

The logo for 'nets' is displayed in a blue, lowercase sans-serif font. To the right of the text are three blue dots arranged in a triangular pattern, with two dots on top and one on the bottom right.

nets



## PAYMENT TERMINAL SOFTWARE - VIKING

Patch version 06.2.4: 01.07.2019

Patch version 06.2.3: 10.05.2019

Patch version 06.2.2: 05.02.2019

Patch version 06.2.1: 10.12.2018

Release version 06.2.0: 20.11.2018

**Highlights:**

In this release Nets introduces:

- Support for French language
- Country Code

**About the release:**

**SW** version: 06.2.4

**Test** version: 62.26

This release is for

- IUP250 + IUR250, iUC180B+iUR250, iUP250+iUR250+iUC150B
- ICT250E, ICT250EG,
- IWL250G, IWL250B, iWL255G(3G terminal)
- iWL220G (Polish configuration with Contactless)
- IPP350
- iCM122, iSMP Companion terminals
- iSMP 4 with and without Barcode reader

Please note that IWL220G (Nets configuration without contactless) and ICT220E, ICT220EG is not supported for this Release.

Terminal languages:

1. Both merchant and cardholder: Norwegian, Swedish, Danish, Finnish, English, German, Hungarian, Estonian, Polish, Dutch and French
2. Only cardholder language: Spanish

**Availability**

Contact your local Pre- and After Sales Service team or Account Manager for more information about this release.

**Patch release v06.2.4 (test version 62.26) includes the following:**

**Description**

**French language support**

In this release support for French has been added to merchant languages strings (menus, receipts and display texts to merchants). Some of the customer language strings (display texts shown to customers) are also adjusted.

**Country Code**

To provide information about cardholder issuer country terminal will support two new tags added under get card info request for both TLD and JSON format as mentioned below;

1. Issuer country code
2. Issuer country code alpha3

Above tags will provide the country code information which is present in the card in both contact and contactless methods.

If above information is not available in card, then ECR will get response as blank.

Refer below examples to use these tags:

1.Issuer Country Code:

JSON	TLD
<p><u>Request:</u></p> <pre>{ "cardinfo": { "ver": "1.03", "issuercountrycode": "?" } , "o": { "ver": "1.00", "merch": 733300 } }</pre> <p><u>Response:</u></p> <pre>Json: {"cardinfo":{"ver":"1.03","issuercountrycode":"578"}}</pre>	<p><u>Request:</u></p> <pre>3018 US 0000 US RS</pre> <p><u>Response:</u></p> <pre>TLD RESP: 3018 0003 578</pre>

## 2. Issuer Country Code Alpha3:

JSON	TLD
<p><u>Request:</u></p> <pre>{ "cardinfo": { "ver": "1.03", "issuercountrycodea3": "?" } , "o": { "ver": "1.00", "merch": 733300 } }</pre> <p><u>Response:</u></p> <p>Json: {"cardinfo":{"ver":"1.03","issuercountrycodea3":"NOR"}}</p>	<p><u>Request:</u></p> <p>3019 US 0000 US RS</p> <p><u>Response:</u></p> <p>TLD RESP: 3019 0003 NOR</p>

This Tags will also be available in alltags request.

Limitations: Json version below 1.03 does not have this information. Not all cards have these country code tags, in that case terminal will send blank response.

## Improvements to Invoice@store

In this version some correction of text strings and printing of receipts has been added.

## iSMP 4 Barcode

Changes have been made to iSMP4 with Barcode reader to wait for 10 minutes instead of 20 seconds before timeout when Barcode reader is activated from F4 key.

## Patch release v06.2.3 (test version 62.22) includes the following:

### Description

#### Invoice@Store

Invoice@Store is a new service for paying by invoice at the point of sale. This service will enable a consumer to select an alternative payment product (usually consumer credit) from a menu in the terminal. The payment methods available will be dependent on the agreement the merchant has with the various invoice payment providers, or ISPs (Invoice Service Provider).

In this first iteration, support for Klarna and Santander will be available. Support for other alternative payment providers are ongoing, next in line will be Mash. Please consult Commerce Enablement for updated list of supported Invoice partners

Once activated, the terminal prompts the customer whether they would like to pay by card or by invoice. The customer can choose invoicing discreetly and it will be almost as quick as a card payment.

Depending on the preference of the ISP, the customer will then enter their social security number or phone number on the terminal and the ISP will pick up the process from there. If approved, the terminal will reply to the merchant ECR that the sale can go ahead.

For some ISPs, it will also be possible to be pre-approved by the ISPs. In this scenario, the consumer will know that the payment has already been pre-approved by the ISP, and at the time of payment, the consumer will enter a code in the terminal, instead of using a payment card, to complete the payment.

#### Mifare cards

MIFARE products are embedded in contactless and contact smart cards, smart paper tickets, wearables and phones. Support to read MiFare Classic and Mifare Ultralight contactless devices is added.

Mifare cards contains a unique ID which is used to identify the cardholder.

Transaction flow Description:

Request:

```
{"cardinfo":{"ver":"1.03","uid":"?"}}
```

Response: (If MIFARE card is tapped, otherwise blank)

```
{"cardinfo":{"ver":"1.03","uid":"FB48A9B0"}}
```

It is expected that ECR will send an ADMIN FINISH to bring the terminal back to idle once UID has been obtained. If ECR sends any other VAS request instead of admin finish, Session will get aborted with a message "Invalid card" And if ECR sends a Transfer Amount request instead of admin finish, terminal will prompt for another card.

Supported cards: MiFare Classic and Mifare Ultralight contactless devices.

Limitations:

- Detection of Mifare cards are only enabled for Get card info (JSON format only).
- For financial transactions such as purchase, terminal won't react to a MiFare contactless card tap.

## Merchant card replacement

All Viking terminals are paired with a specific Merchant card so that Viking menu access can be restricted only to authorized personnel. To reset a merchant card pairing with Viking terminal it is mandatory to enter merchant code. The merchant code can be obtained by Nets Customer Service.

## Patch release v06.2.2 (test version 62.15) includes the following:

### Description

#### iSMP4 and support for Ergonomic Solution duo solution

This feature enables the ISMP4 to charge the IPHONE connected using the Ergonomic Solution hardware when the unit is placed on the docking station. ISMP4 releases a charge of 1 Ampere to connected iPhone when placed on the docking station.



Applies only to ISMP4 terminals and iPhone, ECR integration port in terminal parameters must be set to DOCK MODE.

#### iSMP4 and backlight

Backlight Off feature for iSMP4 attended terminal is implemented. In this feature one new option "Off" is introduced in Backlight parameter which will only be visible on ISMP4 terminal. Below is the detailed description of options provided in Backlight:

- 1) Auto -> When Viking application goes to Idle state, after 6 seconds delay it will dim the backlight display (Existing Feature).
- 2) Always -> Terminal backlight display will always be on and cannot be switched off (Existing Feature).
- 3) Off -> When Viking application goes to Idle state (i.e. Operative, Non-Operative, Battery Low), after 10 seconds delay it will automatically turn the display off. When any action is triggered i.e. (Card swipe, Key press, ECR command etc) it will automatically turn the display on.

**How to setup:**

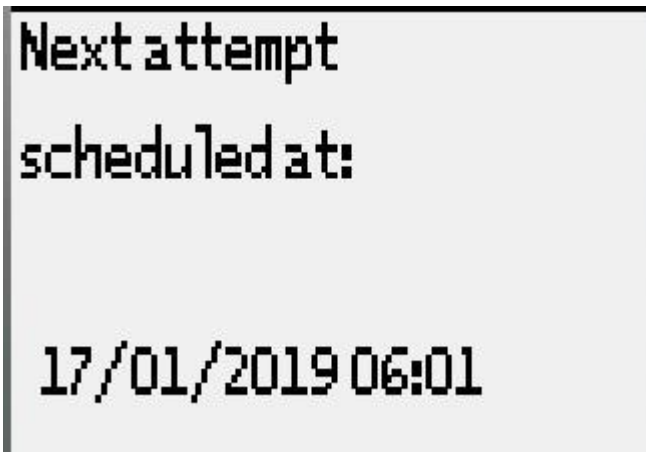
- 1) Swipe Merchant card on idle terminal
- 2) Select option 6 "Parameters" from "Merchant menu"
- 3) Select "Change" option from "Parameters" menu
- 4) Select "Function" from "Change" Menu
- 5) Go to Backlight option using up/down key on terminal
- 6) Press OK (Green Key) and select the any one option (Auto, Always, Off) accordingly using up/down key on terminal

Default value is Auto.

**SW upgrade**

With this feature failed software download requests will be re-triggered again after 24 hours. The terminal will continue to reschedule the software download request to next day until completed successfully.

If failed SW download next software download time will be displayed on the terminal. As shown in the below picture:



On battery operated terminals, merchant is able to 'Stop' software download on power on screen as before. If the merchant stops SW download here, terminal will attempt for SW download prior to merchant 'Switch off' the terminal from main menu or the terminal is idle for duration set in 'power off mode'. But if the terminal is in use for the last 24 hours then the SW download request is re-triggered.

During SW upgrade the duration for which the terminal attempts to reconnect to the network in case of network failure is reduced to 10 mins from 25 mins.

**Refund and deposit transactions are restricted with Merchant card/code**

Transaction types Refund and Deposit can't be accessed without merchant authentication. The authentication method can either be merchant card or merchant code.

Therefore, the previous settings such as "protect refund" and "protect deposit" have been removed because protection is enabled as default for these two transaction types.

ECR Integrated setup:

Transaction types such as deposit, refund and reversal can only be initiated from ECR.

Patch release v06.2.1 (test version 62.11) includes the following:

## Description

### Short cut menu for mobile terminals

A new parameter named as "Protect shortcut" is added under "4. Security" menu with following possible values: YES and NO.

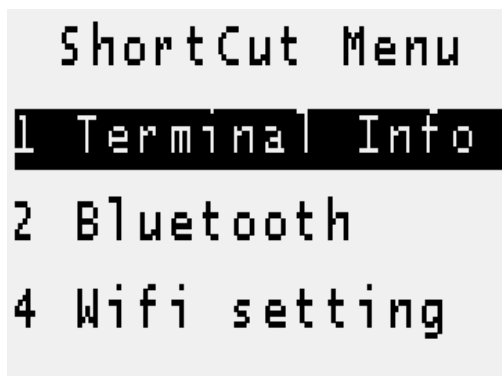
The "Protect shortcuts" is default set to YES.

There are three candidates for shortcut menu options;

WIFI, Bluetooth and Base settings which will be added under F2 key press based upon terminal hardware capabilities i.e battery operated terminal having Bluetooth or WiFi feature, eg. iWL250B, iSMP terminals.

If terminal doesn't support any of the shortcut menu options, like IPP350, then F2 key press will show you the terminal information as it is working today.

Here is a picture of ISMP 4 companion terminal which is Wifi capable.



If Parameter "Protect shortcut" is set to YES, the moment user selects Bluetooth OR Wifi OR Base settings, terminal will prompt to swipe "Merchant card".

### DCC mark up fee

Mark up fee will be displayed on currency selection screen and on transaction receipt in case of successful DCC transaction.

Given below is an example picture from ISMP 4 companion terminal:





## New static texts

Five new static text ID's have been added which will be utilized by ECR to gather some specific data from cardholder.

The static text id's and their translations are given as follows:

ID	NO	SV	DA	EN	FI
33	Venter på beløp	Väntar på belopp	Afventer beløb	Awaiting Amount	Odotetaan summaa kassalta
34	Start fylling	Börja att tanka	Start påfyldning	Start filling	Aloita tankkaus
35	Medlem	Medlem	Medlem	Member	Jäsen
36	Gir du samtykke Ja/Nei	Ger du samtycke Ja/Nej	Giver du samtykke Ja/Nei	Do you consent Yes/No	Hyväksytkö Kyllä/Ei
37	Jeg godtar. Ja/Nei	Jag godkänner. Ja/Nej	Jeg godkender. Ja/Nej	I agree. Yes/No	Hyväksyn. Kyllä/Ei

Examples for sending the digital asset queries as given below:

Query id 33	<pre>{"da":{"ver":"1.0","type":998,"action":3,"ra2t":{"ver":"1.0","query":[{"id":33,"target":1,"mode":5}]}}</pre>
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## iCMP – forced offline is supported

Forced offline support is added to the terminal type iCMP.

## New functionality in the Release:

### Discover/Diners Contactless

Full supports of Discover DPAS contactless cards is added in this release.

Following CVMs are supported: No CVM, Signature and online PIN with offline and online capabilities. On Device CVM processing (payment with mobile phone) is also support.

If Discover Diners contactless card doesn't support any CVM method, terminal switches the interface and prompts to insert the Discover Diners card.

All the features supported for Visa, Master Card will be supported for Discover Diners contactless card as well.

Contact transaction have been supported in previous release versions.

### American Express Contactless

In this release American Express contactless transactions are included in addition to chip transaction that is already supported.

The terminal will accept Contactless on American Express (ExpressPay) together with the other card agreement that is enabled.

Mobile CVM processing (payment with mobile phone) is supported.

Offline and online capabilities

If American Express contactless card doesn't support any CVM method, terminal switches the interface and prompts to insert the American Express card.

American Express cards don't support loyalty applications hence loyalty transactions are not supported. Cashback transaction is not allowed since it is not supported by the card scheme.

Since magstripe based contactless cards will be obsolete from 2019, terminal has not added support for these cards. If such a card is tapped terminal will display, "Insert or try another card".

### New static texts

Four new static text ID's have been added which will be utilized by ECR to gather some specific data from card-holder.

The static text id's and their translations are given as follows:

ID	English	Norwegian	Swedish	Danish	Finnish
29	Enter person ID + OK	Angi person ID + OK	Ange person-ID + OK	Indtast person ID + OK	Syötä henkilö-ID + OK
30	Enter car ID + OK	Angi bil-ID + OK	Ange bil-ID + OK	Indtast bil-ID + OK	Syötä auto-ID + OK
31	Enter mileage + OK	Oppgi kjørelengde + OK	Ange körsträcka + OK	Indtast kilometer + OK	Syötä km-määrä + OK

32 Enter secure ID + OK    Angi sikker ID + OK    Ange säkra ID + OK    Indtast sikker ID + OK    Syötä turvatunnus + OK

Examples for sending the digital asset queries as given below:

Query id 29	<pre> {"da":{   "ver":"1.0",   "type":998,   "action":3,   "ra2t":{     "ver":"1.0",     "query":[{"id":29,"target":1,"mode":1}]   } } </pre>
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### ISMP 4

SDK upgrade to support using physical connection with ECR device (Tablet or phone).

The iSMP4's modular design and 10-pin connector also deliver robust physical connectivity for power and data communication, enabling integration with third-party mobile devices, cases, stands and docks.

## Improvements

### Correct receipt text on reversal for Danish profile terminal

Terminal printed "Visa Danmark" on the receipt for reversal for Danish Visa cards. This is now corrected to print "Visa".

### PCI v4.0 reboot not sent to ECR for iUN

For IUN terminals, it has been noticed that if even one unit in the setup is PCI v4.0, the whole unit behaves as PCI v4.0 and reboots according the PCI requirements.

To avoid unnecessary alarms raised by ECRs the terminal will not report reboot caused by 24-hour reboot requirement to ECRs.

### NFC improvements

If more than one NFC cards are in contactless field terminal will prompt, "Use only one card". Also, now on "Read error, retry", message seen on premature removal of card from contactless field will be displayed on terminal along with ECR. These changes will be applicable for all contactless cards.