

System spesification OCR giro



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SYSTEM SPECIFICATION FOR OCRGIRO

1. Adjustment and clearing of fields

Unless otherwise specified, the following rules apply for all fields:

Alphanumeric fields:

- Data will be left-aligned
- · Empty positions should be blanked

Numeric fields:

- Data will be right-aligned
- Empty positions should be filled in with zeros.

2. Record types, record layout and entering data

Transmissions from Nets must always start with:

A START RECORD FOR TRANSMISSION

Followed by: B. START RECORD FOR ASSIGNMENTS

C. TRANSACTION RECORD

(containing amount items 1 and 2)

D. END RECORD FOR ASSIGNMENT

Transmissions from Nets always end with:

E. END RECORD FOR TRANSMISSION

A transmission can contain assignments for several services for the same data recipient (per customer unit ID). AvtaleGiro transactions are included in the same file as the OCR giro transactions and information transactions from terminals and internet-payments.

2.1 Information transactions from terminals and internet-payments collected through Nets.

In addition to payments from giro and electronic payments with KID, assignments can also have information transactions from terminals and internet-payments collected through Nets. The payee can use this information for updating the customer system.

Information transactions from terminals have these transaction types:

Reversing with KID
 Purchase with KID
 Reversing with free text
 Purchase with free text
 Purchase with free text
 20 (two-zero)
 Purchase with free text
 21 (two-one)

For information transactions with type 20 and 21 (contains free text), there will be 3 amount items per transaction record.

2.2 START RECORD FOR TRANSMISSION

The first record in every transmission.

The record can only occur once per transmission.

FIELD	1	2	3	4	5	6	7	8
FIELD	FORMAT	SERVICE	TRANSM.	RECORD	DATA	TRANSM.	DATA	FILLER
NAME	CODE	CODE	TYPE	TYPE	TRANSMITTER	NO.	RECIP.	
POS.	1 - 2	3 - 4	5 - 6	7 - 8	9 - 16	17 - 23	24 - 31	32 - 80

FIELD 1 - FORMAT CODE

- Alphanumeric, 2 positions
- Always = NY (Norwegian for "new")



FIELD 2 - SERVICE CODE

- Numeric, 2 positions
- Always = 00 (zero-zero)

FIELD 3 - TRANSMISSION TYPE

- Numeric, 2 positions
- Always = 00 (zero-zero)

FIFLD 4 - RECORD TYPE

- Numeric, 2 positions
- Record type start transmission always = 10 (one-zero)

FIELD 5 - DATA TRANSMITTER

- Numeric, 8 positions
- Is filled in with Nets' ID = 00008080

FIELD 6 - TRANSMISSION NUMBER

- Numeric, 7 positions
- Is filled in with serial numbers generated by Nets.

FIELD 7 - DATA RECIPIENT

- Numeric, 8 positions
- Is filled in with data recipient's CUSTOMER UNIT ID.

FIELD 8 - FILLER

- Numeric, 49 positions
- Is filled in with zeroes

2.3 START RECORD FOR THE ASSIGNMENT

The first record for every assignment in the transmission.

The record can only occur once per assignment.

FIELD	1	2	3	4	5	6	7	8
FIELD	FORMAT	SERVICE	ASSIGNM.	RECORD	Agreement	ASSIGNM	ASSIGNM	FILLER
NAME	CODE	CODE	TYPE	TYPE	ID	NO.	ACCT.	
POS.	1 - 2	3 - 4	5 - 6	7 - 8	9 - 17	18 - 24	25 - 35	36 - 80

FIELD 1 - FORMAT CODE

- Alphanumeric, 2 positions
- Always = NY (Norwegian for "new")

FIELD 2 - SERVICE CODE

- Numeric, 2 positions
- OCR giro service code always = 09 (zero-nine)

FIELD 3 - ASSIGNMENT TYPE

- Numeric, 2 positions
- Always = 00 (zero-zero)

FIELD 4 - RECORD TYPE

- Numeric, 2 positions
- Record type start assignment always = 20 (two-zero)

FIELD 5 - AGREEMENT ID

- Numeric, 9 positions
- Is filled in with registered AGREEMENT ID issued by Nets, for the assignment account.

FIELD 6 - ASSIGNMENT NUMBER

- Numeric, 7 positions
- Is filled in with serial number accumulated per assignment in the transmission.



FIELD 7 - ASSIGNMENT ACCOUNT

- Numeric, 11 positions
- Is filled in with the payee's (agreement's) account number.

FIELD 8 - FILLER

- Numeric, 45 positions
- Is filled in with zeroes

2.4. TRANSACTION RECORD

A valid OCR-transaction consists of both an amount item 1 and an amount item 2. (for transaction type 20 and 21 there will be an additional amount item 3)

A. AMOUNT ITEM 1

FIELD	1	2	3	4	5	6	7	8
FIELD	FORMAT	SERVICE	TRANS	RECOR	TRANSACTION	Nets	CENTRE	DAY CODE
NAME	CODE	CODE	TYPE	TYPE	NO.	DATE	ID	
POS.	1 - 2	3 - 4	5 - 6	7 - 8	9 - 15	16 - 21	22 - 23	24 - 25

FIELD	9	10	11	12	13	14	15
FIELD	PARTIAL	SERIAL NO.	SIGN	AMOUNT	KID	FILLER/CARD	FILLER
NAME	SETTLEMENT NO.	SERIAL NO.	31011	AWOON	KID	DRAWER	TILLLIN
POS.	26	27 - 31	32	33 - 49	50 - 74	75 - 76	77-80

FIELD 1 - FORMAT CODE

- Alphanumeric, 2 positions
- Always = NY (Norwegian for "new")

FIELD 2 - SERVICE CODE

- Numeric, 2 positions
- OCR giro service code always = 09 (zero-nine)

FIELD 3 - TRANSACTION TYPE

Numeric, 2 positions

Valid transaction types for the OCR giro service:

Transaction from giro debited account - 10 (one-zero) Transaction from standing orders - 11 (one-one) Transaction from direct remittance - 12 (one-two) Transaction from BTG (Business Terminal Giro) - 13 (one-three) Transaction from counter giro - 14 (one-four) Transaction from AvtaleGiro - 15 (one-five) Transaction from telegiro - 16 (one-six) Transaction from giro - paid in cash - 17 (one seven)

Transaction from terminal and internet-payments:

Reversing with KID -18 (one-eight)
Purchase with KID -19 (one-nine)
Reversing with free text -20 (two-zero)
Purchase with free text -21 (two-one)

FIELD 4 - RECORD TYPE

- Numeric, 2 positions
- Record type for amount item 1 always = 30 (three-zero)

FIELD 5 - TRANSACTION NUMBER

- Numeric, 7 positions
- Is filled in by Nets with the serial number accumulated per transaction in the assignment.

FIELD 6 - Nets-DATE

- Numeric, 6 positions



- Is filled in with Nets processing date, DDMMYY (day, month, year) for the transaction

FIELD 7 - CENTRE ID

- Numeric, 2 positions
- Is filled out by Nets and contains the first two positions in the identification number of the bank data centre to which the transaction was transferred

FIELD 8 - DAY CODE

- Numeric, 2 positions
- Is filled out by Nets and contains the day of the month when the transaction was processed, the numbers run from 01 to 31.

FIELD 9 - PARTIAL SETTLEMENT NUMBER

- Numeric, 1 position
- Is filled out by Nets and contains the number of the partial settlement in which the transaction was processed.
- For transaction type 18, 19, 20 and 21, the field will be filled in with 0 (zero)

FIELD 10 - SERIAL NUMBER

- Numeric, 5 positions
- Is filled in with serial number within the partial settlement

The sum of all transactions with the same serial number is specified on the bank statement.

FIELD 11 - SIGN

- Numeric, 1 position
- Is filled in with "-" (negative sign) if receiver <u>is</u> able to process a credit note electronic in the account current book (conditional, depends on OCR agreement)
- Is filled in with zeroes if receiver <u>is not</u> able to process a credit note electronic in the account current book (conditional, depends on OCR agreement)

FIELD 12 - AMOUNT

- Numeric, 17 positions
- The amount is specified in øre (one øre = NOK 0.01)

FIELD 13 - KID

- Alphanumeric, 25 positions
- The field contains the payee's "KID" (customer identification) including the verification digit and without special characters.
- The "KID" is right-aligned and any empty positions are blanked.
 - The "KID" cannot contain letters of the alphabet.

FIELD 14 - FILLER

- Numeric, 6 positions
- Is filled in with zeroes.

Sorting sequence

The transactions are sorted ascendingly on Nets date.

B. AMOUNT ITEM 2

FIELD	1	2	3	4	5	6	7	8
FIELD	FORMAT	SERVICE	TRANS	RECORD	TRANS	FORM	AGREEMENT	FILLER
NAME	CODE	CODE	TYPE	TYPE	NO.	NUMBER	ID	
POS.	1 - 2	3 - 4	5 - 6	7 - 8	9 - 15	16 - 25	26 - 34	35 - 41

FIELD	9	10	11
FIELD	BANK	DEBIT	FILLER
NAME	DATE	ACCOUNT	



POS.	42 - 47	48 - 58	59 - 80
100.	72 7/	70 30	37 00

FIELD 1 - FORMAT CODE

- Alphanumeric, 2 positions
- Always = NY (Norwegian for "new")

FIELD 2 - SERVICE CODE

- Numeric, 2 positions
- OCR giro service code always = 09 (zero-nine)

FIELD 3 - TRANSACTION TYPE

- Numeric, 2 positions

Valid types of transactions for OCR giros:

Transaction from giro debited account - 10 (one-zero) Transaction from standing orders - 11 (one-one) Transaction from direct remittance - 12 (one-two) Transaction from BTG (Business Terminal Giro) - 13 (one-three) Transaction from counter giro - 14 (one-four) Transaction from AvtaleGiro - 15 (one-five) - 16 (one-six) Transaction from telegiro Transaction from giro - paid in cash - 17 (one seven)

Transaction from terminal and internet-payments:

Reversing with KID -18 (one-eight)
Purchase with KID -19 (one-nine)
Reversing with free text -20 (two-zero)
Purchase with free text -21 (two-one)

FIELD 4 - RECORD TYPE

- Numeric, 2 positions
- Record type for amount item 2 always = 31 (three-one)

FIELD 5 - TRANSACTION NUMBER

- Numeric, 7 positions
- Transaction number from amount item 1.

FIELD 6 - FORM NUMBER

- Numeric, 10 positions
- If the giro was debited in a bank the field will contain the form number on the giro.
- For standing order transactions, the field will be filled in with the type of form and zeroes.
- For other transaction the field will be filled in with zeroes.

FIELD 7 - AGREEMENT- ID/ARCHIVE REFERENCE

- Numeric, 9 positions
- In transactions from direct remittance, the field will contain the payer's AGREEMENT ID in Nets.
- In transactions from BTG (BTG = Corporate Terminal Giro) and standing orders, the field will contains the ARCHIVE REFERENCE from the input to Nets.
- In transactions from form, the field will contain the ARCHIVE REFERENCE in Nets.
- For transactions with transaction type 18, 19, 20 and 21, this will consist of bax-Number (6 digits) and session number (3 digits).

FIELD 8 - FILLER

- Numeric, 7 positions
- The field is filled in with zeros.

FIELD 9 - BANK DATE

- Numeric, 6 positions
- The field is filled in the DDMMYY (day, month, year)

FIELD 10 - DEBIT ACCOUNT

- Numeric, 11 positions
- The payer's bank account, if known, is entered here. Otherwise the field is filled in with zeros.



For transactions with transaction type 18, 19, 20 and 21, the field is always filled in with zeros.

FIELD 11 - FILLER

- Numeric, 22 positions
- The field is filled in with zeroes

C. **AMOUNT ITEM 3**

WILL ONLY OCCUR AT TRANSACTION TYPES 20 AND 21

FIELD	1	2	3	4	5	6	7
FIELD	FORMAT	SERVICE	TRANS	RECORD	TRANS	FREE TEXT	FILLER
NAME	CODE	CODE	TYPE	TYPE	NUM.	MESSAGE	
POS.	1 - 2	3 - 4	5 - 6	7 - 8	9 - 15	16 - 55	56 - 80

FIELD 1 - FORMAT CODE

- Alphanumeric, 2 positions
- Always = NY (Norwegian for "new")

FIELD 2 - SERVICE CODE

- Numeric, 2 positions
- OCR giro always service code = 09 (zero-nine)

FIELTD 3 - TRANSACTION TYPE

- Numeric, 2 positions
- Valid transaction types for OCR giro are:
- Transaction from terminal and internet-payments collected through Nets
 - Reversing with free text 20 (two-zero) Purchase with free text 21 (two-one)

FIELD 4 - RECORD TYPE

- Numeric, 2 positions
- Record type amount item 2 always = 32 (three-two)

FIELD 5 - TRANSACTION NUMBER

- Numeric, 7 positions
- Transaction number from amount item 1 and 2.

FIELD 6 - FREE TEXT MESSAGE

- Alphanumeric, 40 positions.
- Contains a free text message sent from the payment terminal.

FIELD - FILLER

- Numeric, 25 positions
- Is filled in with zeros.

2.5 END RECORD FOR ASSIGNMENT

The last record for every assignment in the transmission. The record can only occur once per assignment.

FIELD	1	2	3	4	5	6	7	8
FIELD	FORMAT	SERVIC	ASSIGNM	RECORD	NUM. OF	NUM. OF	TOTAL	Nets
NAME	CODE	E CODE	TYPE	TYPE	TRANSACTION S	RECORDS	AMOUNT	DATE



POS. 1 - 2 3 - 4 5 - 6 7 - 8	9 - 16 17 - 24	25 - 41 42 - 47
------------------------------	----------------	-----------------

FIELD	9	10	11
FIELD	EARLIEST	LATEST	FILLER
NAME	Nets	Nets DATE	
	DATE		
POS.	48 - 53	54 - 59	60 - 80

FIELD 1 - FORMAT CODE

- Alphanumeric, 2 positions.
- Always = NY (Norwegian for "new").

FIELD 2 - SERVICE CODE

- Numeric, 2 positions
- The OCR giro service code always = 09 (zero-nine)

FIELD 3 - ASSIGNMENT TYPE

- Numeric, 2 positions
- Is filled in with zeroes

FIELD 4 - RECORD TYPE

- Numeric, 2 positions
- Record type end assignment = 88 (eight-eight)

FIELD 5 - NUMBER OF TRANSACTIONS

- Numeric, 8 positions
- Specifies the number of transactions in the assignment.

 (Amount item 1 + amount item 2 + amount item 3 (if used) = a transaction).

FIELD 6 - NUMBER OF RECORDS

- Numeric, 8 positions
- Specifies the total number of items/records in the assignment, including the assignment's start record and the end record.

FIELD 7 - TOTAL AMOUNT

- Numeric, 17 positions
- Specifies the sum of all the transactions in the assignment (field 12 in amount item 1).
- (Amount from revesoins, transaction type 18 and 20, are also added to the sum amount. Is not deducted.)
- The amount is specified in øre. (one øre = NOK 0.01)

FIELD 8 - Nets-DATE

- Numeric, 6 positions
- The field contains the date when the assignment was generated in Nets. Is filled in with DDMMYY (day, month, year).

FIELD 9 - EARLIEST Nets DATE

- Numeric, 6 positions
- The earliest Nets processing date for transactions in the assignment.

FIELD 10 - LATEST Nets-DATE

- Numeric, 6 positions
- The latest Nets processing date (DDMMYY) for transactions in the assignment.

FIELD 11 - FILLER

- Numeric, 21 positions
- The field is filled in with zeroes.

2.6 END RECORD FOR THE TRANSMISSION



The last record in the transmission.

The record can only occur once per transmission.

FIELD	1	2	3	4	5	6	7	8	9
FIELD	FORMAT	SERVICE	TRANSM.	RECORD	NUM OF	NUM: OF	TOTAL	Nets	FILLER
NAME	CODE	CODE	TYPE	TYPE	TRANSACT'N	RECORDS	AMOUT	DATE	
					S				
POS.	1 - 2	3 - 4	5 - 6	7 - 8	9 - 16	17 - 24	25 - 41	42 -	48 - 80

FIELD 1 - FORMAT CODE

- Alphanumeric, 2 positions

- Always = NY (Norwegian for "new")

FIELD 2 - SERVICE CODE

- Numeric, 2 positions

- Always = 00 (zero-zero).

FIELD 3 - TRANSMISSION TYPE

- Numeric, 2 positions

Always = 00 (zero-zero)

FIELD 4 - RECORD TYPE

- Numeric, 2 positions

- Record type end transmission = 89 (eight-nine)

FIELD 5 - NUMBER OF TRANSACTIONS

- Numeric, 8 positions

- Specifies the number of transactions in the transmission

- (Amount item 1 + amount item 2 + amount item 3 (if used) = a transaction).



FIELD 6 - NUMBER OF RECORDS

- Numeric, 8 positions
- Specifies the number of items/records in the transmission, including the assignment's start and end record, and the start and end record for the transmission.

FIELD 7 - TOTAL AMOUNT

- Numeric, 17 positions
- Specifies the total amount of all the transactions in the transmission.
- The amount is specified in øre. (one øre = NOK 0.01)

FIELD 8 - Nets DATE

- Numeric, 6 positions.
- The field contains the date the transmission was generated in Nets.
- Is filled in with the DDMMYY (day, month, year).

FIELD 9 - FILLER

- Numeric, 33 positions
- The field is filled in with zeroes.

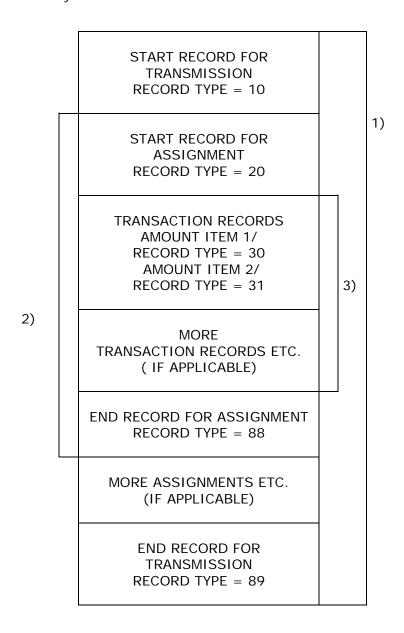


3. Organisation of the record

The start record for the transmission is always the first record and it only occurs once per transmission. After that comes the start record for the assignment. This is always the first record in each assignment in the transmission and it only occurs once per assignment.

Next comes the transaction record. An OCR transaction always consists of both an amount item 1 and an amount item 2.

Every assignment in the transmission concludes with an end record for the assignment. The last record in the transmission is always the end record for the transmission.



- Transmission: A transmission can consist of one or more <u>assignments</u>, for one or more services.
- 2) <u>Assignment:</u> An assignment only contains transactions for <u>a single</u> service pertaining to the same agreement/bank account.
- 3) Transactions





4. APPROVED, PROCESSED TRANSACTIONS

NY0910300000012001921320101464000000000000102000 0000531000000 NY0910300000022001921320101464000000000000102000 0036633000000 NY091031000000297975960160975960161883206160192999910055240000000000000000000000 NY091030000003200192132010146400000000000056000 0048763000000 NY0910310000003979758167509758167518832061701929999104276400000000000000000000000 NY0910300000042001921320101464000000000000102000 0063851000000 NY091031000000497975857600975857601883206170192999910055240000000000000000000000 NY0910300000052001921320101464000000000000102000 0120243000000 NY091030000006200192132010146400000000000056000 0165867000000 NY0910300000072001921320101464000000000000102000 0178357000000 NY091130000008200192132010157000000000000150000 02212291038306000000 NY09123000000092001921320101570000000000000120000 02311291038304000000 NY0913300000010200192132010157000000000000055000 02310291038308000000 NY0911300000011200192132023157000000000000194300 000149012000000 NY09123000000122001921320231570000000000000100000 01211291038306000000 NY0913300000013200192132023157000000000000050000 02111291038305000000 NY09133000000142001921320335572000000000002050000 02321291038303000000 NY0913300000015200192132094157000000000000550000 02331291038302000000 NY0913300000016200192132094157000000000001050000 02341291038301000000 NY09103000000172001921320941570000000000000064400 02358291038305000000 NY0910300000018200192132090451400000000000056400 02311291029238000000 NY09103000000192001921320904514000000000000028800 02311291034832000000 NY091031000001996367778210976949990000001601929999100803400000000000000000000000 NY091030000020200192132090451400000000000054000 02311291133188000000 NY0910310000020963677811709130886100000001701929999101112500000000000000000000000 ****** BOTTOM OF DATA *****************



Computation of the verification digit in modulus and 11

Modulus 10

Modulus 10 - Example:

Field without verification digit	1	2	3	4	5	6	7	8	
Weighting: Products	1 1	_	-	_	-	2 12	-	_	
Sum of the digits	1	+4	+3	+8	+5	+1+2	+7	+1+6	=38
Verification digit	10	-8	=2						

Fields with verification digits 1 2 3 4 5 6 7 8 2. The digits in the field are multiplied by the weighting-numbers 2 1 2 1, **computed from right to left**.

PLEASE NOTE: According to this method one does <u>not</u> add the products, but rather the individual digits in the products. The product 12 thus contributes 1+2 to the sum of the digits. The single (last) digit in the sum of the digits (in this case 8) is subtracted from 10 thus giving the verification digit (in this case 2). If the single digit in the sum of the digits is 0, the verification number will be 0.

Modulus 11

Modulus 11 - Example:

Field without verification digit	1	2	3	4	5	6	7	8	
Weighting: Products:			7 +21						=138
Division:	138 :	11 :	=12	a	nd a re	est of	6		

Verification digit: 11 - 6 = 5

Fields with verification digits: 1 2 3 4 5 6 7 8 5

The digits in the field are multiplied with the weighting numbers 2 3 4 5 6 7 2 3 etc. **computed from right to left**.

The sum of the products (in this case 138) is divided by 11. The rest ater the division (in this case 6) is subtracted from 11, and the result is the verification digit (in this case 5). If the division comes out even (rest = 0), the verification digit is 0.

If the verification digit is 10 (rest = 1) the verification digits must be replaced with a - (minus sign).



6. AMENDMENT LOG FOR THIS SYSTEM SPESIFICATION

VER.	PAGE	WHAT IS CHANGED	DATE	SIGN.
1.0	3	Regarding to pkt. 2 Record types, record layout and entering data. In the first textline it says "transmissions TO Nets must always start with" The right text is: Transmissions FROM Nets must always start with. In the third textline it says "transmissions TO Nets always end with" The right text is: Transamissions FROM Nets always end with.	01.09.99	КТВ
2.0	2	Specified contents	11.08.03	SIM
	3	New information about terminal and internet- payments	11.08.03	SIM
	4	Some more transaction types	11.08.03	SIM
	7	Some more transaction types	11.08.03	SIM
	8	Take away Postal Bank and seven digits in the account number	11.08.03	SIM
	all	Correction name, words, new description of the file	11.08.03	SIM