

Integration with Unitel and Corporate Netbank

General description January 2017

Contents

Introduction	3
1. Advantages of integration with Unitel or Corporate Netbank	4
1.1 Integrated system for outgoing payments	
1.2 Integrated system for incoming payments	
1.3 General advantages of integration with Unitel/CN	6
2. Electronic transmission of payments	7
2.1. Unitel	
2.2 Corporate Netbank	
2.3 Opening hours for payment instructions	7
3. Payment transactions	10
3.1 Indenlandske betalinger [Domestic payments]	
3.2 Udenlandske betalinger [International payments]	
3.3 Særlige betalinger [Special payments]	15
4. Advices	
4.1 Outgoing payments (Only available through Unitel)	
4.2 Incoming payments	
4.3 Account entries	18
5. Glossary	19
Appendices	21
A. Technical manuals for Unitel and Corporate Netbank	
B. Rules relating to the use of text codes and free text for "Indenlandsk bankoverførsel"	
[Domestic transfer]	23
C. Transfer form /Giro payment	
D. Authority in connection with payment instructions	
E. Security: Secrecy, integrity and non-repudiation	27

Introduction

Integration with Unitel and/or Corporate Netbank (abbr. CN) is not simply a matter of transferring data from the customer to Nordea and vice versa. It is also a question of designing a solution that meets and adapts to the customer's business requirements and needs in relation to financial management.

The description is aimed mainly at software suppliers who are about to develop new or enhance existing Danish integrated solutions. However, the description may also be useful for customers wanting to develop integrated solutions themselves or to have further information on the advantages of integrating an ERP system and Unitel/Corporate Netbank.

You can find information about Corporate eGateway at www.nordea.com, Corporate & Institutional, Cash Management, Electronic Channels, Corporate eGateway, if the wish is to develop a Nordic integrated solution.

Before new or further development is deployed it is imminent that Implementation & Customer Support is contacted. In order to receive information about planed changes in payment types, formats and/or security concepts.

Further information on integrated payments transfer may be obtained from:

Cash Management Implementation & Customer Support

E-mail: integration@nordea.dk

Implementation & Customer Supports services are directed primarily towards software suppliers. Please contact your Nordea contact person if you are a customer with Nordea and would like further information regarding transmission of payments.

1. Advantages of integration with Unitel or Corporate

Netbank

Integration with Unitel and/or CN is based on the following main principles:

- Reusing data
- Optimising work routines

The main principles are described in further detail below. The discussion is based on an integrated system for outgoing and incoming payments, respectively.

1.1 Integrated system for outgoing payments

Outgoing payments include a customer's or a company's payments to creditors, for instance suppliers and public authorities, or payment of wages and salaries to the company's employees. Such payments may be recurrent or non-recurrent.

An integrated system for outgoing payments should follow the principles outlined below:

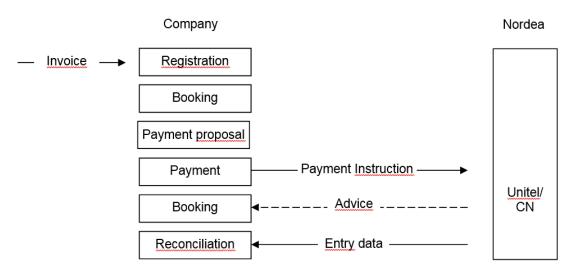


Figure 1.1: Integrated solution, outgoing payments

For the customer, the advantages of an integrated system for outgoing payments are:

- Manual payments, for instance cheques, can be abolished or reduced
- Booking of outgoing payments can be automated
- Reconciliation of bank accounts can be automated
- Punctual payments can be planned more smoothly
- Errors and mistakes could be avoided or substantially reduced.

Notice, Payment advice as a file is currently only available for payments created via Unitel and not for payments created via CN. Payments created via CN have online validation. Entry data can be downloaded.

1.2 Integrated system for incoming payments

Incoming payments include payments to a company from various debtors, typically the company's customers. The integration of incoming payments with Unitel/CN is presently based on the use of advices from transfer forms and/or bank transfers.

An integrated system for incoming payments should follow the principles outlined below:

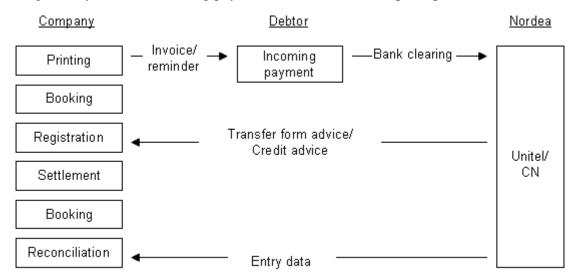


Figure 1.2: Integrated solution, incoming payments

For the customer, the advantages of an integrated system for incoming payments are:

- Booking of incoming payments can be automated
- Set-off/reconciliation of accounts receivable can be automated
- Reminder procedures can be automated
- Reconciliation of bank accounts can be automated.

Notice, Credit advices on domestic bank transfers are currently only available in CN as a file in connection with entry data, and advices on incoming international payments are only available online.

1.3 General advantages of integration with Unitel/CN

A solution integrating the ERP system of the company and Unitel/CN may provide the customer with the following general advantages:

- Administrative advantages in the form of reduced consumption of resources for:
 - preparation of manual payments
 - booking of incoming and outgoing payments
 - reconciliation of accounts receivable and payable
 - reconciliation of bank accounts
 - printing of reminders
- Minimising input errors by reusing data
- Prompt procedures and a more efficient flow of business activities
- Focus on solving problems instead of control.

Thus, the main advantage of integration is the reuse of already accessible data from other administrative processes in the company, which creates an opportunity for rationalising and enhancing efficiency.

2. Electronic transmission of payments

2.1. Unitel

Unitel EDI does not have a user interface for the customer. A *Unitel EDI* solution involves the exchange of data directly between the customer's ERP system and Nordea. In this respect Unitel EDI is solely a file or document exchange program that may be more accurately described as an electronic mailbox between a number of in- and outboxes.

However, it is important to maintain the distinction between user interface and file exchange interface. Several versions of user interfaces may consequently communicate with the same file exchange program, *Unitel EDI*. When Unitel EDI and a ERP system are integrated, the user interface will be in the ERP system.

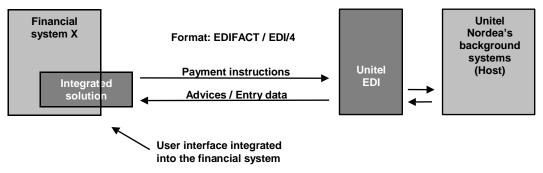


Figure 2.1: Illustration of principle, Unitel EDI

Figure 2.1 illustrates the basic principle of *Unitel EDI*. The customer's ERP-system is found on the left-hand side of the figure. The customer places his instructions in the mailbox, *Unitel EDI*, at the centre. The instructions will be picked up and dealt with by the Nordea applications listed in the right-hand side of the figure. Various forms of data sets for the customer will then be generated by the applications and delivered to the mailbox. Next, the customer may retrieve the data by connecting to *Unitel EDI*. The arrows indicate the data flow direction and whether a delivery system uses unidirectional or bi-directional communication.

Communication with Unitel EDI is described a number of technical manuals, see Appendix A.

2.2 Corporate Netbank

Corporate Netbank is Nordea's banking solution for corporate customers, designed to meet the diverse requirements of all corporate customers internationally. It is a secure, powerful and user-friendly tool for enabling access to a large variety of banking services.

The user can key in payment instructions and/or import payment files from the ERP system. The payments are confirmed online. Through File transfer service can Transfer form advices and Account statements with or without incoming domestic bank transfers be downloaded.

2.3 Opening hours for payment instructions

Payment instructions must be delivered within the opening hours of Unitel as described in the table below, with an execution date **for a future period of 12 months (Unitel)** or **a future period of 360 days (CN)**. For each payment type, a cut-off time has been established, that is the latest time at which a payment instruction should be received if it is to be effected on that same day. Cut-off times are listed in the annex *Payments via Unitel* and *Corporate Netbank, Tariffs and cut-off times for payments effected in Denmark*.

Via	Opening hours
Unitel for PC	24/7
Unitel EDI	24/7 However, payment instructions are only processed between 6.00 – 17.00 on Danish banking days, see below *
Corporate Netbank	24/7

Figure 2.3: Unitel opening hours

* Payment instructions will be stored temporarily in Unitel EDI. In the period 6.00 - 17.00 on Danish banking days payment instructions are retrieved from Unitel EDI every ten minutes for processing in the Unitel system. Reply files will only be created within this period.

Data from Unitel are available for retrieval in *Unitel EDI* as stated below:

Data type	Accessible in Unitel EDI not later than	
Receipt message Used to acknowledge receipt of data in Unitel EDI	Immediately upon receipt of data from the customer, for instance payment instructions.	
Status message Used to acknowledge receipt of payment instructions in Unitel EDI with statement of validation result in Unitel	Approx. 5-10 minutes after Unitel has received data from Unitel EDI. Example: Payment instruction delivered at 9.59 to Unitel EDI. At 10.05, the status message may be expected to be in the customer's mailbox.	
Error message Specification of erroneous payment instruction	Concurrently with the status message, that is 5- 10 minutes after Unitel has received data from Unitel EDI. However, an error message is only delivered if a delivery contains erroneous payment instruction.	
Payment advice Notification to the remitter of payments made and serves as a receipt for payment requests	Effected payments: From 6.00 on the day following the day on which payment was effected. Payment requests: From 6.00 on the day following the day on which the payment instruction was received.	
Advice regarding incoming payments with transfer forms Message to the beneficiary regarding incoming payments made by means of transfer forms	After 8.00 on the day for which the advice was ordered. If daily advice has been requested, the advice may be retrieved after 8.00 on all business days. In this case, the date of advice is the same as the bookkeeping date.	
Credit advices, domestic bank transfers Message to the beneficiary regarding incoming payments made by means of domestic bank transfers	Advises are generated when the transfers are available to Nordea, and are accessible after 5.30, 6.30, 8.00, 11.00 and 16.00.	
Credit advices, international bank transfers	Advises are generated when the transfers are	
Message to the beneficiary regarding incoming payments made by means of international bank transfers	available to Nordea, and are accessible after 5.30, 6.30, 8.00, 11.00 and 16.00.	
Entry data Electronic bank statement	After 6.00 on the day following the day for which the Entry data was ordered. Entry data may be delivered on a daily or weekly basis.	
Custody account data <i>Electronic statement of holdings</i>	Danish holdings: Daily after 6.00 Foreign holdings: Daily after 10.00	

Figure 2.4: Data delivery times in Unitel EDI

3. Payment transactions

Unitel and CN are basically capable of handling a number of domestic and international payment types that are all described below. In addition to this, Unitel/CN may handle various special payment types, which require a specific agreement to this effect between the customer and Nordea. These payment types are described briefly in the section on special payments.

Information about cut-off times, transaction charges and value rules are specified in the customer tariffs *Payments via Unitel* and *Corporate Netbank, Tariffs and cut-off times for payments effected in Denmark.*

In addition to the description of each payment type, a record identification is stated which refers to the three different data formats that may be used in connection with integration with *Unitel EDI* and *CN*:

- *EDI*/4. The format is used in connection with direct integration with *Unitel EDI* and in connection with integration with *CN*
- UTF. Comma-delimited format used in connection with integration with CN
- EDIFACT. The format is used only for direct integration with Unitel EDI

The formats are described in further detail in three separate format descriptions, see Appendix A.

3.1 Indenlandske betalinger [Domestic payments]

Indenlandsk bankoverførsel [Domestic transfer¹]:

Record id:	EDI/4: UTF: EDIFACT:	UBT04500 45 IBB UKA and IBB UUA
Usage:	third party wl	nsfer in DKK between own accounts within Nordea, or to a no has an account with Nordea or another bank. The transfer for all purposes, for instance transfer of salary or creditor
Advice:	beneficiary m the benefician	with a transfer to a third party, an optional message to the may be attached. The message may be either a brief text on ry's bank statement or a combination of a brief text and a l specific message.
		ary may be notified of the payment in that the beneficiary's ward a letter with the message to the beneficiary.
	identification	nount is to be transferred to a third party, the beneficiary's of the remitter (for instance a customer number) as well as a primary document (for instance an invoice number) may pecial fields.
	messages exc	apply to the combination of text codes and optional seeding 20 characters. The options available for the f the advice depend on the remitter's selection of:

¹ A domestic transfer is a form of "multi-payment type". Depending on the wishes of the remitter as regards size of the advice to the beneficiary, the payment from Nordea to the beneficiary's bank will be effected as different payment types. Accordingly, the payment may be in the form of a "Kontooverførsel i Nordea" [Account transfer in Nordea], "Bankoverførsel med meddelelse" [Transfer with advice].

These payment types will appear from the customer tariffs for payments.

text code
 reference to primary document
 creditor's identification of debtor
 The rules for combining text codes and optional messages, including text codes for salary and pension transfers, are described in Appendix B.
 Notice, CN only supports text codes for salary and pensions and that brief advice is optional for all domestic bank transfers.
 Batch entry record: The payment type may handle batch entries, which means that all transfers with the same execution date and the same bunch number will be debited to the remitter's account as one total amount. Special rule for CN: The transfers should be imported and confirmed together in order to be executed as a batch entry.

Same-day credit transfer

Record id.:	EDIFACT: IBB DK1
Usage:	Same-day credit transfer looks like Domestic transfer in DKK between own accounts within Nordea, or to a third party who has an account with Nordea or another bank. The transfer will be at the beneficiaries account the same day as the amount is debited the remitter's account, if the payment instruction is received before cut-off in Nordea.
Advice:	In connection with a transfer to a third party, an optional message to the beneficiary may be attached. The message may be either a brief text on the beneficiary's bank statement or a combination of a brief text and a more detailed specific message.
	The beneficiary may be notified of the payment in that the beneficiary's bank may forward a letter with the message to the beneficiary. Where the amount is to be transferred to a third party, the beneficiary's identification of the remitter (for instance a customer number) as well as a reference to a primary document (for instance an invoice number) may be stated in special fields.
Batch entry record:	The payment type may handle batch entries, which means that all transfers with the same execution date code and the same bunch number will be debited to the remitter's account as one total amount. The batch entry is only allowed to contain this payment type.
Indbetalingskort/G	irobetaling [Transfer form/Giro payment]:

Record ID:	EDI/4:	UBT04600
	UTF:	46
	EDIFACT:	IBK A01, A04, A15, A71, A73, A75
Usage:		third party where the beneficiary has issued a transfer form er form as basis for the payment.

Advice:	Depending on the form type either the payment id (payment reference) or a message to the beneficiary must be entered.
	Appendix C specifies the use of form types, payment id and message fields in connection with form-based payment media.
Batch entry record:	The payment type may handle batch entries which means that all transfers with the same execution date and the same bunch number will be debited to the remitter's account as one total amount. Special rule for CN: The transfers must have been imported and confirmed together in order to be executed as a batch entry.

Check til Danmark [Domestic cheque]:

Record ID:	EDI/4: UTF: EDIFACT:	UBT04700 47 26 DFA, 26 DFM
Usage:		third party where other forms of payment may not be used beneficiary requires payment by means of a cheque.
Special conditions:	1.	type generates a bank cheque which will be sent directly to the beneficiary or to the remitter where required.
		s opposed to an ordinary cheque, a bank cheque is debited is made and that it is irrevocable.

Valutakontooverførsel mellem konti i Nordea [Currency transfers between accounts with Nordea]:

Record ID:	EDI/4: UTF: EDIFACT:	UBT05600 56 IBB VAL
Usage:		veen own foreign currency accounts with Nordea or to a ith a foreign currency account with Nordea.
Special conditions:		may use 4 lines of 35 characters each for a message ne payment. The transfer may be carried out with or without currency.

3.2 Udenlandske betalinger [International payments]

International payment types may also be used to transfer currency to another Danish bank.

The combination possibilities for the individual fields are described in the different file descriptions and in the factsheets *International payments via Unitel - General information* and *International payments - Account number structure* at <u>www.nordea.dk</u>.

Standardoverførsel [Ordinary transfer]:

Record ID:	EDI/4: UTF: EDIFACT:	UBT04900 49 UBB ALO
Usage:	Ordinary tran	third party who has an account with a foreign bank. asfer is the less expensive type of international payment but the longest transfer time.
Advice:	The remitter may use 4 lines of 35 characters each for a message to the beneficiary.	
Special conditions:	international bank. In the e beneficiary's corresponden	network of correspondent banks, most of Nordea's transfers may be transmitted directly to the beneficiary's event that Nordea does not cooperate directly with the bank, the transfer will be carried out via a local at bank. In the latter case, the payment advice to the hay be slightly delayed.
	•	sfers containing information accordingly to conditions for Transfer, EU Payment or Nordea Payment will be executed

Ekspresoverførsel [Express transfer]:

Record ID:	EDI/4: UTF: EDIFACT:	UBT05000 50 UBB - EXP
Usage:	is considerable customers tra	same purposes as an ordinary transfer, but the transfer time ly shorter. An express transfer is thus mainly aimed at nsferring large amounts where the transfer time or the advantage is important.
Advice:	The remitter beneficiary.	may use 4 lines of 35 characters each for a message to the
Special conditions:	international bank. In the e beneficiary's corresponden	network of correspondent banks, most of Nordea's transfers may be transmitted directly to the beneficiary's event that Nordea does not cooperate directly with the bank, the transfer will be carried out via a local t bank. In the latter case, the payment advice to the hay be slightly delayed.

Koncernoverførsel til udenlandsk pengeinstitut [Intercompany transfer to foreign bank]:

Record ID:	EDI/4:	UBT05100
	UTF:	51
	EDIFACT:	UBB KON
Usage:		n a group's account with Nordea DK to the same group's a foreign bank.
Advice:	The remitter beneficiary.	may use 4 lines of 35 characters each for a message to the

Nordea Intercompany Payment:

Record ID:	EDI/4: UTF: EDIFACT:	UBT05200 52 UBB NOR	
Usage:	Transfer from a group's accounts with Nordea DK to the same group's accounts with Nordea's other units.		
Advice:	The remitter may use 4 lines of 35 characters each for a message to the beneficiary.		
Special conditions:	The transfer can be carried out with or without currency conversion.		
Check til udlandet	[Foreign che	que]:	
Record ID:	EDI/4: UTF: EDIFACT:	UBT05400 54 23 DFA, 23 DFM	
Usage:	Transfer to a third party where other types of payment may not be used, for instance where the beneficiary's foreign bank is unknown.		
Advice:	The remitter may use 4 lines of 35 characters each for a message to the beneficiary.		
Special conditions:	The payment type generates a bank cheque which will be sent directly from Nordea to the beneficiary or to the remitter where required.		

Notice, that as opposed to an ordinary cheque, a bank cheque is debited at the time it is made and that it is irrevocable.

3.3 Særlige betalinger [Special payments]

Apart from the payment types described in sections 3.1 and 3.2, there are a few payment types that require a special agreement between Nordea and the customer before payments can be executed. Unless the correct agreement has been made between Nordea and the customer, a payment instruction of this type will be rejected.

Below is a description of the special payment types according to the structure used above in connection with the ordinary types of payment. Information about charges, value and cut-off time will be specifically agreed on between the parties.

Koncernoverførsel [Intragroup transfer]:

Record ID:	EDI/4: UTF: EDIFACT:	UBT05500 55 IBB NAT
Advice:	It is not possi	ible to attach an advice to the transfer.
Usage:	banks. The tr without loss	nsfer between a group's accounts with a number of Danish ransfer may be carried out through the Danish National Bank of value for amounts exceeding DKK 5 million when both ry bank and the remitting bank are notified of the transfer in

Request for Transfer:

Record ID:	EDI/4: UTF: EDIFACT:	UBT04300 43 MTA + specially agreed code
Usage:	Request for payment from an account with a foreign bank. The bank may be either another unit of Nordea or another bank. Request for Transfer may be used to draw funds back from accounts abroad and for requesting domestic and international transfers from the account in the country in question.	
	For instance a customer may use Request for Transfer to pay his creditors in Germany by requesting domestic (German) transfers from his account with Nordea Germany. See the instructions <i>How to enter a Request for transfer</i> at www.nordea.dk. The instructions also contain information on which transfer types can be used in each country and on the content in the message fields.	
Corporate Netbank	Baltics import Transfer, tho	Fransfer's from accounts with Nordea FI, NO, SE and the rted into CN are executed as the payment type Request for ugh manually keyed in payments in CN from the same executed as local payments.

4. Advices

Nordea delivers several kinds of advice in relation to payment handling. The types of advice described are delivered electronically. This ensures that data may be reused in various automated reconciliation routines in the company's own ERP system as described briefly in section 1. Applications for the individual types of advice are furthermore described.

A few paper-based types of advice are also described. These types of advice may not be used in connection with integrated payment transmission, but they have been included in the description in order to give a complete overview of the flow of payments and advices.

4.1 Outgoing payments (Only available through Unitel)

Types and sizes of advice:

Advice in relation to outgoing payments may be divided into three types:

- *Payment requests.* Only supplied for payments where the execution date is later than the request date. Thus, the advice is a confirmation of the customer's payment instruction.
- *Effected payments*. The advice is a receipt confirming that the requested payment has been carried out.
- *Cancelled payments*. The advice serves as confirmation that the requested payment has been cancelled. Payments may only be cancelled via Unitel Online.

Advice of domestic outgoing payments may only be transferred electronically. Advice of international payments may be made on paper as well as electronically.

The format descriptions contain a more detailed description of the contents of a long or brief advice. See Appendix A for further details.

Applications for advice concerning outgoing payments:

Advice of outgoing payments may be used in several ways; as part of the accounting basis and as part of the basis for reconciliation. In connection with international payments, the advice relating to an outgoing payment is particularly interesting as the exchange rate for the currency appears from the advice. The difference may be calculated and entered on this basis.

In many ERP systems, an outgoing payment will be booked at the time at which the payment proposal is approved, that is before a payment advice has been returned from Nordea. In this event, the advice of an outgoing payment will only serve as a basis for reconciliation and for accounting for exchange rate differences in connection with international payments. The disadvantage of using this method, however, is that the overview of the company's cash flow becomes less clear.

By using advice actively in the ERP system in connection with an outgoing payment it becomes easier to get a general idea of the company's cash flow situation.

4.2 Incoming payments

Advice concerning domestic and international incoming payments depends on the type of payment selected by the remitter of the transfer:

Bank transfer with advice	The advice appears from the beneficiary's bank statement in the form of a text of no more than 20 characters and information on the number contained in a separate message including further advice. This message will be forwarded by post, no later than in connection with the forwarding of the next bank statement. Advices can also be delivered electronically via Unitel (Entry data and/or credit advices) or via CN (Account statement ver. 3 DK).
Transfer form	The advice may be delivered either on the beneficiary's bank statement or as a separate advice. If a separate advice is selected, several incoming payments with the same execution date will appear as a batch entry on the beneficiary's bank statement. Among other things, the separate advice includes information on debtor identification, payment date, credit value and any charge amount as stated by the beneficiary on the transfer form. Separate advice is delivered either on paper or electronically via Unitel or CN.
Incoming international Payments	The advice is forwarded by post, when the amount is available for Nordea, irrespective of which payment type the remitter used. Any message attached to the payment will appear from the advice. Advices can also be delivered electronically via Unitel EDI.

See appendix B for further information.

Reversal of transfer form advices:

When advices of incoming payments by means of transfer forms are given electronically consequently, reversals are also advised electronically.

On rare occasions an advice of an incoming payment may by mistake be remitted several times or a payment may be erroneous. Nordea will therefore reverse the payment in question and issue an advice of the reversal electronically.

For additional information on the fields and codes used, see the file descriptions *Transfer form advice* and *EDI CREMUL*.

It should be ensured that the ERP system is able to handle advice of reversals in order to enable automated booking and corrections, if required.

4.3 Account entries

In addition to the advice used purely in relation to incoming and outgoing payments, entries on specific accounts may be delivered electronically to the customer. Information for the customer is actually identical to the information available in an ordinary paper-based bank statement. Entry data may thus be considered an electronic bank statement.

Possible application of Entry data:

Entry data may be used for various reconciliation routines. The following example illustrates actual reconciliation on the basis of Entry data:

- Reconciliation of outgoing payments carried out via Unitel/CN
- Reconciliation of paid cheques
- Reconciliation of sales via "Dankort" card terminals
- General reconciliation of entries and balances in bank accounts

In *CN* Account Statement ver 2 DK and Account Statement ver 3 DK, including advice on incoming domestic bank transfers, are available via File transfer service. In *Unitel EDI* Entry data the following types of deliveries are available: All messages, cheques cashed only or "Dankort" creditor transaction information only.

Reconciliation of payments made via Unitel/CN

A so-called own reference selected by the customer may be stated on the payment instruction transmitted to *Unitel EDI* or imported in *CN*. The reference may be for instance a creditor number.

The customer receives his account entries electronically. The own reference will appear from this data set and a search for outstanding outgoing payments may subsequently be carried out and the entries closed.

5. Glossary

Advice	A message. It may be a message regarding the receipt of a payment amount with statement of the remitter's name or any other kind of debtor identification.
Approval of a payment instruction	The approval of a payment instruction may be compared to the signature on a cheque. Those who approve (sign) must have the necessary authority for the approval to be valid and the payment instruction to be effected
Authority (Unitel)	 A payment instruction will be accepted and effected by Nordea if it has been approved in one of the following ways: with one S code with two different A codes with one A code and one B code.
Availability day	The day on which the funds are available to the beneficiary without any loss of interest.
BBAN	B asic B ank Account Number. The BBAN is the local format for an account number. Nordea DK BBAN consists of 14 digits (4 digits sorting code and 10 digits account number.
Clearing	Set-off of outstanding amounts among banks via the banks' accounts with the Danish Central Bank.
<i>Confirm a payment</i> <i>instruction</i>	CN terminology for approval of payment instructions.
Correspondent bank	Foreign bank with which Nordea has an account.
Credit account	An account into which an amount is to be paid.
Crediting	When an account with a bank is credited, an amount is paid into the account.
Creditor's identification of the debtor	Reference available in "Indenlandsk bankoverførsel" [Domestic transfer]. The reference will typically be a customer number.
Currency account	An account in Nordea DK held in another currency than DKK, e.g. EUR.
Debit account	The account from which an amount is to be withdrawn.
Debiting	When an amount is debited on an account with a bank, the amount is actually deducted from the account.
DES/MAC	Data Encryption Standard/Message Authentication Code. The security routine is primarily based on the DES algorithm for encryption of messages and calculation of the MAC value.
EDI	Electronic Data Interchange. Transfer of data structured according to jointly accepted standards. Furthermore the name of Nordea' own format used for exchanging data with <i>Unitel EDI</i> and for import of payments into <i>CN</i> .
EDIFACT	Electronic Data Interchange for Administration, Commerce and
	Transport. Syntax for electronic data exchange defined under the auspices of the UN.

IBAN	International Bank Account Number. The IBAN is an expansion of the existing account number to which a country code and two check digits have been added. The IBAN is used instead of the usual account number.
Modulus control	Clarifying control in which an extra control digit is added to a number. The extra digit has been calculated on the basis of the other digits in the number by means of an algorithm.
Payment instruction	A payment instruction may be defined as an order sent from a remitter to Nordea requesting Nordea to pay a beneficiary a certain amount.
Personal code (Unitel)	The personal code is a 6-digit code selected by the owner. The code is registered in the systems of the bank and may be used in connection with approval of payment instructions as well as for obtaining direct access to the bank's systems. The owner is obliged to keep his code secret and to take reasonable precautions to ensure that it remains secret.
<i>Reference to primary document</i>	Reference available in "Indenlandsk bankoverførsel" [Domestic transfer]. The primary document will typically be an invoice.
SEPA	Single Euro Payments Area. The Single Euro Payments Area consists of 27 EU member states, three EEA countries (Norway, Iceland and Liechtenstein) and Switzerland.
SEPA Credit Transfer	A SEPA Credit Transfer is a transfer of funds complying with the SEPA credit transfer standards and rules. The identification data of customers and their bank consist of the IBAN and the BIC. Payments have to be in EUR and charges shared between remitter and beneficiary.
UTF	UniTel Format. Comma-delimited file format for import of payments into <i>CN</i> .
Value	The date on which an amount is included in the calculation of interest for an account.
VANS	Value Added Network Service also called a service network. A data network which in addition to data transmission offers information searching, network management, access to data power and electronic mail etc.

Appendices

A. Technical manuals for Unitel and Corporate Netbank

A number of technical manuals are available in connection with the development of an integrated solution for Nordea's products. Most of these manuals can be downloaded from Nordea's website on www.nordea.dk and the remaining can be obtained from Implementation & Customer Support.

The table below includes a list of all technical manuals. The list is represented in the form of flowcharts with solutions for outgoing payments as well as incoming payments/advices.

Functionality and contents		
Manual	Usage	
Integration with Unitel and Corporate Netbank General description	General manual for integration with <i>Unitel</i> and <i>CN</i> . (This manual) Description of payment and advice types	

Record formats and technical specifications		
Manual Usage		
Corporate Netbank and Unitel Payments in EDI/4 format	Format for importing of payment instructions Integration with <i>CN</i> and <i>Unitel for PC</i> Format for upload of payment instructions Integration with <i>Unitel EDI</i>	
Unitel Payment advices in EDI/4 format	Format for download of/exporting payment advices (EDI/4 format) Integration with <i>Unitel EDI</i> and <i>Unitel for PC</i>	
Corporate Netbank and Unitel for PC Comma-delimited format for payments	Format for importing payment instructions (comma-delimited) Integration with <i>CN</i> and <i>Unitel for PC</i>	
Unitel EDI PAYMUL	Format for upload of payment instructions (EDIFACT format) Format for download of payment advice (EDIFACT format) Appendix to the guidelines published by the Danish Bankers Association on payment advices (Finansrådets vejledning for betalingsmeddelelser) in EDIFACT (version 4) Integration with <i>Unitel EDI</i>	
Indbetalingskort Blankethåndbog for fremstilling	Technical specifications for creation of transfer forms Only available in Danish	
Unitel for PC Transfer form advice	Format for exporting transfer form advice (PBS, Danske Bank and BG Bank formats) Integration with <i>Unitel for PC</i>	
Corporate Netbank Transfer form advice	Format for download of transfer form advice (PBS format) Integration with <i>CN</i>	
Unitel EDI Transfer form advice	Format for download of transfer form advice (PBS format) Integration with <i>Unitel EDI</i>	
Unitel for PC Entry data format	Format for exporting account entries (comma-delimited format) Integration with <i>Unitel for PC</i>	

Record formats and technical specifications		
Corporate Netbank	Format for download of account entries (comma-delimited format)	
Account Statement DK ver 2 & 3	Integration with <i>CN</i>	
Unitel EDI	Format for download of account entries (Nordea format)	
Entry data format	Integration with <i>Unitel EDI</i>	
Corporate Netbank	Format for download of account entries (SWIFT format)	
MT940	Integration with <i>CN</i>	
Unitel EDI	Format for download of account entries (SWIFT format)	
MT940	Integration with <i>Unitel EDI</i>	
Unitel EDI	Format for download of custody-account information (Nordea format) <i>Only available in Danish</i>	
Depotdata	Integration with <i>Unitel EDI</i>	
Unitel for PC Credit advice for domestic account-to-account transfers	Format for exporting of credit advice (comma-delimited format) Integration with <i>Unitel for PC</i>	
Unitel EDI FINSTA	Entry data format for account entries (EDIFACT-format) Appendix to the guidelines published by the Danish Bankers Association on payment advices (Finansrådets vejledning for betalingsmeddelelser) in EDIFACT (version 4) Integration with <i>Unitel EDI</i>	
Unitel EDI CREMUL	Format for download of transfer form advice, credit advice on domestic account-to-account transfers and credit advice on international bank transfers Appendix to the guidelines published by the Danish Bankers Association on payment advices (Finansrådets vejledning for betalingsmeddelelser) in EDIFACT (version 4) Integration with <i>Unitel EDI</i>	

Implementation of security and/or communication		
Manual	Usage	
Unitel EDI Security and Transport Module (ESTM)	Installation manual and commands for the EDI Security and Transport module (ESTM) (payments and download files in EDI/4 and EDIFACT format).	
Unitel EDI Sikkerhed i Unitel EDI	Fact sheet about Security in <i>Unitel EDI. Only available in Danish.</i>	
Unikrypt/MVS	Installation manual and commands for UNIKRYPT/MVS Integration with <i>Unitel EDI</i> from MVS platforms (payments in EDIFACT format). <i>Only available in Danish.</i>	
Unitel EDI Implementation manual for mainframes	Implementation manual for integration with <i>Unitel EDI.</i> Only available in Danish. Can be obtained from Implementation & Customer Support.	

Test manual	Usage
Integration with Unitel	Test guidelines, Test data. Integration with all Unitel products.
Test manual	Can be obtained from Implementation & Customer Support.

B. Rules relating to the use of text codes and free text for "Indenlandsk bankoverførsel" [Domestic transfer]

If a customer wants to transfer an amount to another Danish bank account, the payment type Domestic transfer should be used.

Nordea will execute the payment either as a Transfer between accounts within Nordea, Transfer with advice or a Transfer with express advice, depending on the customer's selection of:

- Beneficiary's account
- Text code
- Message to the beneficiary
- Reference to primary document and creditor's identification of debtor
- Express advice

Туре	Unitel name	Corporate Netbank name
Kontooverførsler indenfor Nordea [Transfer between accounts within Nordea]	Indenlandsk bankoverførsel [Domestic transfer]	Bank Transfer
Bankoverførsel med meddelelse [Transfer with advice]		

As the payment is executed as one of three possible payment types, each of which has a specific functionality, certain restrictions apply to the use of text codes, free text etc. The table below shows the rules applying to the usage of text codes and free text etc, depending on the type of payment used for creating the payment. *Please note that the table continues on the next pages*.

Functionality	Transfer between accounts within Nordea	Bank transfer with advice	
Express advice option available	No	No	
Message to beneficiary as free text	41 lines of 35 characters	41 lines of 35 characters	
Specifying an alternative remitter	Unitel: Yes, but lines used will not be available for free text CN: Use of alternative remitter does not limit the number of available lines for free text	Unitel: Yes, but lines used will not be available for free text CN: Use of alternative remitter does not limit the number of available lines for free text	
Batch entry record option	Yes	Yes	
Using a free text on text code line of beneficiary's bank statement	Yes	Yes	
Using a text code	May be used	Mandatory in Unitel	

Functionality	Transfer between accounts within Nordea	Bank transfer with advice	
Specifying a reference to the primary document	Yes	Yes	
Specifying the creditor's identification of the debtor	Yes	Yes	
Text codes for transfer of salaries and pensions *	099 Løn * [Wages and salaries] 103 Pension * [Pension] 156 Lønoverførsel * [Transfer of wages and salaries] 157 14 dages løn * [Fortnightly salary]	099 Løn * [Wages and salaries] 103 Pension * [Pension] 156 Lønoverførsel * [Transfer of wages and salaries] 157 14 dages løn * [Fortnightly salary]	
Other accessible text codes CN: Does not support other text codes than the text codes for salaries and pensions. All other text codes will be renamed to "Overførsel" [Transfer]	008 Opgjort konto* [Closed account] 018 Omkostninger [Costs and expenses] 035 Husleje [Rent] 068 Overførsel [Transfer] 086 Tilbageførsel [Reversal] 100 [Fri tekst] [Free text] 102 Info-overførsel [Info transfer] 139 Klientkontomidler [Client account funds] 145 Tilskud [Grants and subsidies] 158 Indbetaling [Incoming payment] 159 Regning [Bill] 160 Faktura [Invoice] 161 Kontingent [Membership fee] 163 Udbytte [Dividend] 307 Udlæg [Disbursements]	008 Opgjort konto* [Closed account] 018 Omkostninger [Costs and expenses] 035 Husleje [Rent] 068 Overførsel [Transfer] 086 Tilbageførsel [Reversal] 100 [Fri tekst] [Free text] 102 Info-overførsel [Info transfer] 139 Klientkontomidler [Client account funds] 145 Tilskud [Grants and subsidies] 158 Indbetaling [Incoming payment] 159 Regning [Bill] 160 Faktura [Invoice] 161 Kontingent [Membership fee] 163 Udbytte [Dividend] 307 Udlæg [Disbursements]	

* To make sure that the beneficiaries of salary and pension transfers (whether they have an account with Nordea or with another bank) receive the amounts in time and at the same time, the transfers must contain one of these text codes.

C. Transfer form /Giro payment

The beneficiary gains several advantages by using transfer forms as a means of collecting payments. One advantage is the possibility of receiving an advice when payment has been received. The advice may be registered in connection with a bank statement or in the form of a paper-based list. Or as a file via *Unitel EDI* or *CN*, which makes electronic reconciliation possible. For the beneficiary it is essential that the payment reference (payment ID) is entered and transferred correctly in order to allow automatic reconciliation.

Figure C.1 below is an example of a transfer form. The difference between an ordinary giro transfer form and a transfer form is the OCR line at the bottom of the form. This line contains information such as form type code, payment ID and creditor number.

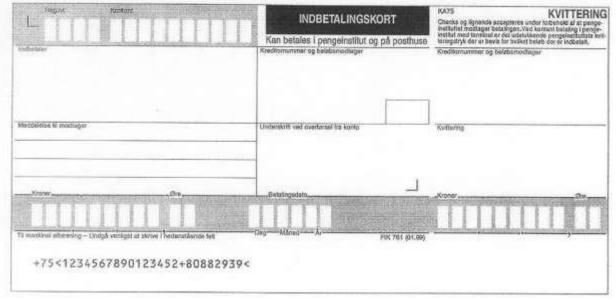


Figure C.1: Transfer form

The form type code contains information on the selected type of payment and requirements/possibilities for using a payment reference (payment ID). The form type code on the transfer form in Figure C.1 is 75, which means that the payment ID must be entered with 15 digits plus a modulus control digit, that is a total of 16 digits. The payment ID in the example is 1234567890123452. The 8 digits following "+" identify the creditor number (80882939).

The table below shows the validation of form type codes which can be paid via Unitel or CN.

Form type	Beneficiary account	OCR/Payment id (number of digits)	Message lines	Remitter info.	Alternative remitter
01	Normally 7 digits	Not available	Should be used – up to 4 lines in Unitel and 41 in CN	Yes	May be used
04	Normally 7 digits	Mandatory (16)	Not available	No	Not available
15	Normally 7 digits	Mandatory (16)	Not available	Yes	Not available
71	8 digits starting with 8	Mandatory (15)	Not available	No	Not available
73	8 digits starting with 8	Not available	Should be used – up to 41 lines	Yes	May be used
75	8 digits starting with 8	Mandatory (16)	May be used – up to 41 lines	No	Not available

D. Authority in connection with payment instructions

Unitel

If Nordea is to accept a payment instruction and the amount to be transfered to the beneficiary, the payment instruction must be signed/approved by those staff members in the company who have the necessary authority to operate the company's accounts. The authority of such staff members is defined in the agreement made between the company and Nordea in connection with the establishment of access to Unitel.

When approving payment instructions, users use their 6-digit personal codes. Various levels of authority may be defined for the personal codes. For example, a company may decide that all payment instructions are to be approved by two individual users or by one superuser. For this reason, Nordea has developed a hierarchy consisting of a number of different levels of authority of which the S code is the most comprehensive. The levels of authority may be described as follows:

A payment instruction will be accepted and executed by Nordea if it has been approved in one of the following ways:

- with one S code
- with two different A codes
- with one A code and one B code

Corporate Netbank

Please contact the customer's Cash Management adviser for guidance concerning the confirmation rules in Corporate Netbank

E. Security: Secrecy, integrity and non-repudiation

