PAYMENT TERMINAL SOFTWARE - VIKING

RELEASE2 2016

Patch Release v04.83: 10.03.2017
Patch Release v04.82: 19.12.2016
Main Release v04.81: 20.10.2016

Highlights:

In this release Nets introduces:

- IFR (Interchange Fee Regulation) and co-branded cards
- BankAxept Contactless
- Forced offline

About the release:

SW version 04.83

Test version 43.30

This release is for

- IUP250 + IUR250, iUC180B+iUR250, iUP250+iUR250+iUC150B
- ICT250E, ICT250EG, ICT220E, ICT220EG
- IWL220, IWL250G, IWL250B, iWL255G(3G terminal)
- IPP350
- iCM122, iSMP Companion terminals

Terminal languages:

1. Both merchant and cardholder: NO, SE, DK, FI, EN, DE, HU, ET, PL
2. Only cardholder language: FR, ES

New Mobile Manager Version 4.8 for Pay@Table

Availability

Contact your local sales support team or Account Manager for more information about this release.

Patch Release v04.83 (test version 43.30) includes the following:

Description
Removing wrong signature line If parameter setting "always copy" is set to Yes on payment with Contactless and ChipExpress the printed receipt on the retailer part prints out signature line. This line is now removed.
S-Bonus mag card was not being validated and declined A correction has been added for validating of this S-Bonus mag card.
DCC corrections It has been observed on Swedish terminals when DCC is activated that co-branded cards do not always ask for PIN. The issue has now been fixed.

Patch Release v04.82 (test version 43.29) includes the following:

Description
German Maestro debet card being declined A fix has been introduced so that German Maestro debit card is being accepted.
Terminal freezes on JSON received The terminal can now handle version with exponent, and this issue was specific to Digital Asset functionality.
iUN: Java Baxi & Jungo 2.80 USB driver / USB connection between workstation and payment terminal not works A new file is added in this patch for IUP250 and IUC180B which is downloaded to terminal in order to fix this issue.

New functionality in Release 2:

IFR (Interchange Fee Regulation) and co-branded cards

Introduction

A new EU regulation gives merchants the right to define which part of a combined payment card that is to be prioritised when customers pay by card. Currently, payment terminals are automatically prioritising the domestic card schemes; Dankort in Denmark and BankAxept in Norway. The EU regulation gives the card holder the final decision authority, which implies that the card holder can override the merchant's card priority settings.

The EU regulation came into effect 9 June 2016 in Denmark. It comes into effect 1 November 2016 in Norway.

A temporary solution has been available for Danish merchants, where the card holder is requested to select card scheme before each transaction.

For more information, please see:

- www.nets.eu/terminaltjek
- www.dankort.dk/Pages/Dankort-eller-Visa.aspx
- Search for "article 8" in: www.eur-lex.europa.eu/legal-content/DA/TXT/PDF/?uri=CELEX:32015R0751&rid=1
- www.regjeringen.no/no/aktuelt/forskrift-om-formidlingsgebyr-i-kortordninger/id2506302/

The software update will not be available on Nets' legacy terminals, which will be swapped by the end of 2017:

https://www.nets.eu/en/payments/secure-payments/pci-standard/non-compliant-terminals

The solution

Below is a description on how we will enable the card holder to select application on Viking terminals. The basic principle of the solution is that the card holder indicates that he wants to perform application selection before the card is presented. This is done by pressing the yellow CLEAR-button on the terminal.

Note that the application lies within the chip of the payment card. The solution is made for co-branded BankAxept cards and co-branded Dankort cards.

- The priority can be changed by a local parameter in the terminal:
  - Parameter name: IFR priority = <domestic>, <international>, <none>.
    This parameter will be visible for Norwegian and Danish terminal configurations.
  - The existing priority <domestic> will be default.

The priority can also be set from the ECR for integrated terminals. This enables the merchant to prioritise based on input from the card holder.

From ECR requests:

1. The IFR priority sent as a part of ECR request applies only to that particular transaction session only.
2. IFR priority values can be defined as :

IFR parameter value	Description
1	Domestic
2	International
3	None
Any other value	Ignored by the terminal

Transfer amount:

Add this JSON data which includes IFR priority parameter as part of optional data field in transfer amount.
{"od":{"ver":"1.01","nets":{"ver":"1.0","ch13":{"ver":"1.0","ta":{"ver":"1.0","o":{"ver":"1.02","ifr":2}}}}}}

- The card holder is able to overrule the automatic selection:
  - The application's preferred card scheme will be displayed during PIN entry to ensure that the card holder can see which application that has been selected.

```
      BankAxept
NOK          12,00
KODE + OK
Skjul inntasting
```

- The first line of the PIN entry screen will be used for this purpose.
  - The card holder can disable the automatic selection by pushing the yellow CLEAR-button when the card is requested.
    - Standard application selection is then displayed, enabling the card holder to select the desired application.

```
VELG KORTTYPE        VÆLG KORTTYPE
1 BankAxept          1 Dankort
2 VISA CLASSIC       2 Visa
```

The names are fetched from the card:

- The name displayed below "BankAxept" in the sample above is the international card scheme. The card issuer decides the text.
- The selection will only be available on newer VisaDankort cards which also support contactless. The name on the receipt for the old cards will still be "VisaDankort" and these will be processed as before.

- The functionality will be available for all terminals except the unattended module iUC180B. This module does not support PIN entry or application selection.

A transaction has to be aborted and initiated again if the card holder sees that the application at PIN entry is not in line with what he wants. This is expected to be a seldom issue.

Note that the terminal does not display any guidance text informing about the yellow CLEAR-button's functionality. The merchants should ensure that their employees are informed about the yellow CLEAR-button's functionality and are able to guide card holders. It is also assumed that the card holders that want to perform the selection will rapidly learn how to enable it.

The yellow CLEAR-button will not have effect for contactless transactions. Card holder should be advised to use the contact chip in case he wants to select application.

BankAxept Contactless

In this release we introduce support for BankAxept Contactless cards.
It work similar to Visa, MasterCard and Dankort contactless which is already supported.
- · BankAxept contactless is online only. EOT is only supported for contact chip transactions and card holder should be advised to use chip if there are communication problems.
- · Contactless is currently not supported for cashback – and terminal will not display contactless symbol if cashback is initiated.
- · The CVM limit is NOK 200 which is the same as for Visa/MasterCard. (The amount limit before PIN is requested).
- · Contactless can be used for any amount and PIN will be requested when amount is above NOK 200.
- · There is a limit on number of small amounts that will be accepted after each other. The terminal will request chip to be used if this limit is reached. This ensures that PIN is requested and the card holder is verified.
- • We are in process of ensuring BankAxept test cards that support contactless and that can become available for our partners.

Force offline
This functionality gives the merchant the possibility to make a forced offline transaction if there is a communication or connection problem.
- • Offline approval done by the chip (contact) cards and this is based on existing solution for Dankort.
- • Terminal allow for amount up to kr 10.000 (EUR 1000), but it is the chip of the card that have the final say.
  - • Forced offline is also marked on the receipt. TCC is IB5 instead of IB3.
    The receipt also have the authorization code
- • A separate transaction type occur on the terminal:
  - • Press MENU ->3 -> 8, optional aut code, amount, enter card.
  - • This is already available for Dankort
- • This can also be activated from ECR via separate transaction type and where the authorization code is sent from the ECR.
  - • Available also on unattended terminals.
Only applies to contact chip cards.
Please note that in order to take this into use you need an agreement with your acquirer.

PINS Bonus transactions

For Finnish market only

PINS (bonus/bonus refund) transactions are supported in this release. Reversal and technical reversal of these loyalty transactions can also be performed. PINS loyalty transaction receipt is printed.

On standalone terminal, "Bonus" and "Bonus Return" are a service that gets visible in "Card services menu" when the service has been enabled from Nets.

The sequencing of Menu in "Card services" has changed due to introduction of new menus "Bonus, Bonus Refund and Force Offline".

To perform a PINS bonus transactions on standalone terminals:

Press Menu –> 3 Card Services –> 8 Bonus

Insert bonus amount

Read magstripe card or insert chip card (choose Pins)

Transaction is made

Terminal asks "Press OK" to print receipt – receipt is needed in case one later need to make an revesal.

PINS bonus reversal in standalone terminals:

Press Menu –> 3 Card Services –> 9 Bonus Rtn

Insert Return amount

Read magstripe card or insert chip card (choose Pins)

Terminal is asking: "Enter Refund REF" (insert refund REF from bonus receipt)

Transaction is made

Terminal asks Press OK to print receipt. Press STOP to continue.

For integrated terminals:

PINS Loyalty number is returned to calling application when PINS card is read. Both mag.stripe and co-branded chip cards are supported via same interface. Terminal will not automatically register loyalty transaction and ECR must call another function to register transaction with readen bonus card number. ECR must validate issuer/PAN and calculate possible discounts.

Usage:

Read bonus information from card using GetCardInfo command.

Register bonus transaction with PINS card number using TransferCardData and TransferAmount with H3E (type1).

More details can be found from the Baxi API documentation.

Separate counter of X/Z report

Separate counter value for X/Z report is added which will be printed on X/Z Total report. Counter value starts from 001 and ends at 999.

Counter incremented after each Z-Total. Three digit X/Z counter number in local mode for each transaction. In case of multi terminal a separate counter is maintained for each TID. The counter is retained after reboot and software upgrade.

Sample receipts shown below.

X-Total Receipt	Z-Total Receipt
Term: 82110000-821100	Term: 82110000-821100
11/05/2016 08:41	11/05/2016 08:43
Valuta: EUR	Valuta: EUR
Session.: 443	Session.: 443
X-report : 001	**Z-report : 001**
X-Total	Z-Total
Last Z-Total	Last Z-Total
11/05/2016 06:32	11/05/2016 06:32
VISA 1	VISA 1
Amount= 12,00	Amount= 12,00
-----------------------	-----------------------
Number 1	Number 1
Total= 12,00	Total= 12,00

Serial- and partnumber is added in the parameter list

Serial- and partnumber is displayed in parameter receipt.

CDV Modulus 10 check on refund transactions

Added support for CDV Modulus 10 check for all refund transactions where data origin is manually entered on ECR and sent to terminal over ECR integration
If card number sent does not comply to modulus 10 it will be rejected by terminal.

Pay@Table and DCC

Support for DCC is added for the Pay@Table

SAS Eurobonus card

Support for SAS Eurobonus cards is added in this release.

Terminalid and serial number displayed in the terminal screen

By pressing the F2 button (or arrow down) in the idle screen the terminal will display the Termialid and Serial number. Any button press will bring the terminal back to idle screen or the terminal will return to idle screen after 2 minutes.

This functionality is only available for attended terminals.

Multi terminal - locking of one user

A new parameter is added in the menu that makes it possible for locking of one multi user at a time.

Change --> Function
1. Always
2. After Reconciliation
3. After Z-Total

If Change Merchant is set to always, merchant selection screen should be display in each transaction or menu selection.

If Change Merchant is set to After Reconciliation , merchant selection is displayed only for first transaction and after reconciliation is performed

If Change Merchant is set to After Z-total, merchant selection is displayed only for first transaction and after Z-total is performed.

The feature is only for standalone Multi terminals.

Merchant Locking selection will reset after reboot.

Pay@Table and new Mobile Manager Version 4.8

New functionality:

Increase number of open bills possible in Pay@Table
- Support for 120 checks

Change amount request as a changeable setting – config. File

Setting.ValidateAmountAfterRejected = FALSE

Incidents resolved:
- Terminal navigates back to awaiting card screen after cancelling the transaction
  - Fix:Terminal navigate back to P&T application with Payment not accepted
- Split Payment in self-service not working as expected
  - Fix: When we have a cheque for refund/reverse the application should present the amount with "-ve" before the amount which is shown in service mode but not in self-service mode

Please note that earlier versions of Pay@Table (mobile manager) are also support for our terminal SW version 04.81.