danskebank.com/integrationservices</a> for more information about PKI Web Services and EDI Web Services.

The EDI Web Services URL to be used when implementing EDI Web Services is

https://businessws.danskebank.com/financialservice/edifileservice.asmx

In this document you will come across the term "Customer User ID". This ID is equivalent to the lowest level of identification of a user (belonging to a Business Online Agreement). The ID is reflected in the certificates issued by Danske Bank.

SOAP-packets are time stamped before they are signed. The EDIWeb Services will not accept SOAP-packets that are older than 5 minutes.

Every night at 2.55 CET we have one minute Service Window for the EDI Web Services. All requests from customers passing through the EDI Web Services between 2.55 and 2.56 CET will NOT be handled.

We have chosen to follow Internet standards in naming our new services: Web Services must be used in two words and always in plural form. Hence the official product names:

- EDI Web Services
- PKI Web Services



### 1. General notes

This section describes general characteristics of EDI Web Services in Danske Bank.

### **Encryption**

Danske Bank Group requires that data sent to the Bank is always encrypted (ApplicationRequest). Data sent from the Bank (ApplicationResponse). will normally be encrypted, but in error situations Danske Bank cannot always identify the user, and error responses may be unencrypted.

#### Compression

It is recommended that files uploaded to the Bank are compressed. Likewise files downloaded from the Bank will also be compressed.

Two methods of compression will be supported: GZIP (RFC 1952) and DEFLATE (RFC 1951).

#### UploadFile maximum size

The Maximum file size is 70MB.

If compression is used the original file size does not matter, as long as the compressed file size is 70MB or below.

#### Maximum number of files

Up to 80,000 files may be uploaded per agreement per day.

Up to 269,190 files may be downloaded per agreement per day.

## Service Bureau / Service House

To accommodate the concept of Service Bureaus we will allow the CustomerId of the ApplicationRequest to differ from the ID of the certificate used to sign the ApplicationRequest. See section 2.3 and Appendix E.

#### <u>DownloadFileList</u>

Please notice that the operation DownloadFileList will only return files that are available for download from the Bank. It will not show the files that have been uploaded to the Bank.

## <u>DownloadFile</u>

The list of files for download provided in FileReferences can contain up to 10,000 FileReferences. To download more than 10,000 files you will have to call Download File multiple times.

If the client experiences a timeout on a multiple file DownloadFile request – the client side may have to split the operation into multiple calls to DownloadFile.

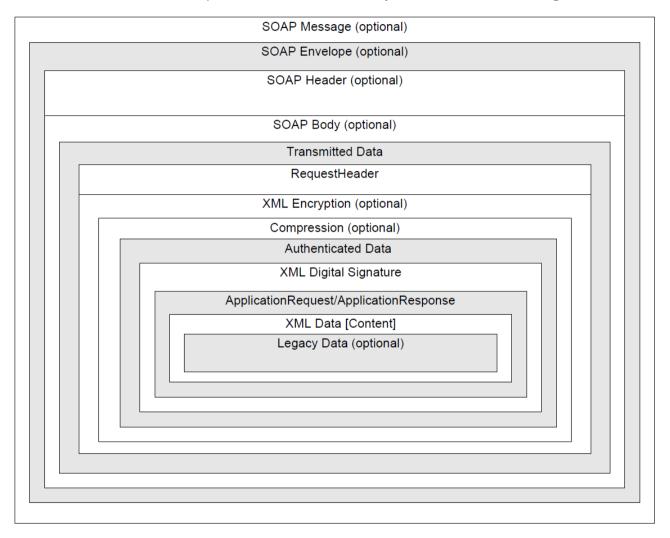
#### Transfer-encoding: chunked

Danske Bank does not support 'Transfer Encoding: chunked' in the http header.



## 2. Information about the functions of the EDI Web Services.

The SOAP Packet used for requests consists of several layers as seen in the drawing below:



The RequestHeader (or ResponseHeader) wraps layers of compression, encryption and signing before the ApplicationRequest (or ApplicationResponse) can be accessed.

The RequestHeader and ResponseHeader are validated using the WSDL-file whereas the ApplicationRequest and ApplicationResponse have their own XML Schema files for validation.

This chapter describes the RequestHeader, ResponseHeader, ApplicationRequest and ApplicationResponse XML-structures.

The description lists the intended use of each field (tag) as specified by the original specifications.



## 2.1 Using the RequestHeader

		RequestHe	ader	
Field	Туре	Cardinality	Official definition of the	Danske Bank
			field	usage
Senderld	Max35Text	[11]	The unique identification of the sender of this request message. The message sender can be a 3rd party service bureau. This identification is issued and managed by the receiver of this message (the bank). The Senderld identity is authenticated by the digital signature in the SOAP Header.	Customer User ID registered for the sending customer / Service Bureau. The ID must match the content of the certificate used to sign the SOAP packet.
RequestId	Max35Text	[11]	The unique identification for this request. Rule: This unique ID is copied to the response header. This value must be unique for three months.	Copied to ResponseHeader
Timestamp	ISODateTime	[11]	Time and date when the request was sent. If no time zone specified, UTC time zone assumed	Request will be rejected if timestamp is older than 1 hour.
Language	Max16Text	[01]	Language attribute. Used to request language version for certain information in display (human readable) format. If used, one of the following codes must be used: "EN" = English "SV" = Swedish "FI" = Finnish	Not used
UserAgent	Max35Text	[11]	The name and version of the software which was used to send this request.	Not used
ReceiverId	String	[11]	Identification of the receiver of this request message (BIC code for the bank)	Not used



## 2.2 Using the ResponseHeader

		ResponseH	eader	
Field	Туре	Cardinality	Official definition of the field	Danske Bank usage
Senderld	Max35Text	[11]	The unique identification of the sender of the original request message for this response (the receiver of this response).	Customer User ID registered for the sending customer / Service Bureau. Matches the Senderld from the RequestHeader.
RequestId	Max35Text	[11]	The unique identification copied from the original request for this response.	Copied from RequestHeader
Timestamp	IS0DateTime	[11]	Time and date when the response was sent.	Used
ResponseCode	Max16Text	[11]	This code is used to indicate the file delivery (send - receive) condition.	Used. For valid response codes see Appendix B.
ResponseText	Max512Text	[11]	The textual explanation of the condition.	Used
ReceiverId	String	[11]	Identification of the receiver of the original request message for this response (the BIC code of the bank that sends this response)	DABADKKK



## 2.3 Using the ApplicationRequest

	ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of the field	Danske Bank usage	
CustomerId	Max16Text (min 1, max16)	[11]	Code used by the bank to identify the customer who originated this request. This code is bank specific, i.e. each bank issues and manages its own Customerlds. When signing the ApplicationRequest element, the certificate used to verify the Signature must be associated with the Customerld given in this field. Customerld identifies the customer, the Signature authenticates the identity of the customer. This element is always mandatory in all operations.	Customer User ID registered for the sending customer. Usually this ID matches the ID in the certificate used to sign the payload (for UploadFile). See also Signature field of the ApplicationReque st and Appendix E.	

ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
Command	Max32Text Must specify one of the following: UploadFile, DownLoadFileList, DownloadFile, DeleteFile, ConfirmFile or GetUserInfo	[01]	This element specifies the requested operation. The values are not case sensitive. This element is optional if the bank can determine the operation by other means. For example in the SOAP message the name of a higher level XML element can already specify the operation. In such a case, the Command element can be left out, but if it is included in the request, its content must match the operation specified by other means.	Only the following values are accepted: UploadFile, DownLoadFileList, DownloadFile  DeleteFile/GetUs erInfo (not implemented - see section 3.4 and 3.5).
Timestamp	ISODateTime	[11]	Time and date when the Application Request Header was created.	Not used
StartDate	ISODate	[O1]	When requesting data from the bank, e.g. with the DownloadFileList operation, this element can be used to specify filtering criteria. This element contains a date which specifies the starting point of the time filter, inclusive. If this element is not present, but EndDate is given, it means the filtering criteria does not have a starting point.	Used

	ApplicationRed	quest - Gener	ral Description	
Field	Туре	Cardinality	Official definition of the field	Danske Bank usage
EndDate	ISODate	[01]	When requesting data from the bank, e.g. with the DownloadFileList operation, this element can be used to specify filtering criteria. This element contains a date which specifies the ending point of the time filter, inclusive. If this element is not present, but StartDate is given, it means the filtering criteria does not have an ending point.	Used
Status	Max10Text Must specify one of the following: "NEW" = Give me a list of those files that haven't been downloaded yet. "DLD" = Give me a list of those files that have already been downloaded. "ALL" (default) = Give me a list of both new and already downloaded files.	[01]	When requesting data from the bank, e.g. with the Download File List operation, this element can be used to specify filtering criteria. One status can be specified in this element and this status is used to filter the requested data. For example only a list of files with status "NEW" can be fetched.	Used

ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank
	,,	,	the field	usage
Serviceld	Max256Text	[01]	Additional identification information of the Customer, for example a Contract Number, Account Number or similar. This element is used, if the Customerld alone does not give identification that is specific enough to process the request.  In DownloadFile request for multiple files the field can be use to state a predefined separator	See appendix F.
Environment	Must specify one of the following codes:  "PRODUCTION" = Production environment,  "TEST" = Testing environment.	[11]	This field specifies which environment the request is meant for. The values are not case sensitive. This element must agree with the URL the request was sent to. For example if this element says "PRODUCTION", but the request was sent to a test URL, the bank will reject the request. The customer can use this element to add a level of redundancy which helps to catch situations when a wrong URL is used. Rule: In case of URL and code mismatch the following Response code is given "Environment mismatch".	TEST is interpreted as "payments are validated but not executed" (no bookkeeping). Please note that Environment only applies to payments



ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
FileReferences FileReference	Complex Max32Text	[01] [1n]	Unique identification of the file that is the target of the operation. This element is used in operations DownloadFile, DeleteFile and ConfirmFile to specify which file is to be operated upon. The customer must have obtained the FileReference value beforehand, e.g. using the DownloadFileList or UploadFile operations. The customer never generates the FileReference. This value is generated in the bank. It is comparable to a file system File Handle.	Usage deviates slightly from the official usage. See appendix G. In Danske Bank: n = 10000

ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
UserFileName	Max80Text	[01]	A name given to the file by the customer. The value given in this element in the UploadFile operation is stored in the bank and shown in various listings to help the customer identify the file.  Please note that the real identification of a file is the FileReference. The UserFileName field is just comment type information and is not used by bank systems.  Rule: This element is mandatory in the operation UploadFile and ignored in all other operations. If missing, request will be rejected, responsecode = "No File Name"	Used Will be displayed in List of files in Business Online
TargetId	Max80Text	[01]	The logical folder name where the file(s) of the customer are stored in the bank. A user can have access to several folders. A customer may want to give their users different views of files and assets that are included in the customer agreement. That can be achieved by organizing file types and assets associated to those file types into separate folders.	Not used

	ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank	
			the field	usage	
ExecutionSerial	Max32Text	[O1]	An identifier given by the customer to identify this particular request. The bank does not enforce the uniqueness of this identifier – the value is used only by the customer. This element could be used for example to uniquely identify all ConfirmFile operations. This element is optional. Using ISO timestamp is recommended.	Not used	
Encryption	Boolean	[01]	Encryption indicator for the content or encryption request for the responses Rule: If this element is present and the content is the string "true" (casesensitive) it means that the Content is encrypted or the requested data should be encrypted by the bank. If this element is present and the content is the string "false" (casesensitive) it means that the Content is NOT encrypted or the requested data should NOT be encrypted by the bank.	Not used. Has no real meaning since this field is part of the encrypted information. Danske Bank requires incoming data to be encrypted.	
EncryptionMethod	Max35Text	[01]	Name of the encryption algorithm	Not used	



	ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank	
			the field	usage	
Compression	Boolean	[01]	Compression indicator for the	Used	
			content and		
			compression		
			request for the		
			responses.		
			Rule: If this element		
			is present and the		
			content is string true		
			(case-sensitive) or 1		
			it means that the		
			Contentis		
			compressed or the requested data		
			should be		
			compressed.		
			If this element is		
			present and the		
			content is string		
			false (case-sensitive)		
			or 0 it means that		
			the Content is NOT		
			compressed or the		
			requested data		
			should NOT be		
			compressed.		
CompressionMetho	Max35Text	[01]	Name of the	GZIP or DEFLATE	
d			compression		
			algorithm		



ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
AmountTotal	Double	[O1]	Total sum of amounts in the file. If the data contained in this request has monetary values, the customer can calculate the total amount of these values and place it in this field. If this element is present, the bank can compare the values in the data against the value in this element and reject the request if they do not match. The use of this check is to be agreed between the customer and the bank. This element can also be used in file listings and reports as comment type information to help identify data files. It is easier for the customer to say "file sent last week with total amount around 2.000 euros", instead of "file with FileReference 192830384938". It is up to the bank to decide if it takes the Amount information	
			is up to the bank to decide if it takes the Amount information from this element in the request or if it	
			calculates it from the data file.	

	ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank	
			the field	usage	
TransactionCount	Long	[01]	The same use as	Not used	
			element		
			AmountTotal, but		
			contains the total		
			number of		
			transactions in		
			the data. What		
			"transaction" means		
			varies with type of		
			data, e.g. in C2B		
			pain.001.001.02		
			payment data		
			TransactionCount is		
			the number of		
			<cdttrftxinf></cdttrftxinf>		
0.6	NA COT		elements.		
Softwareld	Max80Text	[11]	This element	Used. Can be	
			contains the name	monitored in the	
			and version of the client side software	EDI Gateway at Danske Bank.	
			that generated	Danske Bank.	
			the request. It is		
			used for customer		
			support purposes.		
CustomerExtension	Complex	[01]	Customer, bank,	Not Used	
GGStorrici Exterision	Complex	[01]	country or region	Not asca	
			specific elements		
			not already		
			contained in the		
			schema. This		
			element allows		
			adding new elements		
			without changing the		
			ApplicationRequest		
			schema.		
			Both customer and		
			bank must agree on		
			the structure of this		
			element.		

ApplicationRequest - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
FileType	Max40Text	[01]	Specified the type of file in the request. Can also be used as a filter in the operation DownloadFileList. The values accepted in this element are agreed upon between the customer and the bank. New file types will be added, and they will not affect the schema. An appendix will be provided listing commonly used FileTypes. Rule: For ISO messages, the ISO name must be used. This element is mandatory in operation UploadFile, optional in DownloadFileList, ignored in other operations.	Used See Appendix D
Content	Base64Binary	[01]	The actual file in the UploadFile operation. The file is in Base64 format. Rule: This element is mandatory in operation UploadFile, ignored in other operations.	Used

	ApplicationRequest - General Description				
Field		Cardinality	Official definition of	Danske Bank	
rieiu	Туре	Cardinality			
0:	14 11 11 11 15 15 15 15	10.11	the field	usage	
Signature	MaxUnlimitedDSI G	[01]	The digital signature for the ApplicationRequest. This element is created by the XML Digital Signature operation by the customer. It is included in this schema as optional	If the ID in the certificate does not match the ID specified in the Senderld field then the certificate ID must belong to a Service Bureau that is allowed to	
			element to allow schema validation of the ApplicationRequest element with or without the Signature. Its content is specified by the XML Digital Signature standard. Rule: This element is mandatory when sending any request to the bank as it is used for integrity verification and authentication. This	handle payments on behalf of the Senderld. If that is the case then we will use the Customer User ID from Senderld instead of the one from the Signature (see Appendix E.). ApplicationReque st has to be signed by one and only one signatur	
			element is defined as optional in the schema because the recipient can remove the signature element after verification of the signature.		



## 2.4 Using the ApplicationResponse

	ApplicationResp	onse – Gener	al Description	
Field	Туре	Cardinality	Official definition of the field	Danske Bank usage
CustomerId	Max16Text	[11]	Returns the customer identification that was in the corresponding Application Reques t.	Copied from ApplicationReque st
Timestamp	ISODateTime, if no time zone specified, UTC time zone assumed	[11]	Time and date when the Application Response Header was created	Used
ResponseCode	Max16Text	[11]	The response code given by the bank to indicate the result of the requested operation. For valid codes - see appendix C.	Used
ResponseText	Max80Text	[11]	A text string (human readable) explaining the response code given in the ResponseCode element. Do not rely on the exact contents of this string, use the ResponseCode value instead.	Used
ExecutionSerial	Max32Text	[01]	The bank returns the Execution Serial unique identification code for the operation given by the customer in the Application Reques t Header.	Used

	ApplicationResponse - General Description			
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
Encrypted	Boolean	[01]	Encrytion indicator for the content or encryption request for the responses Rule: If this element is present and the content is the string "true" (case-sensitive) it means that the Content is encrypted or the requested data should be encrypted by the bank. If this element is present and the content is the string "false" (case-sensitive) it means that the Content is NOT encrypted or the requested data should NOT be encrypted by the bank.	Not used. Has no real meaning since this field is part of the encrypted information.
EncryptionMethod	Max35Text	[01]	Name of the encryption algorithm	Not used

	ApplicationResponse - General Description			
Field	Туре	Cardinality	Official definition of the field	Danske Bank usage
Compressed	Boolean	[01]	Compression indicator for the content and compression request for the responses. Rule: If this element is present and the content is string true (casesensitive) or 1 it means that the Content is compressed or the requested data should be compressed. If this element is present and the content is string false (casesensitive) or 0 it means that the Content is NOT compressed or the requested data should NOT be compressed.	Used
CompressionMetho d	Max35Text	[01]	Name of the compression algorithm	GZIP or DEFLATE



	ApplicationRest	onse - Gener	al Description	
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
Field AmountTotal	Type Double		Official definition of	
			the data file.	
			Rule: There is no	
ı			requirement for the bank to use	
			this element even	
Version 4.4-	Danske Bank, Corpora	te Banking R3	if the file type	s Page 23 of 71
01.06.2017	траньке ранк, согрога	are Daliking, Be	TDANARAGIONNANI DELINICE	<u>p Page∠30</u> /1



	ApplicationResp	onse - Gener	al Description	
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
TransactionCount	Long	[O1]	The same use as element AmountTotal, but contains the total number of transactions in the data. What "transaction" means varies with type of data, e.g. in C2B pain.001.001.02 payment data TransactionCount is the number of < CdtTrfTxInf> elements. Rule: There is no requirement for the bank to use this element even if the file type would allow for it.	Not used
FileDescriptors FileDescriptor	Complex Complex	[O1] [1n]	In response to DownloadFileList. An element containing a number of FileDescriptor elements as described in Appendix A.	Used
CustomerExtension	MaxUnlimitexText	[01]	Customer, bank, country or region specific elements not already contained in the schema. This element allows adding new element without changing the ApplicationReques t schema. Both customer and bank must agree on the structure of this element.	Not used

ApplicationResponse - General Description				
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
FileType	Not known	[01]	Not described in either original documentation or Schema file for ApplicationResponse.	Not used
UserFileTypes	Complex	[01]	The response for GetUserInfo contains number of UserFileType elements that describe which file types are accessible to this user and their attributes. It is possible to filter the view by specifyingTargetId and/or FileType in the ApplicationReques t for GetUserInfo request.	Not used
Content	MaxUnlimitedBase6	[01]	Response to DownloadFile. The actual content, payload in the DownloadFile operation. The file is in Base64 format. Rule: This element is mandatory in operation DownloadFile, ignored in other operations.	Used



	ApplicationResp	onse – Gener	al Description	
Field	Туре	Cardinality	Official definition of	Danske Bank
			the field	usage
Signature	MaxUnlimitedDSIG	[01]	Digital signature of the ApplicationRespon se. Definition: Digital signature. This element is created by the XML Digital Signature operation by the bank. It is included in this schema as optional element to allow schema validation of the ApplicationReques t element with or without the Signature. Its content is specified by the XML Digital Signature standard. Rule: This element is mandatory when sending ApplicationRespon se to the customer as it is used for integrity verification and authentication of the bank. This element is defined as optional in the schema because the recipient can remove the signature element after verification of	Used
			signature element after verification of	
			the signature.	



# ${\tt 3. Operations of the EDIWeb Services}$

## 3.1UploadFile

The UploadFile function is used to send a file to the bank.

The table below only shows the fields from the Application Request that is used by the UploadFile function and how these fields are interpreted by Danske Bank.

	ApplicationRequest - UploadFile
Field	Description / Value
Customerld	The Customer User ID of the user sending the file.
Command	"UploadFile"
Timestamp	Time and date the request was made
StartDate	Not used
EndDate	Not used
Status	Not used
Serviceld	Not used
Environment	"PRODUCTION" or "TEST". If "TEST" is used on a payment
	file then payments are validated but not executed.
FileReference	See Appendix G
UserFileName	Used
TargetId	Not used
ExecutionSerial	Not used - but copied to ApplicationResponse if present
Encryption	Not used. Has no real meaning since this field is part of
	the encrypted information
	Danske Bank requires data to/from the Bank to be
	encrypted.
EncryptionMethod	Not used
Compression	"true" if content is compressed. If not present or value is
	"false" then content is regarded as uncompressed.
CompressionMethod	If Compression is true:
	"GZIP": Content is compressed using GZip
A	"DEFLATE": Content is compressed using Deflate.
AmountTotal	Not used
TransactionCount	Not used
Softwareld	Value saved in EDI Gateway at Danske Bank
CustomerExtension	Not used
FileType	See Appendix D
Content	Contains the file that should be uploaded
Signature	Signature of the user / customer for which the file was
	generated.
	ApplicationRequest has to be signed by one and only one
	signatur



Provided the UploadFile request was successful the following ApplicationResponse is returned:

ApplicationResponse - UploadFile			
Field	Description / Value		
Customerld	The Customer User ID of the user sending the file		
Timestamp	Timestamp for when the ApplicationResponse was generated		
ResponseCode	See Appendix C		
ResponseText	Used		
ExecutionSerial	Copied from ApplicationRequest if present		
Encrypted	Not used. Has no real meaning since this field is part of the encrypted information  Danske Bank requires data to/from the Bank to be encrypted.		
EncryptionMethod	Not used		
Compressed	Not used		
CompressionMethod	Not used		
AmountTotal	Not used		
TransactionCount	Not used		
FileDescriptors	Not used		
CustomerExtension	Not used		
FileType	Not used		
UserFileTypes	Not used		
Content	Not used		
Signature	Signature of Danske Bank		



#### 3.2 DownloadFileList

The DownloadFileList function is used to acquire a list of files available for download using the DownloadFile function. Please notice that files that have been sent to the bank do not occur in the list.

In addition to files available for download the list can also include references to "Real time" files. These files are created upon request. For more info on those entries – see Appendix E: "Real time" files.

The table below only shows the fields from the ApplicationRequest that is used by the DownloadFileList function and how these fields are interpreted by Danske Bank.

Ap	plicationRequest - DownloadFileList			
Field	Description / Value			
Customerld	The Customer User ID of the user requesting the file list.			
	Only files available for the specific user will be returned.			
Command	"DownLoadFileList"			
Timestamp	ISODateTime of the time the request was made.			
StartDate	Optional ISODate specifying the lower limit of a date-range			
	for the request. Files from this date is included in the			
	result.			
EndDate	Optional ISODate specifying the upper limit of a date-			
	range for the request. Files from this date is included in			
	the result.			
Status	If specified - use one of the following:			
	"NEW" = Give me a list of files that haven't been			
	downloaded yet.			
	"DLD" = Give me a list of files that have			
	already been downloaded. Please be aware that files that			
	have been downloaded will become unavailable overnight.			
	"ALL" (default) = Give me a list of both new and already			
	downloaded files.			
Serviceld	Not used			
Environment	Not used by Danske Bank-but mandatory acc to schema			
	file			
FileReference	Not used			
UserFileName	Not used			
TargetId	Not used			
ExecutionSerial	Not used - but copied to ApplicationResponse if present			
Encryption	Not used.			
	Danske Bank requires the XML SOAP body to/from the			
	Bank to be encrypted.			
EncryptionMethod	Not used			
Compression	Not used			
CompressionMethod	Not used			
AmountTotal	Not used			
TransactionCount	Not used			
Softwareld	Not used but mandatory			
CustomerExtension	Not used			
FileType	If used, must be one of the file types listed in Appendix D.			
Content	Not used			



ApplicationRequest - DownloadFileList			
Field	Description / Value		
Signature	Signature of requesting user / customer.		

Provided the DownloadFileList request was successful the following ApplicationResponse is returned:

ApplicationResponse - DownloadFileList			
Field	Description / Value		
Customerld	The Customer User ID of the user sending the file		
Timestamp	Timestamp for when the ApplicationResponse was		
	generated		
ResponseCode	See Appendix C		
ResponseText	Used		
ExecutionSerial	Copied from ApplicationRequest if present		
Encrypted	Not used.		
	Danske Bank requires the XML SOAP body to/from the		
	Bank to be encrypted.		
EncryptionMethod	Not used		
Compressed	Not used		
CompressionMethod	Not used		
AmountTotal	Not used		
TransactionCount	Not used		
FileDescriptors	Populated – see Appendix A.		
CustomerExtension	Not used		
FileType	Not used		
UserFileTypes	Not used		
Content	Not used		
Signature	Signature of Danske Bank		



#### 3.3 DownloadFile

The DownloadFile function is used to fetch one or more files from the bank – based on information received via the DownloadFileList request. DownloadFileList will provide the FileDescriptor needed to address the individual files that are available for download.

The table below only shows the fields from the ApplicationRequest that is used by the DownloadFile function and how these fields are interpreted by Danske Bank.

ApplicationRequest - DownloadFile			
Field	Description / Value		
Customerld	The Customer User ID of the user requesting the file list.		
	Only files available for the specific user will be returned.		
Command	Must contain the string "DownLoadFile".		
Timestamp	ISODateTime of the time the request was made.		
StartDate	Not used		
EndDate	Not used		
Status	Not used		
Serviceld	Usage described in appendix F.		
Environment	Not used by Danske Bank - but mandatory		
FileReferences	ID for the file to be downloaded. Generated via the		
+FileReference	DownloadFileList request.		
	Please notice that FileReference can contain up to 10000		
	FileReferences. See appendix G		
UserFileName	Not used		
TargetId	Not used		
ExecutionSerial	Not used - but copied to ApplicationResponse if present		
Encryption	Not used.		
	Danske Bank requires the XML SOAP body to/from the		
	Bank to be encrypted.		
EncryptionMethod	Not used		
Compression	If "true" the file (Content) will be sent in compressed form		
CompressionMethod	If Compression is true:		
	"GZIP": Content will be sent in compressed form using		
	GZip		
	"DEFLATE": Content will be sent in compressed form		
A .T . 1	using Deflate.		
AmountTotal	Not used		
TransactionCount	Not used		
Softwareld	Not used by Danske Bank - but mandatory according to		
	schema		
CustomerExtension	Not used		
FileType	Not used		
Content	Not used		
Signature	Signature of requesting user / customer.		

For information on how to download "Real Time Files" - see Appendix E.



Provided the DownloadFile request was successful the following ApplicationResponse is returned:

ApplicationResponse - DownloadFile				
Field	Description / Value			
Customerld	The Customer User ID of the user sending the file			
Timestamp	Timestamp for when the ApplicationResponse was			
	generated			
ResponseCode	See Appendix C			
ResponseText	See Appendix C			
ExecutionSerial	Copied from ApplicationRequest if present			
Encrypted	Not used.			
	Danske Bank requires the XML SOAP body to/from the			
	Bank to be encrypted.			
EncryptionMethod	Not used			
Compressed	"true" if content is compressed. If not present or value is			
	"false" then content is regarded as uncompressed.			
CompressionMethod	If Compression is true:			
	"GZip": Content is compressed using GZip			
	"Deflate": Content is compressed using Deflate.			
AmountTotal	Not used			
TransactionCount	Not used			
FileDescriptors	Not used			
CustomerExtension	Not used			
FileType	Not used			
UserFileTypes	Not used			
Content	Contains the requested files			
Signature	Signature of Danske Bank			



## 3.4 DeleteFile

The DeleteFile function is intended to delete a file that was sent to the bank.

This function is not implemented. To adhere to the official WSDLa dummy version of DeleteFile has been implemented. It does not delete anything and always returns with errors code "05" (DeleteFile function not implemented).



## 3.5 GetUserInfo

The GetUserInfo function is not implemented.

If used then error code "05" (GetUserInfo function not implemented) is returned.



# Appendix A: FileDescriptor

FileDescriptor is the result of a DownLoadFile request. FileDescriptor provides details of each file ready for download. The details of the FileDescriptor can be used when selecting files for download.

FileDescriptor - General Description				
Field	Туре	Cardinality	Definition	Danske Bank
				usage
FileDescriptor	Complex	[1n]	An element containing file attributes below.	Used
+FileReference	Max32Text	[11]	The unique identifier for this file. The identifier is unique in the bank system within one Targetld (folder). File reference is fixed for the entire duration of the file's lifecycle. Therefore, if the client already knows the file references of the desired files (and the file type and the folder) then, for example, it is not mandatory to do a Dowload File List operation each time prior to the DownLoad File operation	Used
+TargetId	Max80Text	[11]	The logical folder name where the file(s) of the customer are stored in the bank. A user can have access to several folders.  A customer may want to give their users different views of files and assets that are included in the customer agreement.  That can be achieved by organizing file types and assets associated to those file types into separate folders.  Rule: Optional for information requests, if omitted the response will cover all files that the user has access to.	The folder name will be created from the date the file was generated: "YYYYMMD D" – as in 20091224.

FileDescriptor - General Description				
Field	Туре	Cardinality	Definition	Danske Bank
				usage
+Serviceld	Max256Text	[01]	Additional identification information of the Customer, for example a Contract Number, Account Number or similar. This element is used if the Customerld alone does not give identification that is specific enough to process the request.	See appendix F.
+ServiceldOwnerName	Max256Text	[01]	Owner of the service identified by Serviceld	Not used
+UserFileName	Max80Text	[01]	A name given to the file by the customer. The value given in this element in the UploadFile operation is stored in the bank and shown in various listings to help the customer identify the file. Please note that the real identification of a file is the FileReference. The UserFileName field is just comment type information and is not used by bank systems. Rule: This element is mandatory in the operation UploadFile and ignored in all other operations. If missing, request will be rejected, responsecode = "No File Name"	Used For files based on a file order in Danske Bank's Delivery System the field UserFileNam e will be filled in with the 'File order name'. If '&' is a part of the File order name it will be replaced by a blank.
+ParentFileReference	Max16Text	[01]	A file reference to a file to which this file is related. For example this file could be a status response file to another file. This element indicates the relationship.	Used if file is a response (feedback) file.

FileDescriptor - General Description				
Field	Туре	Cardinality	Definition	Danske Bank
				usage
+FileType	Max40Text	[11]	Specifies the type of file in the request. Can also be used as a filter in the operation DownloadFileList. The values accepted in this element are agreed upon between the customer and the bank. New file types will be added, and they will not affect the schema. A bank specific document will be provided listing commonly used FileTypes. Rule: For ISO messages, the ISO name must be used. This element is mandatory in operation UploadFile, optional in DownloadFileList, ignored in other operations.	Contains the type of file. Valid values can be found in Appendix D.
+FileTimestamp	ISODateTime	[11]	The timestamp of the moment the file was created in the bank system.	Used
+Status	Code (Max10Text)	[11]	The status (state) of the file. One of the following codes must be used:  Code Name WFP Waiting for processing WFC Waiting for confirmation FWD Forwarded to processing DLD Downloaded DEL Deleted NEW New file KIN Key-in	Only values DLD and NEW are used

FileDescriptor - General Description				
Field	Туре	Cardinality	Definition	Danske Bank
				usage
+AmountTotal	Double	[01]	Total sum of amounts in the file. If the data contained in this request has monetary values, the customer can calculate the total amount of these values and place it in this field. If this element is present, the bank can compare the values in the data against the value in this element and reject the request if they do not match. The use of this check is to be agreed between the customer and the bank. This element can also be used in file listings and reports as comment type information to help identify data files. It is easier for the customer to say "file sent last week with total amount around 2.000 euros", instead of "file with FileReference 192830384938". It is up to the bank to decide if it takes the Amount information from this element in the request or if it calculates it from the data file. Rule: There is no requirement for the bank to use this element even if the file type would allow for it	Not used

FileDescriptor - General Description				
Field	Туре	Cardinality	Definition	Danske Bank
+TransactionCount	Long	[O 1]	The same use as	usage Not used
+TransactionCount	Long	[01]	The same use as element AmountTotal, but contains the total number of transactions in the data. What "transaction" means varies with type of data, e.g. in C2B pain.001.001.02 payment data TransactionCount is the number of <cdttrftxinf> elements. Rule: There is no requirement for the bank</cdttrftxinf>	Not used
			to use this element even if the file type would allow for it.	
+LastDownloadTimestamp	ISODateTime	[01]	The timestamp of the moment this file was last downloaded by the customer. Rule: If this element does not exist, the file has not been downloaded.	Used
+ForwardedTimestamp	ISODateTime	[01]	The timestamp of the moment this file was forwarded to processing in the bank. Rule: If this element does not exist, the file has not been forwarded to processing.	Not used
+Confirmable	Boolean	[01]	Tells whether the file needs confirmation before being forwarded for processing or allowed to be downloaded. Rule: If this element does not exist, it implies the value false, i.e. not confirmable.	Not used
+Deletable	Boolean	[01]	Tells whether the file can be deleted by the customer. Rule: If this element does not exist, it implies the value false, i.e. not deletable.	Not used

FileDescriptor - General Description				
Field	Type	Cardinality	Definition	Danske Bank
				usage
+SubStatusCode	Code (Max35Text)	[01]	Some filetypes can have a substatus (substate), eg. Finish Payment Service filetype (LMP300) If Code One of the following codes must be used:	Not used
			Code Name HIGH High NORM Normal	
+SubStatusText	Max70Text	[01]	A text describing the FileSubStatus	Not used
+MissingTransactions	Boolean	[01]	Checksum error indicator for certain filetypes. Rule: true if the validation of the file has discovered that the checksum in the file does not match, otherwise false	Not used
+SubType	Max35Text	[01]	Valid for some file types describing in more detail what the file content is	Used See subtypes in Appendix D.
+FeedbackFileAttributes	Complex	[01]	Feedback file attributes	Not used
++FeedbackFileReference	Max16Text	[11]	The unique identifier for this file. The identifier is unique in the bank system within one Targetld (folder). This element is mandatory. File reference is fixed for the entire duration of the file's lifecycle. Therefore, if the client already knows the file references of the desired files (and the file type and the folder) then it is not mandatory to do a Dowload File List operation each time prior to the DownLoad File operation	Not used



FileDescriptor - General Description				
Field	Туре	Cardinality	Definition	Danske Bank
				usage
++FeedbackFileType	Max35Text	[01]	Specifies the file type of the feedback file to be used for download or detailed info. The file types are bank dependent.	Not used
++FeedbackTypeName	Max80Text	[01]	The name of the feedback fileType.	Not used
++FeedbackFileStatus	Code (Max16Text)	[01]	Has the feedback file already been downloaded or not. One of the following codes must be used:  Code Name New The file is new Down- The file loaded has been download ed	Not used
++FeedbackFileDate	ISODate	[01]	The date when the file was created	Not used
++FeedTimestamp	ISODateTime	[01]	The timestamp of the moment the file was created in the bank system.	Not used
++FeedbackFileServiceId	Max35Text	[01]	Some upload fileTypes have a feedback fileType. When a feedback fileType exists the feedback-fields will be provided after a upload has been executed to help the client/user to pinpoint the feedback to the correct upload. Rule: The internal Serviceld associated with this feedback file and the feedback information is bank dependent	Not used
++FileActionHistory	Max16Text	[01]	A list of actions for the file. Examples of actions are new, download etc.	Not used



# $Appendix\,B: List of Response Codes\,used\,in\,Response Header$

This section lists the valid ResponseCodes given in ResponseHeader.

ResponseCode	ResponseText	Remarks
00	OK	
01	Pending	Not used
02	SOAP signature error	Signature verification failed
03	SOAP signature error	Certificate not valid for this id
04	SOAP signature error	Certificate not valid
05	Operation unknown	
06	Operation is restricted	
07	SenderID not found	
08	SenderID locked	
09	Contract locked	
10	SenderID outdated	
11	Contract outdated	
12	Schemavalidation failed	
13	CustomerID not found	
14	CustomerID locked	
15	CustomerID outdated	
16	Product contract outdated	
17	Product contract locked	
18	Content digital signature not valid	
19	Content certificate not valid	
20	Content type not valid	
21	Deflate error	
22	Decrypt error	
23	Content processing error	
24	Content not found	
25	Content not allowed	
26	Technical error	
27	Cannot be deleted	
28	[not used]	Not used
29	Invalid parameters	
30	Authentication failed	
31	Duplicate message rejected	SOAP.Body.RequestHeader.SenderId
		+
		SOAP.Body.ReqhestHeader.RequestId
32	Duplicate ApplicationRequest	ApplicationRequest.CustomerId +
	Rejected	ApplicationRequest.Timestamp



# $Appendix\,C: List\,of Response Codes\,used\,in\,Application Response$

This section lists the valid RespnseCodes given in ApplicationResponse.

ResponseCode	ResponseText	Remarks
00	OK	
01	Pending.	not used
02	SOAP signature error.	signature verification failed
03	SOAP signature error.	certificate not valid for this id
04	SOAP signature error.	certificate not valid
05	Operation unknown.	
06	Operation is restricted.	
07	SenderID not found.	
08	SenderID locked.	
09	Contract locked.	
10	SenderID outdated	
11	Contract outdated	
12	Schemavalidation failed.	
13	CustomerID not found.	
14	CustomerID locked.	
15	CustomerID outdated.	
16	Product contract outdated.	
17	Product contract locked.	
18	Content digital signature not	
	valid.	
19	Content certificate not valid.	
20	Content type not valid.	
21	Deflate error.	
22	Decrypt error.	
23	Content processing error.	
24	Content not found.	
25	Content not allowed.	
26	Technical error.	
27	Cannot be deleted.	
28	[not used]	not used
29	Invalid parameters.	
30	Authentication failed.	
31	Duplicate message rejected.	SOAP.Body.RequestHeader.SenderId
		+
		SOAP.Body.ReqhestHeader.RequestId
32	Duplicate ApplicationRequest rejected.	ApplicationRequest.CustomerId +
		ApplicationRequest.Timestamp



# Appendix D: Supportedfile types

This appendix lists the valid string values for the FileType field of the ApplicationRequest / ApplicationResponse.

Appendix D includes file types for both UploadFile and DownloadFile.

Upload of other file types than those listed under 'Upload file types:' must be tested. Please contact Customer Support.

## Upload file types:

File type string	Description
AYEL	Finnish format: Trade union membership fees.
camt.055.001.01	SEPA Direct Debit Cancellation
	XMLformat: ISO 20022 - camt.055.001.01 (Payment Cancellation
	Request)
	The format is used for sending cancellation requests regarding Core and
	B2B SEPA Direct Debit transactions to Collection Service.
FALL	Finnish format: Factoring invoices for Danske Finance.
FILL	Finnish format: Transmission of Invoices or Direct Payments
FIPL	Finnish Finvoice format: Receiver Proposal
FISL	Finnish Finvoice format: Sender info
IBAL	Finnish format: BBAN account numbers to be converted to IBAN.
OL2L	Finnish format : Payment of domestic invoices LMO2 & Express Giro.
OL3L	Finnish format : Payment of domestic invoices LMO3 & Express Giro.
pain.001.001.02	The Payment Standards Initiation format from ISO 20022 XML in version 2
pain.001.001.03	The CustomerCreditTransferInitiation message from ISO 20022 XML,
	version 3
pain.008.001.02	SEPA Direct Debit Initiation
	XMLformat: ISO 20022 - pain.008.001.02 (Direct Debit Initiation)
	The format is used for sending Core and B2B SEPA Direct Debit
	transactions to Collection Service.
DELL	
PELL	Finnish format : Regular payments – e.g. Salaries.
SOVL	Finnish format: Common Transfer - Customer specific material transfers
	from customer; various purposes, no common file structure.
ULJL	Finnish format: State officer files to the bank (Ministry of justice).
UM2L	Finnish format: Foreign payment / LUM2.
UMTL	Global Transfer (SWIFT MT101) only used in Finland
Must be omitted	EDIFACT 96 A format: PAYMUL
Must be omitted	EDIFACT 96A format: DIRDEB
Must be omitted	Danske Bank commaseparated format: Payment files
	CMBO,CMUO,CMGB,CMBODK,CMSI,CMNI,CMFI,CMDE,CMGBDC,CMII,
0.4	CMUOGB,CMIIDC,CMUOIE,CMUO10,CMUOSE,CMUOFI,CMUODE,CMUONO
Must be omitted	Danske Bank commaseparated format: Collection files
N.A	COLLECTION, COLDEBMOD, COLDELETE
Must be omitted	Danske Bank Idoc format: Payment file
Must be omitted	MT101 format
Must be omitted	MT104 format
Must be omitted	EFTS format



Must be omitted	BACS format (Header is required - contact Customer Support)
Must be omitted	Norwegian BBS format
Must be omitted	Norwegian Telepay format
Must be omitted	Swedish UtLands LB format
Must be omitted	Swedish Autogiro format
Must be omitted	Swedish LB format
Must be omitted	Swedish BG Invoice format
Must be omitted	Swedish KI Löner
Must be omitted	OIOXML format
Must be omitted	OIOUBL format:
	UBLINV,UBLREM,UBLRES,UBLORD,UBLORS,UBLCRE
Must be omitted	The CustomerPaymentCancellationRequest format from ISO 20022 XML in
	version 1:
	camt.055.001.01



## Download file types:

FileType can be used for identifying the various files in the DownLoadFileList

File type string	Description	Description	
AG	Swedish Autogiro format (new and old format)		
	An additional subtype will be	e delivered	
	Code	Name	
	SPE	Payments specification and Rejected	
		payments in balance check inquiry	
	MAN	Mandate advice	
	REJ	Rejected payment orders	
	CAN	Cancellation/change of payments	
		, , ,	
APSN	Finnish format: Balance info	rmation (Real time request).	
BALR	Finnish format: Balance info	rmation for DB, Helsinki branch	
BANSTA96A	EDIFACT 96A format: Statu		
	An additional subtype will be	e delivered:	
	Code	Name	
	MFB	Status file Status file	
BGCRMO	Swedish Returned money or	ders from BankGirot	
BGCVOL	Corporate Reporting Bankgi		
BG_MAX	Swedish BG Max format		
_	An additional subtype will be	e delivered:	
	Code	Name	
	BGI	Pass-through file from BankGirot	
		Ŭ	
BGMAX	Swedish BG Max format: Cr	edit entries	
	An additional subtype will be	e delivered:	
	Code	Name	
	KRE	Credit entries	
BIL	Swedish BILD format		
	An additional subtype will be	e delivered:	
	Code	Name	
	IMA	Pass-through file from BankGirot	
		S	
DEBADV921	EDIFACT 92-1 format: Debit	t entries	
	An additional subtype will be	e delivered:	
	Code	Name	
	DEB	Debit entries	
DEBADV96A	EDIFACT 96A format (single	e payment): Debit entries	
	An additional subtype will be		
	Code	Name	
	DEB	Debit entries	
		•	
	<u> </u>		



DEBMUL96A	EDIFACT 96A format: Debit entries		
	An additional subtype will be	e delivered:	
	Code	Name	
	DEB	Debit entries	
camt.052.001.02	ISO 20022 XML		
		eport format: Account Report-	
	An additional subtype will be		
	Code	Name	
	BAL	Balance Information	
	ACC	Account Entries	
camt.053.001.02	ISO 20022 XML BankToCu	atawa auCtatawa aut fanus at.	
camt.053.001.02			
	Account Statement (End of a An additional subtype will be		
	Code	Name	
	FIN	Account Statement	
camt.054.001.02		Account Statement	
Camt.034.001.02	XML BankToCustomerDebi	tCreditNotification format:	
	DebitCreditNotification	itel editivotilication for mat.	
	Debitol editivotification		
	An additional subtype will be	e delivered in DCN-file	
	Code	Name	
	DNOT	All Debit notification	
	CNOT	All Credit notification	
	DCNOT	Both Debit and Credit notification	
	FBFOPFI	Feedback on Foreign Payments	
		(product only available in Finland)	
CAP	Fixed format in Ireland and L	Fixed format in Ireland and UK: Customer Account Postings	
	An additional subtype will be	e delivered in DCN-file:	
	Code	Name	
	CAP-DNOT	Debit notification	
	CAP-CNOT	Credit notification	
	CAP-DCNOT	Debit and Credit notification	
CAPCSV		ated format: Customer Account Postings	
	An additional subtype will be		
	Code	Name	
	CAP-DNOT	Debit notification	
	CAP-CNOT	Credit notification	
	CAP-DCNOT	Debit and Credit notification	
CAPUDD		ated format: Customer Account Postings	
	with unpaid Direct Debits	dalivanadia DCN £1-	
	An additional subtype will be		
	CAR PNOT	Name Debit petification	
	CAP-DNOT	Debit notification	
	CAP-CNOT	Credit notification	
	CAP-DCNOT	Debit and Credit notification	
	I Danaka Dankaina fannasti kista af aka		
CUD	Danske Bank giro format: List of cheque debits  Danske Bank giro format: Processing list of cheques		
CHD CHK			



CMDPF	Danske Bank fixed form	at: Custody funds with mortgages
	An additional subtype w	
	Code	Name
	VPD	Custody funds
CMDPK		eparated format: Custody funds with mortgages
	An additional subtype w	ill be delivered:
	Code	Name
	VPD	Custody funds
ON AD A OF		
CMDAOF		at: Custody funds with shares and bonds
	An additional subtype w	Name
	VPD	
	LAPD	Custody funds
CMDAOK	Danske Bank comma-se	eparated format: Custody funds with shares and
GIVID/ (GIV	bonds	paracea format. Gostody formas with shares and
	An additional subtype w	ill be delivered:
	Code	Name
	VPD	Custody funds
CMMFAST	Danske Bank fixed form	at: Joint inpayment forms
	An additional subtype w	
	Code	Name
	FIK	Joint Inpayment forms
	-	
CMMKOM	Danske Bank comma-se	eparated format: Joint inpayment forms
	An additional subtype w	
	Code	Name
	FIK	Joint Inpayment forms
CMMSEKT		format: Joint inpayment forms
	An additional subtype w	
	Code	Name
	FIK	Joint Inpayment forms
CMMBG8	Danske Bank giro forma	at: Joint inpayment forms with end-record
CMMBGX	record	at: Joint inpayment forms with an additional knd-
CMKS		eparated format: Balance information
GIVIICO	An additional subtype w	
	Code	Name
	SLI	Balance information
		Dalarios información
CMKSCP	Danske Bank comma-se	eparated format: Balance information including
		er, currency codes, interest balance and booked
	balance	
	An additional subtype w	ill be delivered:
	Code	Name
	SLI	Balance information



CMKSIA		rated format: Balance information including
	external account number, currency codes, interest balance, booked balance, accrued interest and interest date	
	An additional subtype will be	
	Code	Name
	SLI	Balance information
CMKSVA		rated format: Balance information with
	currence codes An additional subtype will be	e delivered:
	Code	Name
	SLI	Balance information
CMKU	Danske Bank comma-separ	rated format: Entries
	An additional subtype will be	
	Code	Name
	PT0	Entries
O14141114		
CMKUVA	Danske Bank comma-separ codes	rated format: Entries including currency
	An additional subtype will be	e delivered:
	Code	Name
	PTO	Entries
CMKV	Danske Bank comma-separ	rated format (non-recurring file orders):
	Entries An additional subtype will be	e delivered:
	Code	Name
	PTO	Entries
CMKVVA	Danaka Pank samma sanan	rated format: (non-recurring file orders):
CIVINVVA	Entries including currency of	
	An additional subtype will be	
	Code	Name
	PTO	Entries
CMKXFST	Danske Bank fixed format: E	Entries for reconsilistion
CIVINAFOI	An additional subtype will be	
	Code	Name
	PTX	Entries for reconciliation
CMKXFVA	Danske Bank fixed format: F	Entries for reconciliation including currency
S.VII.V. V/ V	codes	and the formation moraling correctly
	An additional subtype will be delivered:	
	Code	Name
	PTX	Entries for reconciliation
CMKXKOM	Danske Bank comma-separ	rated format: Entries for reconciliation
	An additional subtype will be	
	Code	Name
	PTX	Entries for reconciliation



CMKXKOX	Danske Bank comma-sepa	arated format: Entries for reconciliation
	including external account	
	An additional subtype will	
	Code	Name
	PTX	Entries for reconciliation
CMKXKVA	Danske Bank comma-sepa	arated format: Entries for reconciliation
	including currency codes	
	An additional subtype will	be delivered:
	Code	Name
	PTX	Entries for reconciliation
CMKXKVX	Danske Bank comma-sepa	arated format: Entries for reconciliation
		number and currency codes
	An additional subtype will	
	Code	Name
	PTX	Entries for reconciliation
CMKXKUX	Danske Bank comma-sepa	arated format: Entries for reconciliation
		number, currency codes and extended advice
	An additional subtype will	
	Code	Name
	PTX	Entries for reconciliation
CMKXSAL	Danske Bank comma-sepa	arated format: Entries for reconciliation
	including balance '	
	An additional subtype will	be delivered:
	Code	Name
	PTX	Entries for reconciliation
CMKXKSX	Danske Bank comma-sepa	arated format: Entries for reconciliation
		number, currency codes, extended advice and
	balance	•
	An additional subtype will	be delivered:
	Code	Name
	PTX	Entries for reconciliation
CMTLF	Danske Bank fixed format:	Forward rate and options transactions
	specified with Contract an	
	An additional subtype will	be delivered:
	Code	Name
	TRM	Forward rate and options transactions
		· · ·
CMTLK	Danske Bank comma-sepa	arated format: Forward rate and options
		h Contract and sub-trade number
	An additional subtype will	
	Code	Name
	TRM	Forward rate and options transactions
	1	



CMTLFF	Danske Bank fixed format	t: Forward rate and options transactions
	specified with Trade num	
	An additional subtype will	
	Code	Name
	TRM	Forward rate and options transactions
CMTLFK		parated format: Forward rate and options
	transactions specified wi	
	Code	Name
	TRM	Forward rate and options transactions
	113341	1 of war a rate and options it ansactions
CMVCLH	Danske Bank fixed format	t: Balances for currency accounts
	An additional subtype will	l be delivered:
	Code	Name
	SLU	Balances for currency accounts
ON 40 (OLL 1) (		
CMVCLHV		t: Balances for currency accounts including
	currency codes An additional subtype will	l he delivered:
	Code	Name
	SLU	Balances for currency accounts
	013	Balances for correling accounts
CMVCLPO	Danske Bank comma-sep	parated format: Balances for currency accounts
	An additional subtype will	l be delivered:
	Code	Name
	SLU	Balances for currency accounts
CMVCLPV	Danske Bank comma-sen	parated format: Balances for currency accounts
GIVIVGLI V	including currency codes	
	An additional subtype will	
	Code	Name
	SLU	Balances for currency accounts
CMVCLP1		parated format: Balances for currency accounts
	including currency codes	
	An additional subtype will	Name
	Code SLU	Balances for currency accounts
	SLU	Dalances for correlicy accounts
COLLACK	Danske Bank comma-separated format: Network receipt	
	An additional subtype will	
	Code	Name
	ACK	An acknowledgement file
CDECCE	Danaka Pankasasasas	appared format. Credit entries
CRECSF	An additional subtype will	parated format: Credit entries
	Code	Name
	KRE	Credit entries
		or care circines



CREEXT96A	EDIFACT 96A (single payme	ent):Credit entries
	An additional subtype will be	
	Code	Name
	KRE	Credit entries
CREM96A	EDIFACT 96A format:	
	An additional subtype will be	e delivered:
	Code	Name
	FIK	Joint inpayment forms
	KRE	Credit entries
		-
CUD	Danske Bank giro format: Lis	
DCRE96A		ish payments with BGMAX summary): Credit
	entries	
	An additional subtype will be	
	Code	Name
	KRE	Credit entries
FF		1.116
EF	Swedish Autogiro format (ne	
	An additional subtype will be	
	Code	Name
	MVI	Mandates via the Internet Bank
ERP	Danske Bank XML-format: 9	STD of Forey Tradec
LIXE	An additional subtype will be	
	Code	Name
	ERP	STP of Forex Trades
		STI GITGI GX TIGGGS
FEEGSC	Corporate Reporting FEE Glo	obal Service Code Report
FILN	Finnish Finvoice format: Reti	rieval of Invoices or Direct Payments.
FINS921	EDIFACT 92-1 format: Acco	
	An additional subtype will be	
	Code	Name
	FIN	Account statement
FINS96A	EDIFACT 96A format: Accou	unt statement
	An additional subtype will be	
	Code	Name
	FIN	Account statement
FINVKS		xchange rates – the European Central Bank's
	buying, selling and average r	
	An additional subtype will be	
	Code	Name
	VKS	Exchange rates
FIDN	Finnish Finysias format: Da-	oiven infe
FIRN	Finnish Finvoice format: Rec	
FIVN	Finnish Finvoice format: Reti	rieval of error messages (ack)



HTMLCRE	Readable format:Credit e	entries	
THINESINE	An additional subtype wil		
	Code	Name	
	KRE	Credit entries	
HTLMDEBA	Readable format: Debit e	ntries	
	An additional subtype wil	Il be delivered:	
	Code	Name	
	DEB	Debit entries	
HTMLFIK	Readable format: Joint In		
	An additional subtype wil		
	Code	Name	
	LDEB	Joint Inpayment forms	
HTMLMFB	Readable format: Status	file	
THIVILIVIED	An additional subtype wil		
	Code	Name	
	MFB	Statusfile	
IBAN	Finnish format: IBAN acc	count numbers converted from BBAN.	
IBK	Danske Bank giro format	t: Giro Inpayments Forms	
IDOCACK	Danske Bank Idoc forma		
	An additional subtype will be delivered:		
	Code Name		
	ACK An ack	nowledgement file	
IKB	Danske Bank giro format: Inpayments with voucher		
IKO IMG-IMAGE		t: Inpayments – personnel welfare dept.	
IIVIG-IIVIAGE	Danske Bank format: Ima	_	
	IMG	Name	
	livid	Images	
IMIN	Danske Bank comma-ser	parated format: International MultiCurrency	
11711114	Interest Netting	sar acea for mac. international widition of a circy	
	An additional subtype wil	ll be delivered:	
	Code	Name	
	IMN	International MultiCurrency Interest	
		Netting	
INC		parated format: Incentive programme	
	An additional subtype wil		
	Code	Name	
	LINC	Incentive programme	
KMHN	Finnish format Informati	ion to KELA about problems within student	
KIVITIN	loans.	on to RELA about problems within student	
KMVN	Finnish format: Claim fro	ım Bank to KELA	
KNR		t: Processing list of customer numbers	
KOMBANSTA		parated format: Status file	
, KOND, WOTA	An additional subtype wil		
	Code	Name	
	Code MFB	Status file	



KOMDEBOVS	Danske Bank comma-s	separated format: List of debtors	
ROWBLESTS	An additional subtype		
	Code	Name	
	DEO	List of debtors	
KOMSTATMED	Danske Bank comma-s	separated format: Status file on collection or	
	debtor amendment		
	An additional subtype	will be delivered:	
	Code	Name	
	PSR	Payment Status Report	
		· ·	
KONTOAF	Norwegian fixed forma	t: Bank reconciliation	
	An additional subtype		
	Code	Name	
	KAF	Bank reconciliation	
KTAFKOM	Norwegian standard co	omma-separated format: Bank reconciliation	
	An additional subtype		
	Code	Name	
	KAF	Bank reconciliation	
KTPSKOM	Norwegian simple com	ma-separated format: Bank reconciliation	
	An additional subtype	will be delivered:	
	Code	Name	
	KAF	Bank reconciliation	
KTO	Danske Bank giro form	at: Processing list account-to-account	
KTON	Finnish format: Accour	nt Statement	
LB	Swedish Leverantörsbetalningar format		
	An additional subtype		
	Code	Name	
	SPE	Payments specification with payment	
		types	
	REC	Reconciliation report	
	ST0	Stopped payments	
	REJ	Rejected payments	
	CAN	Cancellations and date amendments	
LKC		at: Countermanded cheques	
LØN		at: Processing list salary	
MCF	MasterCard Corporate		
MCT	MasterCard Corporate		
MT199	MT199 format Free fo		
		An additional subtype will be delivered:	
	Code Nam		
	REJECTED A fe	edback file (after validation of payment)	
147000	1.470655	6.1.15	
MT900	MT900 format Confir		
	An additional subtype		
	Code Nam		
	BOOKED A fee	edback file (after payment execution)	



MT94	MT940 Finnish file type	format (Standard version) for Danske Bank,	
	Helsinki branch	ermat (etanaara verelen)rer Baneke Bank,	
	An additional subtype wil	il be delivered:	
	Code	Name	
	FIN	Account statement	
MT940SP	MT940 format (SAP ver	sion): Account statement	
14110 1001	An additional subtype wil		
	Code	Name	
	FIN	Account statement	
MT940SW	MTQ/O format (Standar	d vergion): Account statement	
1011340300	MT940 format (Standard version): Account statement An additional subtype will be delivered:		
	Code	Name	
	FIN	Account statement	
MT941SW	MT941 format Balance i	information	
14110 11044	An additional subtype wil		
	Code	Name	
	SLI	Balance information	
MT942SW	MT942 format: Transac	tion Deport	
1011342300	An additional subtype wil		
	Code	Name	
	TRE	Transaction Report	
NODEOGA	EDIE A OT OOA (		
NCRE96A	EDIFACT 96A format (Norwegian payments): Credit entries  An additional subtype will be delivered:		
	Code	Name	
	KRE	Credit entries	
NOKVKSF	Danalia Dankfinad farma	* F	
NUKVKSF	Bank's buying, selling and	at: Exchange rates - the Norwegian National	
	An additional subtype wil		
	Code	Name	
	VKS	Exchange rates	
	VICE	Exertainge rates	
NOKVKSK		parated format: Exchange rates – the Norwegian	
	National Bank's buying, selling and average rates		
	An additional subtype wil		
	Code	Name	
	VKS	Exchange rates	
OTUXML	Readable format: Transfe		
	An additional subtype wil		
	Code	Name	
	OUT	Transfers abroad	
OFUXML	Readable format: Transfe	ers from abroad	
	An additional subtype wil	l be delivered:	
	Code	Name	
	OFU	Transfers from abroad	
OIOXMLCRE	OIOXML format: Creditno		
SIS/ (IVILOI)	1 Cloravi Torrida. Greatin	Using DOD Integration Complete	



OIOXMLINV OTHERDATA  Pass through files  ISO 20022 XML Payment Status Report version 2. Used for both acknowledgement and feedback and is generated as a result of an ncoming ISO 20022 XML pain.001.001.02 CustomerCreditTransferInitiation message  An additional subtype will be delivered:  Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)  Pain.002.001.03  ISO 20022 XML CustomerPaymentStatusReport version 3. Used for both acknowledgement and feedback.  An additional subtype will be delivered:  Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)  SCRE96A  EDIFACT 96A format (Swedish payments): Credit entries		
pain.002.001.02  ISO 20022 XML Payment Status Report version 2. Used for both acknowledgement and feedback and is generated as a result of an ncoming ISO 20022 XML pain.001.001.02 CustomerCreditTransferInitiation message  An additional subtype will be delivered:  Code Name  ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)  ISO 20022 XML CustomerPaymentStatusReport version 3. Used for both acknowledgement and feedback.  An additional subtype will be delivered:  Code Name  ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)		
acknowledgement and feedback and is generated as a result of an ncoming ISO 20022 XML pain.001.001.02 CustomerCreditTransferInitiation message  An additional subtype will be delivered:  Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)  pain.002.001.03  ISO 20022 XML CustomerPaymentStatusReport version 3. Used for both acknowledgement and feedback.  An additional subtype will be delivered: Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)		
ncoming ISO 20022 XML pain.001.001.02 CustomerCreditTransferInitiation message  An additional subtype will be delivered: Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)  pain.002.001.03  ISO 20022 XML CustomerPaymentStatusReport version 3. Used for both acknowledgement and feedback.  An additional subtype will be delivered: Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)		
CustomerCreditTransferInitiation message  An additional subtype will be delivered:  Code Name  ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)  pain.002.001.03  ISO 20022 XML CustomerPaymentStatusReport version 3.  Used for both acknowledgement and feedback.  An additional subtype will be delivered:  Code Name  ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)		
An additional subtype will be delivered:  Code  Name  ACK  An acknowledgement file (after validation of format BOOKED  REJECTED  A feedback file (after payment execution)  REJECTED  A feedback file (after validation of payment)  ISO 20022 XML CustomerPaymentStatusReport version 3.  Used for both acknowledgement and feedback.  An additional subtype will be delivered:  Code  Name  ACK  An acknowledgement file (after validation of format BOOKED  A feedback file (after payment execution)  REJECTED  A feedback file (after validation of payment)		
Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)  ISO 20022 XML CustomerPaymentStatusReport version 3. Used for both acknowledgement and feedback.  An additional subtype will be delivered: Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)		
Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)  ISO 20022 XML CustomerPaymentStatusReport version 3. Used for both acknowledgement and feedback.  An additional subtype will be delivered: Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)		
BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)  ISO 20022 XML CustomerPaymentStatusReport version 3. Used for both acknowledgement and feedback.  An additional subtype will be delivered: Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)		
REJECTED A feedback file (after validation of payment)  pain.002.001.03 ISO 20022 XML CustomerPaymentStatusReport version 3. Used for both acknowledgement and feedback.  An additional subtype will be delivered:  Code Name  ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)		
pain.002.001.03  ISO 20022 XML CustomerPaymentStatusReport version 3. Used for both acknowledgement and feedback.  An additional subtype will be delivered:  Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)		
Used for both acknowledgement and feedback.  An additional subtype will be delivered:  Code Name  ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)		
Used for both acknowledgement and feedback.  An additional subtype will be delivered:  Code Name  ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)		
An additional subtype will be delivered:  Code Name  ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)		
Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)	]	
Code Name ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)	]	
ACK An acknowledgement file (after validation of format BOOKED A feedback file (after payment execution)  REJECTED A feedback file (after validation of payment)		
BOOKED A feedback file (after payment execution) REJECTED A feedback file (after validation of payment)	<u> </u>	
REJECTED A feedback file (after validation of payment)	] }	
SCRE96A   EDIFACT 96A format (Swedish payments): Credit entries		
1 SUKESBA TEDIFAC I SBA TORMAT ISWEDISH DAVMENTSI: Gredit entries		
,,,,		
An additional subtype will be delivered:		
Code Name		
KRE Credit entries		
SEKVKSF Danske Bank fixed format: Exchange rates – the Swedish National Ba	nk'c	
	buying, selling and average rates	
An additional subtype will be delivered:		
Code Name		
VKS Exchange rates		
T Exertaing Faces		
SEKVKSK Danske Bank comma-separated format: Exchange rates - the Swedis	h	
National Bank's buying, selling and average rates		
An additional subtype will be delivered:		
Code Name		
VKS Exchange rates		
SOVN Finnish format: Common Transfer - Customer specific material trans	fers	
to customer; various purposes, no common file structure.		
SWFN Finnish format: SWIFT account statement		
SWMT9X0 MT940 format (old SAP version): Account statement		
An additional subtype will be delivered:		
Code Name		
FIN Account statement		
SWMTSTD MT940 format (old standard version): Account statement		
An additional subtype will be delivered:		
Code Name		
FIN Account statement		
TAPN Finnish format: Account entries(Real time request).		



TITO	Finnish format for DB, Helsinki branch: Basic transaction list		
	An additional subtype will be delivered:		
	Code Name		
	FIN Account statement		
TLPR2	Telepay format: Return advices for processed payments		
	An additional subtype will be delivered:		
	Code Name		
	TLP Return advices for processed		
	payments		
TD1	T-1		
TR1	Telepay format: Acknowledgement Receipt An additional subtype will be delivered:		
	Code Name		
	TR1 Acknowledgement Receipt		
	TK1   Acknowledgement Neceipt		
TRANVOL	Corporate Reporting Transaction Volume Report		
TRRE	Finnish legacy format:		
	- Basic transaction list		
UBLCRE	UBL 2.0 format: Creditnote		
UBLINV	UBL 2.0 format: Invoice		
UBLORS	UBL 2.0 format: Order Response Simple		
UBLREM	UBL 2.0 format: Reminder		
UBLRES	UBL 2.0 format: ApplicationResponse		
ULJN	Finnish format: State officer files from the bank (Ministry of justice).		
UM2N	Finnish format: Feedback on foreign payments		
USEN	Finnish format: Incoming foreign payments (Real time request).		
VAKDK	Danske Bank comma-separated format: Exchange cross rates agai		
	DKK		
	An additional subtype will be delivered:  Code  Name		
	VKK Currence cross rates		
VAKDKD	Danske Bank fixed-separated format: Exchange cross rates against D	KK	
VIIIDIND	An additional subtype will be delivered:	1 (1 (	
	Code Name		
	VKK Currence cross rates		
VAKNO	Danske Bank comma-separated format: Exchange rates – the Danish		
	National Bank's middle rates		
	An additional subtype will be delivered:		
	Code Name		
	VKS Exchange rates		
VALANCE		,	
VAKNOD	Danske Bank fixed format: Exchange rates - the Danish National Bank	(S	
	middle rates		
	An additional subtype will be delivered:  Code  I Name		
	VKS Exchange rates		
VAKUN	Danske Bank fixed format: Exchange rates - Danske Bank's selling rat	es	
V/ (IXCIV	An additional subtype will be delivered:		
	, additional ocotypo vill bo dolivolodi		
	Code Name		
	Code Name		



VAKUS	Danske Bank comma-sei	parated format: Exchange cross rates against	
_	USD		
	An additional subtype wil	ll be delivered:	
	Code	Name	
	VKK	Currence cross rates	
VARI	Daneka Rank comma co	parated format: Currency interest rates on	
VARI	deposits	parateu format. Corrency interestrates on	
	An additional subtype wil	ll be delivered:	
	Code	Name	
	VRS	Currencyinterest rates	
VARU	Daneke Bank comma-sei	parated format: Currency interest rates on loans	
VAILO	An additional subtype wil		
	Code	Name	
	VRS	Currency interest rates	
VARUD		parated format: Currency interest rates on loans	
	An additional subtype wil		
	Code VRS	Name	
	LVR5	Currencyinterest rates	
VKKFST	Danske Bank fixed forma	at: Exchange cross rates with optional counter	
	currency		
	An additional subtype wil	ll be delivered:	
	Code	Name	
	VKK	Currence cross rates	
) # (1 (1 (O) 1			
VKKKOM		parated format: Exchange cross rates with	
	optional counter current An additional subtype wil		
	Code	Name	
	VKK	Currence cross rates	
	VIXIX	Currence cross rates	
VKSFAST	Danske Bank fixed forma	at: Exchange rates	
	An additional subtype wil		
	Code	Name	
	VKS	Exchange rates	
\			
VKSKOM		parated format: Exchange rates	
	An additional subtype wil		
	Code VKS	Name Exchange rates	
	VICO	rycijalike i grep	
VIPN	Finnish format:		
	- Basic transaction list	t	
	- Factoring invoices fo		
VK01	Finnish format: EUR curr	rency rates for DB, Helsinki branch	
VKEN	Finnish format: Exchange		
XMLTITO	Danske Bank XML forma		
	An additional subtype wil		
	Code	Name	
	FIN	Account statement	



## Appendix E: "Real time" files

When executing the DownloadFileList function the list of FileDescriptors returned can contain a mixture of entries that refers to either files available for download or "Real time" files that will be generated upon request (DownloadFile).

An individual FileDescriptor for a file ready for download can look like this:

```
<FileDescriptor>
    <FileReference>1004160005-1004160750</FileReference>
    <TargetId>20100416</TargetId>
    <FileType>pain.002.001.01</FileType>
    <FileTimestamp>2010-04-16T07:50:00</FileTimestamp>
    <Status>NEW</Status>
</FileDescriptor>
```

Users can request real time balances and postings using field FileReference in operation DownloadFile directly. There are three types of requests available. They are described in detail in the sub-sections of this appendix.

TAPN, APSN and USEN can only be requested on accounts held with Danske Bank, whereas CAMT.052 can be requested on all accounts held with Danske Bank Group.

#### TAPN/CAMT.052 - Last 50/200 postings

If there are TAPN-files available - the result from a call to Download FileList will also contain entries like these:

```
<FileDescriptors>
 <FileDescriptor>
  <FileReference>TAPNFI8516344400211864</FileReference>
  <TargetId>20100416</TargetId>
  <ServiceId>FI8516344400211864/ServiceId>
  <FileType>TAPN</FileType>
  <FileTimestamp>2010-04-16T07:50:00</fileTimestamp>
  <Status>NEW</Status>
 </FileDescriptor>
 <FileDescriptor>
  <FileReference>TAPNFI8529141722212410</FileReference>
  <TargetId>20100416</TargetId>
  <ServiceId>FI8529141722212410/ServiceId>
  <FileType>TAPN</FileType>
  <FileTimestamp>2010-04-16T07:50:00</FileTimestamp>
  <Status>NEW</Status>
 </FileDescriptor>
</FileDescriptors>
```



If there are CAMT.052-files available – the result from a call to DownloadFileList will also contain entries like these:

```
<FileDescriptor>
...

<FileDescriptor>
    <FileReference>CAMTFI8516344400211864 (ACC) </FileReference>
    <TargetId>20100416</TargetId>
        <ServiceId>FI8516344400211864</ServiceId>
        <FileType>camt.052.001.02</FileType>
        <FileTimestamp>2010-04-16T07:50:00</FileTimestamp>
        <Status>NEW</Status>
        <SubType>ACC</SubType>

<p
```

The user can request the TAPN for individual accounts. For camt.052.001.02 the user can request for both single accounts and group of accounts. The account numbers must be in either IBAN or BBAN format. The Serviceld contains account-number or name on group of accounts for which the request can be downloaded (informational).

When calling DownloadFile to retrieve the TAPN/CAMT.052 the following tags from the ApplicationRequest has special meaning (see also section 3.3):

Tag	Content	Sample
<pre><serviceid></serviceid></pre>	Format: [P][ddmmyyyy]  If "P" is specified the request will only contain positive amounts – only for TAPN.  If a date is specified it must be the current date. Then the request will only contain posting from today.  Otherwise, the request will contain the last 50 postings (potentially from multiple days) – only for TAPN.  If <serviceid> is omitted – return the last 50 postings for TAPN and the last 200 postings for camt.052.001.03.</serviceid>	<pre> <serviceid>P</serviceid> Return the last 50 positive postings - only for TAPN.  <serviceid>17052010</serviceid> Providing today is May 17<sup>th</sup>, 2010 - return 50 postings from today - only for TAPN.  <serviceid>P24122009<serviceid> Providing today is Dec. 24<sup>th</sup>, 2009 - return 50 positive postings from today - only for TAPN.  </serviceid></serviceid></pre>
<filereferences></filereferences>	Use the content from	Download specific entry for TAPN:



<filereference></filereference>	FileReference entry of the FileDescriptor you receive from DownloadFileList.	<pre><filereferences> <filereference>TAPNFI8529141722212410      </filereference> </filereferences></pre>
		<pre>Download specific entry for CAMT:     <filereferences>     <filereference>CAMTFI8529141722212410 (ACC)          </filereference>          </filereferences></pre>

#### APSN/CAMT.052 Balances

If there are APSN-files available – the result from a call to DownloadFileList will also contain entries like these:

```
<FileDescriptors>
 <FileDescriptor>
  <FileReference>APSN</FileReference>
  <TargetId>20100416</TargetId>
  <FileType>APSN</FileType>
  <FileTimestamp>2010-04-16T07:50:00</FileTimestamp>
  <Status>NEW</Status>
  </FileDescriptor>
  <FileDescriptor>
  <FileReference>APSNFI8516344400211864/FileReference>
  <TargetId>20100416</TargetId>
  <ServiceId>FI8516344400211864
  <FileType>APSN</FileType>
  <FileTimestamp>2010-04-16T07:50:00</fileTimestamp>
  <Status>NEW</Status>
  </FileDescriptor>
  <FileDescriptor>
  <FileReference>APSNFI8529141722212410/FileReference>
   <TargetId>20100416</TargetId>
  <ServiceId>FI8529141722212410/ServiceId>
   <FileType>APSN</FileType>
  <FileTimestamp>2010-04-16T07:50:00</FileTimestamp>
  <Status>NEW</Status>
  </FileDescriptor>
</FileDescriptors>
```



If there are CAMT.052-files available – the result from a call to DownloadFileList will also contain entries like these:

Please notice that the sample above contains two entries on specific account numbers plus one entry with no account number specified. If there are APSN's available for more than one account the caller will also be able to request a APSN without account number specified which will give a combined APSN for all available account numbers.

The user can request the APSN for individual accounts and for camt.052.001.02 the user can request for both individual accounts and group of accounts (group of accounts are maintained in Business Online). The account numbers must be in either IBAN or BBAN format.

When calling DownloadFile to retrieve the APSN/CAMT.052 the following tag from the ApplicationRequest has special meaning [see also section 3.3]:

Tag	Content	Sample
<pre><filereferences> <filereference></filereference></filereferences></pre>	Use the content from FileReference entry of the FileDescriptor you receive from Download FileList.	Download APSN for all connected accounts: <filereferences> <filereference>APSN</filereference> </filereferences> Download APSN specifically for account number  80001999999999999999999999999999999999



### USEN - Incoming foreign payments:

If a USEN file is available - the result from a call to Download FileList will also contain an entry like this:

```
<FileDescriptors>
...

<FileDescriptor>
    <FileReference>USEN</FileReference>
    <TargetId>20100416</TargetId>
    <FileType>USEN</FileType>
    <FileTimestamp>2010-04-16T07:50:00</FileTimestamp>
    <Status>NEW</Status>
    </FileDescriptor>
    ...
</FileDescriptors>
```

When calling DownloadFile to retrieve the USEN the following tag from the ApplicationRequest has special meaning (see also section 3.3):

Tag	Content	Sample
<filereferences></filereferences>	USEN	Download USEN for all connected
.=13 = 6		business ID's:
<filereference></filereference>		<filereferences></filereferences>
		<filereference>USEN</filereference>
		There is no way of downloading USEN for a specific business ID.



## Appendix F: Usage offield Serviceld

Appendix F consists of two parts - DownloadFile and DownloadFileList. Both parts are described.

#### DownloadFile with request of multiple files

When a DownloadFile request contains more than one file to be downloaded the files are concatenated into one big file and sent to the client.

For usage of FileReference in connection with download multiple files - see appendix G.

If the client side wants to have the concatenated files separated the field serviceld can be used to state a separator. When a separator is used, it will be inserted between each file. The default setup is that no separator is used.

There are three predefined separators available - see Appendix H:

S1: 3 line breaks (before next file to be read)

S2: 10 strokes ('----')

S3: File reference

The separator is surrounded by new line characters (CR+LF).

A separator must always be appended to other information that might be used in the Serviceld.

The last two characters in a Serviceld must be the separator



#### DownloadFileList

The below table lists the ServicelD's provided for each filetype. The ServicelD can be used to identify a specific file among many files with the same FileType.

File type string	ServiceID	
AG	Bankgirot no.	
APSN	IBAN no.	
BALR	Account no.	
BANSTA96A	Not provided	
BGCRMO	Bankgirot no.	
BGI	Bankgirot no.	
BGMAX	Account no. or Group of Accounts	
BIL	Customer no.	
DEBADV921	Account no. or Group of accounts	
DEBADV96A	Account no. or Group of accounts	
DEBMUL96A	Account no. or Group of accounts	
camt.052.001.02	Account no. or IBAN no. or Group of accounts	
camt.053.001.02	Account no. or IBAN no. or Group of accounts	
camt.054.001.02	Account no. or ibarreno. or droup or accounts	
Came. OJ4. OO1. OZ	SubType ServiceID	
	FBFOPFI Not provided	
	DCN Account no. or IBAN no. or Group of	
	accounts	
CAP	Account no. or Group of Accounts	
CAPCSV	Account no. or Group of Accounts	
CAPUDD	Account no. or Group of Accounts	
CHD	Not provided	
CHK	Not provided	
CMDPF	Custody account	
CMDPK	Custody account	
CMDAOF	Custody account	
CMDAOK	Custody account	
CMMFAST	Creditor no., Account no. or Group of accounts	
CMMKOM	Creditor no., Account no. or Group of Accounts	
CMMSEKT	Creditor no., Account no. or Group of Accounts	
CMMBG8	Creditor no., Account no. or Group of Accounts	
CMMBGX	Creditor no., Account no. or Group of Accounts	
CMKS	Account no. or Group of Accounts	
CMKSCP	Account no. or Group of Accounts	
CMKSIA	Account no. or Group of Accounts	
CMKSVA	Account no. or Group of Accounts	
CMKU	Account no. or Group of Accounts	
CMKUVA	Account no. or Group of Accounts	
CMKV	Account no. or Group of Accounts	
CMKVVA	Account no. or Group of Accounts	
CMKXFST	Account no. or Group of Accounts	
CMKXFVA	Account no. or Group of Accounts	
CMKXKOM	Account no. or Group of Accounts	
CMKXKOX	Account no. or Group of Accounts	
OL11(VII (OV)	[ / Geodificitio, or aroup of Accounts	



CMKXKVA	Account no. or Gro	up of Accour	nts
CMKXKVX	Account no. or Grou	up of Accour	nts
CMKXKUX	Account no. or Grou	up of Accour	nts
CMKXSAL	Account no. or Grou	up of Accour	nts
CMKXKSX	Account no. or Grou		
CMTLF	Customer no.	•	
CMTLK	Customer no.		
CMTLFF	Customer no.		
CMTLFK	Customer no.		
CMVCLH	Account no. or Grou	up of Accour	nts
CMVCLHV	Account no. or Grou		
CMVCLPO	Account no. or Grou		
CMVCL PV	Account no. or Grou		
CMVCLP1	Account no. or Gro		
COLLACK	Not provided	ор от тогоо.	
CRECSF	Account no. or Gro	up of Accour	nts
CREEXT96A	Account no. or Grou		
CREM9 6A			<del></del>
	SubType		ServiceID
	FIK		Creditor no., Account no. or Group of
			Accounts
	KRE	,	Account no. or Group of Accounts
		•	· .
CUD	Not provided		
DCRE96A	Account no. or Gro	up of Accour	nts
EF	Bankgirot no.		
ERP	Customer no.		
FILN	E-invoice address		
FINS921	Account no. or Grou	up of Accour	nts
FINS96A	Account no. or Grou	Account no. or Group of Accounts	
FINVKS	Group of currencies	S	
FIRN	Creditor no.		
FIVN	E-invoice address		
HTMLCRE	Account no. or Grou	up of Accour	nts
HTLMDEBA	Account no. or Grou	up of Accour	nts
HTMLFIK	Creditor no., Accou	nt no. or Gro	oup of accounts
HTMLMFB	Not provided		·
IBAN	Not provided		
IBK	Not provided		
IDOCACK	Not provided		
IKB	Not provided		
IKO	Not provided		
IMG-IMAGE	Account no. or Gro	up of Accour	nts
IMIN	Account no. or Cus		
INC	Not provided		
KMHN	Batch no. or File name		
KMVN	Batch no. or File name		
KNR	Not provided		
KOMBANSTA	Not provided		
KOMDEBOVS	Creditor no.		
KOMSTATMED	Not provided		
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KONTOAF	Account no., Group of accounts or Company ID
KTAFKOM	Account no., Group of accounts or Company ID
KTPSKOM	Account no., Group of accounts or Company ID
KTON	Account no.
KTO	Not provided
LB	Bankgirot no.
LKC	Not provided
LØN	Not provided
MT94	BIC address and Account no.
MT940SP	BIC address and Account no.
MT940SW	BIC address and Account no.
MT942SW	BIC address and Account no. or Group of Accounts
NCRE96A	Account no. or Group of Accounts
NOKVKSF	Group of currencies
NOKVKSK	Group of currencies
OTUXML	Account no. or Group of Accounts
OFUXML	Account no. or Group of Accounts
OIOXMLCRE	Not provided
OIOXMLINV	Not provided
Pain.002.001.02	Not provided
pain.002.001.03	Not provided
SCRE96A	Account no. or Group of Accounts
SEKVKSF	Group of currencies
SEKVKSK	Group of currencies
SOVN	Batch no. or File name
SWFN	BIC address and Account no.
SWMT9X0	BIC address and Account no.
SWMTSTD	BIC address and Account no.
TAPN	IBAN no.
TITO	Account no or IBAN no.
TLPR2	Company no. or Group of companies
TR1	Not provided
TRRE	Account no.
UBLCRE	Not provided
UBLINV	Not provided
UBLORS	Not provided
UBLREM	Not provided
UBLRES	Not provided
ULJN	Batch no. or File name
UM2N	Not provided
USEN	Not provided
VAKDK	Group of currencies
VAKDKD	Group of currencies
VAKNO	Group of currencies
VAKNOD	Group of currencies
VAKUN	Group of currencies
VAKUS	Group of currencies
VARI	Group of currencies
VARU	Group of currencies
VARUD	Group of currencies



VKKFST	Group of currencies
VKKKOM	Group of currencies
VKSFAST	Group of currencies
VKSKOM	Group of currencies
VIPN	Account no.
VKEN	Not provided
XMLTITO	Account no.



## Appendix G: Usage of field File Reference

This section describes the usage of FileReference in UploadFile and DownloadFile

### UploadFile

If user fills in this with own reference when using operation UploadFile, Danske Bank will put this reference in ParentFileReference (note: only 16 characters available) in operation DownloadFileList when creating feedback files. This enables the customer to see links between payload and response files – e.g. when pain.002 PaymentStatusReport needs to be linked to the pain.001CustomerCreditTransfer. (See description of ParentFileReference of DownLoadFileList).

Only one FileReference can be used in UploadFile.

If FileType is SOVL then a six digit batch number which has to be agreed with Danske Bank, Finland must be filled in when using operation UploadFile.

### DownloadFile

If a client wants to download more than one file using DownloadFile a maximum of 10000 FileReferences is permitted.

For usage of FileReference in connection with "Real-time" files - see appendix E.



# Appendix H: Usage of separators

Separators can only be use in connection with a DownloadFile request of more than one file.

In the examples below are shown a DownloadFile request with 3 file references for balance information (APSN) to be downloaded:

Separator (upper -case sensitive)	Content of the returned file
S1 (3 line breaks)	180001234567890+00000004776978+00000004776978+
	000000047769781112051400+00000000000000EUR
	180001234567891+00000020213753+00000020213753+
	000000202137531112051400+00000000000000USD
	180001234567892+00000000481498+00000000481498+
	00000004814981112051400+00000000000000EUR
S2 (10 strokes '')	180001234567890+00000004776978+00000004776978+
	000000047769781112051400+00000000000000EUR
	180001234567891+00000020213753+00000020213753+
	000000202137531112051400+0000000000000USD
	180001234567892+00000000481498+00000000481498+
	00000004814981112051400+0000000000000EUR



S3 (file reference)	APSNFI9580001234567890
	180001234567890+00000004776978+00000004776978+
	000000047769781112051400+00000000000000EUR
	APSNFI5880001234567891
	180001234567891+00000020213753+00000020213753+
	000000202137531112051400+00000000000000USD
	APSNFI1980001234567892
	180001234567892+00000000481498+00000000481498+
	00000004814981112051400+0000000000000EUR