1.0. Overview
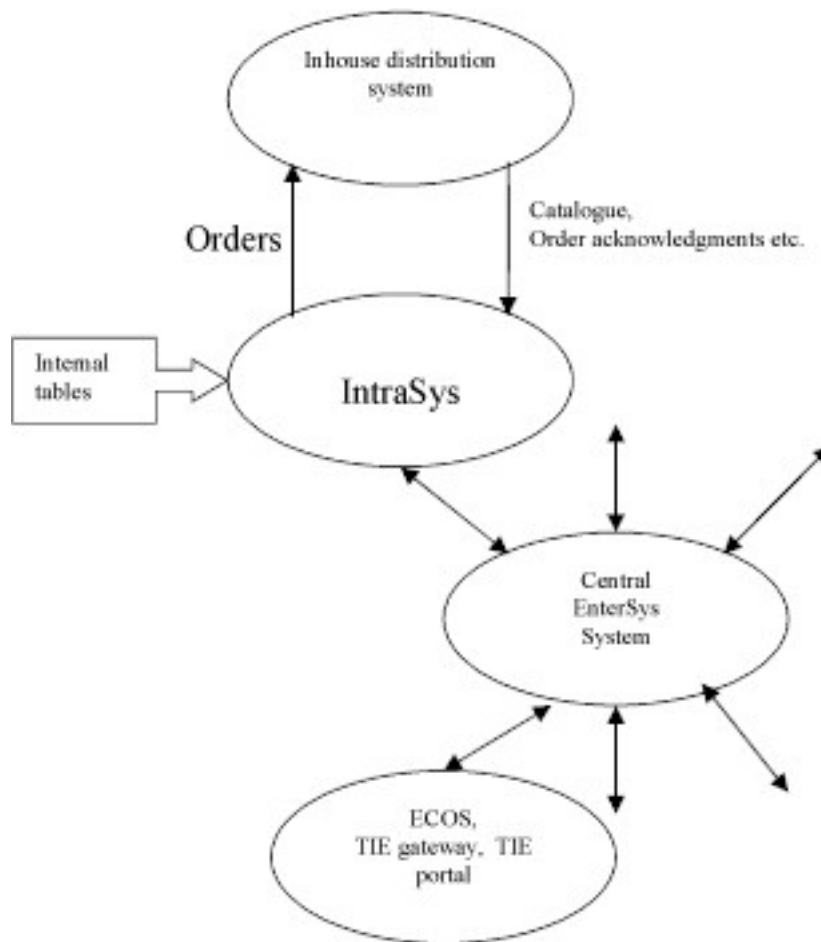
IntraSys is the standard interface between the central PhonoNet system and industry / company users.

The functionalities of IntraSys are:

- Secure data communication with the PhonoNet (Webster) network
- EDIFACT based data exchange with PhonoNet (orders, catalogue updates)
- Import from and export to in-house applications by means of flat SDF files
- Creation of catalogue updates through comparison of catalogue files
- Collection of orders from the central PhonoNet system
- Table driven translation of internal (in-house) codes into PhonoNet standard codes
- Timer controlled, external controlled or manual operating

Internal tables in IntraSys

- Catalogue (product database)
- Order database
- Translation tables for
  - Article status codes
  - Supplier codes
  - Genre codes
  - (sound-)Carrier (configuration-) codes
  - Label codes

In most cases the implementation of an IntraSys system is a simple procedure and will be fully supported by PhonoNet.
In some cases a company-specific subroutine needs to be build and integrated into IntraSys to translate in-house article codes into standard PhonoNet formatted article codes.

1.1 Article updates

Creation of catalogue updates for PhonoNet is very easy and can be done by putting the entire actual in-house catalogue in a specific folder of IntraSys.

IntraSys will then, on demand:
- Import the in-house catalogue
- compare the in-house catalogue with its own private IntraSys catalogue
- mark the items for which an update in PhonoNet is necessary

Apart from that, the user can decide to let IntraSys:
- translate the catalogue updates into EDIFACT format
- replace the IntraSys private catalogue by the new in-house catalogue.
  The IntraSys catalogue now is an exact copy of the PhonoNet catalogue.
- transmit the EDIFACT messages to PhonoNet

It is good practice to follow the complete procedure mentioned above once a day, in pace with the catalogue update and distribution process of the central PhonoNet system.
However, the two-step procedure makes it possible to offer the in-house catalogue to IntraSys once (or more/less than once) a day, and separately, to let IntraSys create updates for PhonoNet once a day, once a week, or in another frequency.

The in-house catalogue can be placed in one file (for all relevant countries and/or marketing companies) but it is also possible to create separate files for each country and/or marketing company.
The file(s) must have the extension .IMP and must be placed in a specific folder. The name of this folder is a (user defined) system parameter of IntraSys.

While importing the in-house catalogue IntraSys performs a number of checks on the imported data.

There is a maximum on the number of article updates (see System/IntraSys setup/PhonoNet) that can be produced in one run.

The processing of the catalogue updates sent by IntraSys at the central PhonoNet system will produce a report, which will be transmitted to IntraSys, reporting the results of the PhonoNet update procedure.

If necessary, the user can manually 'reset' an article, in such a way that an update of that article will be re-submitted in the next run.

1.2 Orders

IntraSys will collect orders from the central PhonoNet system. Frequency and timing of this process are user-dependent. The user may decide to collect orders once a day, but normally a much higher frequency (say, every half-hour) is advisable. Collected orders are stored in the IntraSys order database, from which the collected orders can be handled in various ways:

- Orders can be manipulated (f.e. discounts can be added, orders can be deleted)
- Orders can be exported to an in-house order system
- For distribution companies with no interface to their in-house system, the incoming orders can be printed.

Customer number and PhonoNet user identification

A 'customer' can identify himself in an order by:

- Using his customer number
- Using his PhonoNet User Identification
- Using both his customer number and his PhonoNet user Id.

If a customer-table is loaded into IntraSys, the system will add the matching customer number. Working this way, the exported orders will always contain a

customer number.

We do not advice this practice, however. It is easier and less error-prone to handle customer numbers inside the in-house system. See … for more information.

1.3. Order Acknowledgements, Shipping lists, Invoices, etc.

It is possible to import various types of information (order acknowledgements, shipping lists, invoices, backorder reports, etc.) from the in-house system and let IntraSys e-mail this information to the customer.
(To be described later)

1.4. Communication

Communication with the central PhonoNet system is an integrated function within IntraSys.
Communication is possible through an (analog) modem, ISDN, ADSL, cable, etc. PhonoNet uses a dedicated network (the Webster network) to guarantee secure communication.

1.5. Database maintenance

IntraSys offers a number of database maintenance functions:
- Remove collected orders
- Remove generated EDIFACT messages
- Clear the catalogue database
- Restore backup
- Empty all database tables
- Euro conversion
- Clear up the IntraSys order database with orders older than 200 days
- Clear up the IntraSys catalogue database with (logically) deleted items

All these functions, except the two last mentioned, are password protected.

1.6. Technical

IntraSys runs with Windows 95/98/NT and demands a P200+ and a minimum of 300 Mb free disk space. IntraSys runs in a network environment.

IntraSys startup parameters

Intrasys.exe/AUTO_EDI   starts the EDI robot, keeps IntraSys running
            /AUTO_EDI:ONCE starts the EDI Robot,
import/export/transmitting, and exits IntraSys.

2. Tables used in IntraSys

2.1. Customer import table

This table is used to add the customer number to an order, for orders that only contain an PhonoNet usernumber.

Field	Type	Obligatory
Customer number	N7	Yes
Ship-to-code	N6	No
PhonoNet usernumber	N6	No
Name	A40	Yes
Address	A50	No
Postal code + City	A50	No
Country	A30	No
Customer type	A15	No
Telephone nr	A25	No
Fax nr	A25	No
E-mail address	A50	No

All fields must be left justified. Unique key : Customer number + ship-to-code. In case of duplicate keys the last occurrence will be used.

2.2. Conversion/translation tables

All fields should be left justified. If an incoming value does not match the conversion table the exported value will be left empty. If a field is marked Yes* and the incoming value is empty, the record will be skipped.

GENRE IMPORT

This table can be used to convert the in-house genre code into the standard PhonoNet genre code.

Field	Type	Obligatory
Genre (IN)	C8	Yes
PhonoNet genre (OUT)	N3	Yes

STATUSCODE IMPORT

This table can be used to convert the in-house delivery status code into the standard PhonoNet delivery status code.

Field	Type	Obligatory
Statuscode (IN)	C8	Ja
PhonoNet statuscode (OUT)	N2	Ja*

CONFIGURATION CODE IMPORT

This table can be used to translate the in-house configuration code into the standard PhonoNet configuration code.

Field	Type	Obligatory
Configuration (IN)	C8	Yes
PhonoNet configuration (OUT)	N3	Yes*
Description of configuration	C25	No
Number of items in configuration (boxset) (OUT)	N3	No
PhonoNet VAT code	C1	No

Some companies use a 'configuration-code' which is actually a combination of carrier-code and boxset (number of items in the configuration). IntraSys is configured to handle this.

An example:

In-house code	PhonoNet code	Boxset in PhonoNet
CD-1	0406	1
CD-2	0406	2

SUPPLIER IMPORT

If there is only one marketing company involved, this table needs not to be used.

Field	Type	Obligatory
Supplier (IN)	C16	Yes
PhonoNet supplier code (OUT) [Marketing Cy]	N3	Yes*

LABEL IMPORT

This table can be used to convert an in-house label code into a labelname to be used in PhonoNet.

Field	Type	Obligatory
Label code (IN)	C16	Yes
Label name (OUT)	C35	Yes

3. User Manual

3.1 Collecting and updating orders

Order collecting from the central PhonoNet system is activated by starting an 'EDI-session' (System/EDI session, or ALT/E).
The user can export the orders (system/export orders) or print the orders. After exporting orders, the user should delete the export-files.
It is possible to reset the export-indicator of an order (Orders or ALT/B). An order can be deleted or updated (discounts, net prices, backorder indicators, action code, delivery date, ..)

3.2 The IntraSys Catalogue

The in-house catalogue must be placed in one (or more) file(s) with extension .IMP and must be placed in a specific folder. The catalogue can be placed in one file (containing all relevant countries and/or marketing companies) but it is also possible to create separate files for each country and/or marketing company.

The (new) catalogue can then be imported into IntraSys. During this process IntraSys will mark all article records that have been updated (of course, including 'new' and 'deleted' items).

While importing the in-house catalogue IntraSys performs a number of checks on the imported data. Errors are reported in a file (which has the same filename as the imported file but with extension .ERR).
The following error codes are used:

- 010 Country-identification not filled
- 011 Invalid Country-identification
- 020 Article has no barcode
- 021 Invalid barcode
- 022 Incorrect barcode (check digit)
- 030 Empty suffix / prefix
- 031 Invalid suffix/prefix
- 040 Artist field and / or Title field are empty
- 050 Empty format
- 060 Field Supplier (PhonoNet marketing company number) is empty
- 070 Field Delivery Status is empty

Edi – messages

PhonoNet will produce a report and transmit this report back to IntraSys, after each catalogue update offered. (System/EDI messages).

Catalogue database fields

Barcode
Obligatory field, max. 13 digits.

Article suffix/prefix
Obligatory fields. Suffix C7, Prefix A7

Artist
Obligatory, A35

Title
Obligatory, A35

Composer
Optional, A35

Conductor
Optional, A35

PPD
Price

Labelname
Optional A35

Release Date
Date field, two formats allowed: DDMMYY or YYYYMMDD

Genre
Obligatory. Present use: Pop=100 and Classics/Jazz=500.

Article Status
Defines the availability of an article.

Availability status codes used in PhonoNet

Status	Description
01	Pre notification
02	Available
03	Not available
07	Temporary not available
91	Re-release

Configuration code

Obligatory field, variable length.

Translation through conversion table is possible, if in-house coding differs from PhonoNet coding.

CONFCODE	DESCR
401	7' single
402	12' single
403	10' LP
404	12' LP
405	Music cassette
406	Compact disc
407	Videotape +videotape music
408	Accessoires
409	Printed matter
410	Various
411	3' single cd
412	5' single cd
413	5' CD-V
414	8' CD-V

415	12' CD-V
416	Super audio CD CD, single, maxisingle
417	DCC
418	mini disc
419	CD-I
420	Games
421	DVD single + DVD music
422	DVD video

Boxset

Variable length field. Number of items in a configuration.
F.e.: double-CD: boxset=2

Marketing Company

Internal marketing company number in PhonoNet.
If the Distribution Company works with more than 1 company number, this number is obligatory in the import.

Country code

Every record of the catalogue contains the country code (NL, BE). If an article is available for 2 countries, it needs an occurrence for each country separately.

Definition of file layout

The SDF file structure is used, so sequence and length of the fields are variable. The filename(s) are irrelevant, as long as the extension .IMP is used and the files are placed into the correct folder.

Order file

The IntraSys export procedure produces two files:
An order-header file ORD_MAIN.SDF
An order-detail file ORD_DATA.SDF

These files are produced every time IntraSys receives orders during an PhonoNet session.
After processing (importing the files into the in-house system) these files have to be removed by the user.

Structure for file: ORD_MAIN.SDF

Field	Type	Length	Description
ORDER_CNR	N	6	Internal ordernumber within IntraSys; links to detail
ORDMSG_REF	C	14	Order reference supplied by customer - used for printing on shipping list, invoice, etc.
ORDER_TYPE	C	2	Source of the order 10 = order directly from customer, 25 = order from sales representative
ORDER_ID	C	8	First 2 characters define country (NL/BE)
ORDER_DATE	C	6	
DIST_COMP	C	3	Identification (number) of the distribution centre in PhonoNet
ES_USERID	N	6	PhonoNet usernumber of the customer
SR_USERID	N	6	PhonoNet usernumber of the sales representative
CLNT_NUMB	C	7	Customer number at the Distribution Centre
CLNT_SHIP	N	6	Outletnumber of the customer
BCK_ORDER	C	1	J/N,empty , Indicates whether customer wants backorder for this order J=Yes, N=No, empty=default DC value

BCK_MERGE	C	1	J/N, empty, Indicates whether customer wants backorder-merge for with this order J=Yes, N=No, empty=default DC value
SHIP_MODE	C	1	Shipment mode
WAIT_ORDER	C	1	J/N, empty, Indicates a 'waiting order' for the DC J=Yes, N=No, empty=No
SHIP_DATE	C	6	Shipment date supplied by customer
ORDER_CAMP	C	8	Campagn code (for action orders)
ORDER_DISC	C	5	Discount % for all lines of the order
TOT_LINES	N	10	Number of order lines
TOT_QTY	N	12	Total quantity ordered in this order
Comment field 1	C	70	Comment field. First 2 characters NL of BE.
Comment field 2	C	70	Comment field, not used
Comment field 3	C	70	Comment field, not used
Comment field 4	C	70	Comment field, not used
Comment field 5	C	70	Comment field, not used

Structure for file: ORD_DATA.SDF

Field	Type	Length	Description
ORDER_CNR	N	6	See ORD_MAIN.

DETAIL_CNR	N	6	Order line number (counter)
ITMCODE_SA	C	14	Article suffix/prefix
ITMCODE_ZZ	C	15	Internal DC article number
ITMCODE_ZY	C	14	US article number
BARCODE	C	13	
ORDER_QTY	N	6	Quantity
DEV_NETPRC	C	7	Net-price for this article
VALUTA_ID	C	3	
CAMP_CODE	C	8	Campagn code for action orders
DISCOUNT	C	5	Discount % for this article
ORIG_ORDER	C	8	

Identification of an article

An orderline might contain an article suffix/prefix **or** a barcode. IntraSys will export suffix/prefix **and** the barcode, if this is possible. The internal IntraSys catalogue is used for this purpose.

Procedures for handling PhonoNet orders - general

1. Customer number and PhonoNet User Id

An order may contain a customer number, PhonoNet user identification or both. The IntraSys application could take care of the translation from PhonoNet user Id into Customer number. However, we strongly suggest implementing the translation procedure (PhonoNet user ID into Customer number) into the in-house application, and not use the IntraSys capabilities to do so.

2. Translation procedure

Customer number CLNT_NUMB	PhonoNet User nr. ES-USER_ID	
X		Customer number is used
	X	PhonoNet user-id is translated into customer number
X	X	Customer number is used; if invalid: translation from PhonoNet user-id
		Error

If a user does not want to use the IntraSys build-in customer table, he will need a

translation table Client number / ES_USER_id into the in-house system.

1. Orders from Representatives

SR_Userid is an identification of the representative that sent the order.
If there is some problem with such an order, you know which rep. sent it to
PhonoNet. Within a rep. order (SR_Userid is filled) you will always find a client
number. And that client number is the identification to be used.

2. Orders from Clients

A (direct) client order might contain: ES_USER-id **or** client number **or** both.

If the order contains a client number, this number should be used for
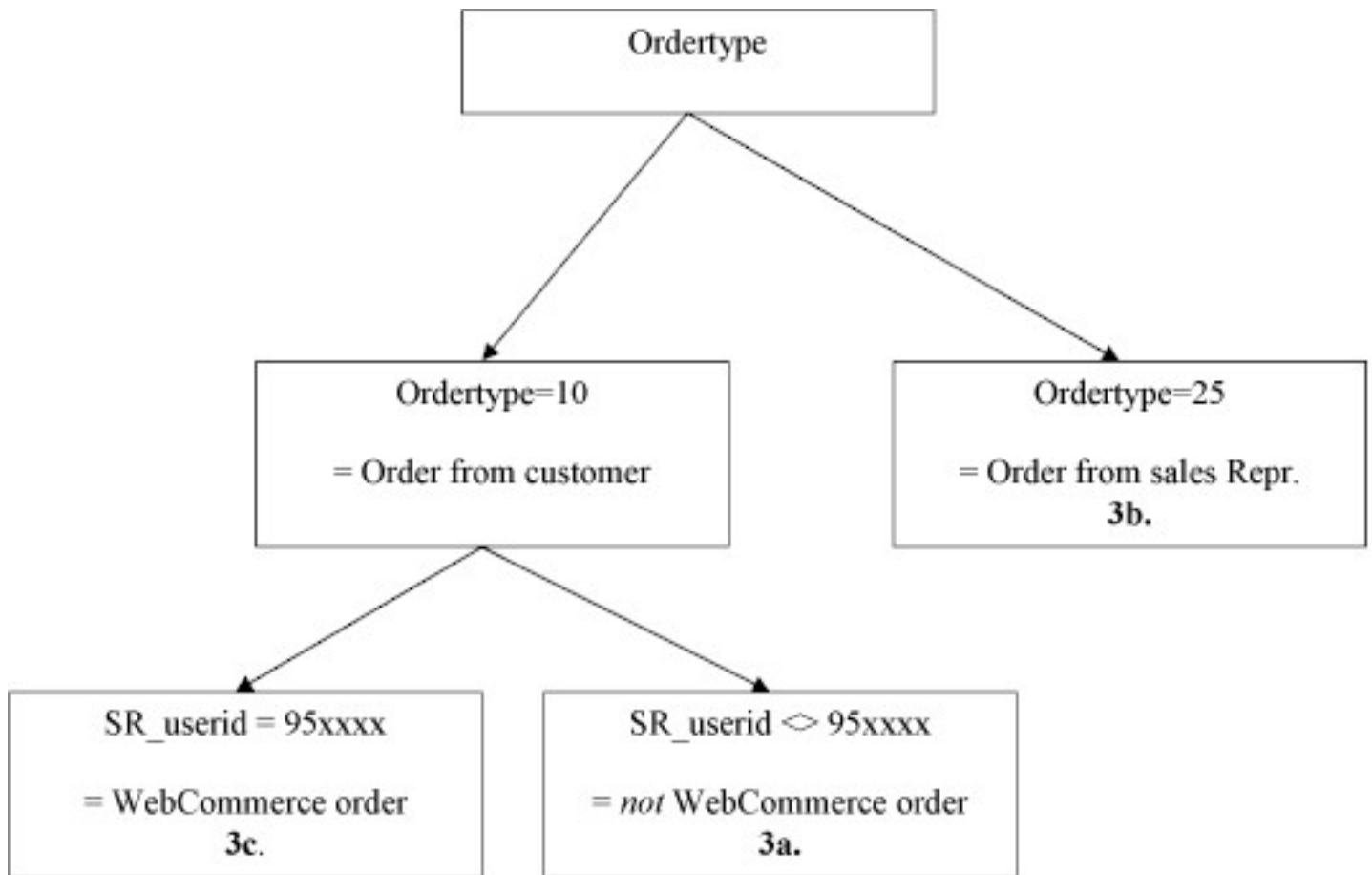identification.
If the order contains both numbers, you should use the client number. Client
number is leading.
One can go one step further: if the client number is invalid / not existing give the
order another try through the ES_USER-id. There is no real need for this,
however.

If the order does not contain a client number, you should use ES_USER-id, and
translate this number via an in-house translation table into a client number.

See also: IntraSys manual

3. Order types

```
                        ┌──────────────────┐
                        │    Ordertype     │
                        └──────────────────┘
                         /                \
                        /                  \
      ┌────────────────────────┐    ┌────────────────────────┐
      │     Ordertype=10       │    │     Ordertype=25       │
      │                        │    │                        │
      │  = Order from customer │    │  = Order from sales Repr.│
      │                        │    │           3b.          │
      └────────────────────────┘    └────────────────────────┘
          /           \
         /             \
┌────────────────────┐  ┌────────────────────┐
│ SR_userid = 95xxxx │  │ SR_userid <> 95xxxx│
│                    │  │                    │
│ = WebCommerce order│  │ = not WebCommerce  │
│        3c.         │  │    order  3a.      │
└────────────────────┘  └────────────────────┘
```

3a. Orders sent directly by customers
Order-type = 10 and SR_userid <> 95xxxx

Possible procedure for manually discounts and net-prices
Header:

ORDER-DISC (discount) should be empty,

if not: in-house application sets ORDER-DISC to empty.

Details:

DEV_NETPRC should be empty,

if not: in-house application sets DEV_NETPRC to empty.

DISCOUNT   should be empty,

if not: in-house application sets DISCOUNT to empty.

A customer is not allowed to add net-prices or discount %'s to his order.

If a customer does so, these net-prices and/or discount %'s will be skipped by the

in-house application.

3b. Orders sent by representatives
Order-type = 25
SR-userid = 80xxxx is the PhonoNet user id belonging to the representative.

Processing of manually discounts and net-prices (possible procedure)

See: 4. Manually entered discounts and Discounting System

Header:
ORDER-DISC (discount) may contain non-zero value.
Details:
DEV_NETPRC may contain non-zero value
DISCOUNT   may contain non-zero value.
If both values are non-zero this should be treated as an error, or alternatively,
DISCOUNT can be set to 'empty'.

If DISCOUNT = empty AND DEV-NETPRC = empty and ORDER-DISC is not
empty, DISCOUNT is replaced by ORDER-DISC. So ORDER-DISC is the
default-value for all orderlines with no discount or net-price added.

Only for orderlines with no manually entered discount % or net-price, the
Discount System will calculate discounts.
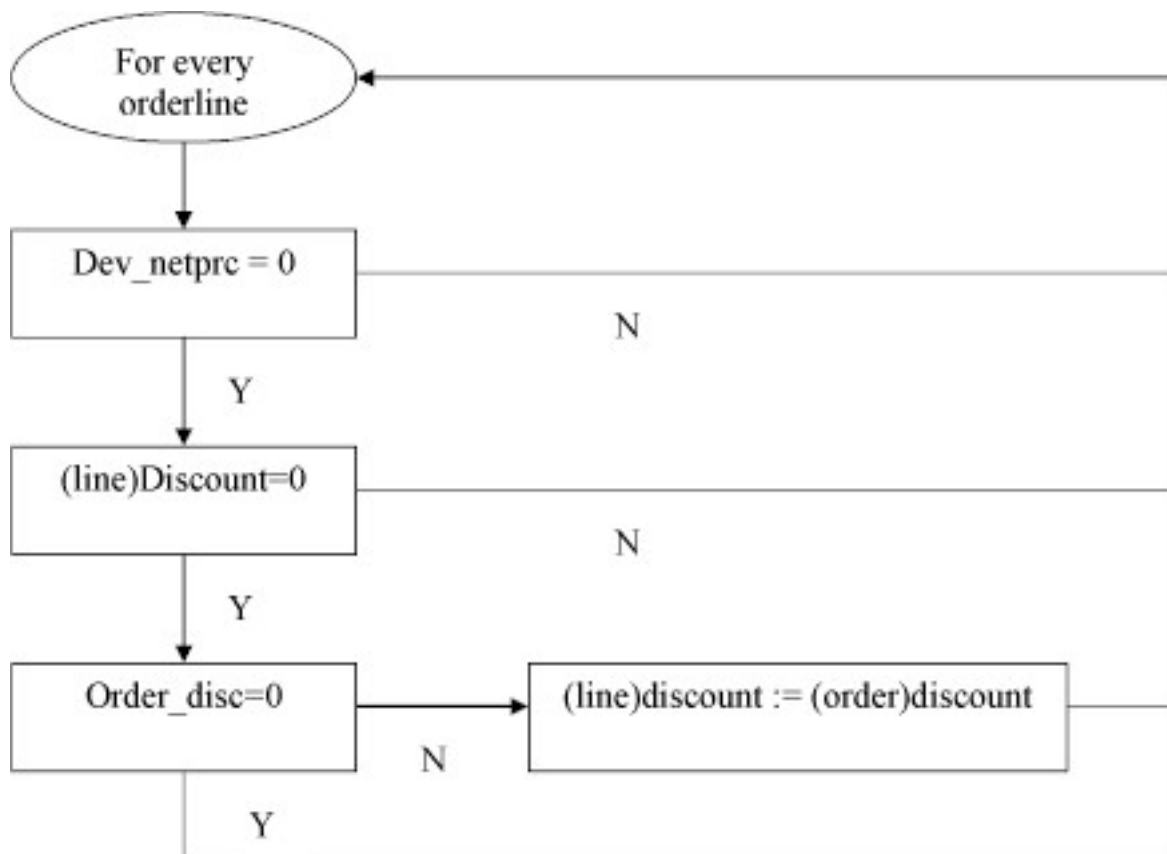
3c. Web Commerce orders
Order-type=10
SR-userid = 95xxxx

See: 4. Manually entered discounts and Discounting System

In this case discount %'s are treated within the discounting system as meant to be supplementary, i.e. to be added to the file-discount.

4. Manually entered discounts and Discounting System

Phase 1 : processing of manually entered discounts

Phase 2 : Processing by Discounting System

The Discounting system will calculate discounts only for orderlines with no

manually entered discount % or net-price.

For WebCommerce orders, discount %'s are treated within the discounting system as meant to be supplementary, i.e. to be added to the file-discount.