PMS.NEXO30.CEGID - Y2 Interface

User Guide

Version 1.0 - 14/06/2021

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1. INTRODUCTION

This document describes how to install, configure and use the PMS.NEXO30.CEGID Y2 driver (also called "Driver" inside this document).

1.1. ARCHITECTURE DESCRIPTION

The driver provides access to the NEXO compliant terminal provided by Dalenys and Natixis, allowing to perform transactions and exchange data with that POS using the NEXO Retailer 3.0 protocol.

1.2. Y2 DRIVER CAPABILITIES

The Y2 driver allows making the following transactions or operations:

✓ Purchase transactions

A purchase is done as follows:

- **a.** The merchant operator enters or computes the amount to pay.
- **b.** The cashier initiates a payment on the Y2 interface.
- **c.** The Y2 system sends a NEXO Retailer 3.0 order to the terminal.

The order contains the amount of the transaction and can contain additional information if required.

- **d.** The terminal displays the amount and waits for the customer to insert (or swipe) its card.
- **e.** When the transaction is complete on the terminal a NEXO Retailer 3.0 containing the result is sent back to the Y2 system.
- **f.** The Y2 interface displays the result to the operator.
- **g.** The transaction, whatever the result is stored on the NEXO Server of the acquirer.

✓ Purchase cancellation

To be added when supported by the terminal.

Refund a purchase

To be added when supported by the terminal.

2.1. NOTICE

2.1.1. SUPPORTED SYSTEMS

This driver has been tested on:

✓ CEGID Y2 v13, v14

All Y2 versions starting from v12 should normally be supported, subject to a test before.

✓ Windows 10 (64 and 32 bits), Windows 7 (64 and 32 bits)

Compatibility with Windows 8 can't be guaranteed.

✓ PAX Terminals provided by Dalenys and Natixis

Out of these parameters any modification (Y2 version, OS, functionalities) needs to be asserted with Dalenys and Natixis and can't be guaranteed.

2.1.2. SUPPORTED CURRENCIES AND COUNTRIES

Supported currencies

The PMS.NEXO30.CEGID Y2 driver supports any currency valid for the acquirer.

The currency is set in the driver settings.

It is possible to declare any currency inside a JSON file located inside the user directory and called "nexosale.currencies.json". Each currency is defined by both its ISO code and number of decimals.

If no currency is defined inside this file, the driver automatically uses the default currency details of the local computer.

Supported countries

The PMS.NEXO30.CEGID Y2 driver can be used in any country where the acquirer operates.

The only limitation to using the PMS.NEXO30.CEGID Y2 driver is all messages are today displayed in English (though translating them is possible). As long as these messages can be accepted by a merchant the PMS.NEXO30.CEGID Y2 driver can be used at any store.

2.1.3. SUPPORTED INSTITUTIONS

The PMS.NEXO30.CEGID Y2 driver can operate for any merchant whose acquirer's terminals support NEXO Retailer 3.0.

The PMS.NEXO30.CEGID server is operated by Dalenys and Natixis acting as acquirers.

2.2. Installation overview

Installation is made possible using the provided:

InstalPMS.NEXO30.CEGIDYInstallPMS.NEXO30.CEGID-vx.x.x.x-vYYYY-MM-DD.exe

file which will:

- ✓ Create all directories required to install the Driver.
- ✓ Copy files inside the directories.
- ✓ Install the required components.
- ✓ Provide an uninstall procedure.

2.2.1. PREREQUISITES

2.2.1.1. Software

The Driver uses the Microsoft .NET framework version 4.7 and won't be usable if this framework is not installed on the computer.

If not installed, the Microsoft .NET framework version 4.7 can be downloaded from https://www.microsoft.com/en-US/download/details.aspx?id=55167.

2.2.1.2. Hardware

The driver requires the use of a NEXO terminal supporting NEXO Retailer 3.0.

The PAX terminals provided by Dalenys and Natixis complies with these specifications.

2.2.2. DIRECTORIES

The created (and default) local directories are the following ones:

1. C:\Program Files (x86)\PMS.NEXO30.CEGID Y2 Driver

This is the main directory inside which are copied the following files:

- PMS.NEXO30.CEGID.dll: the CEGID Y2 driver itself;
- PMS.NEXOSALE30.dll, PMS.NEXO30.dll, PMS.COMMON.dll and Newtonsoft.Json.dll: support modules required by the CEGID Y2 driver.

2. C:\ProgramData\PMS.NEXO30.CEGID Y2 Driver\Settings

This is the default driver's settings directory. These settings are the ones manipulated while going through the PMS.NEXO30.CEGID Y2 driver settings (§4.2).

Storing the settings in a different directory (on a server for instance) is done by modifying the registry entry HKCU\Software\PMS\NexoSale\SettingsFileName.

3. C:\ProgramData\PMS.NEXO30.CEGID Y2 Driver\Log

This is the default driver's log file directory.

Log files are created daily (the date being appended to the end of the file).

Storing the log files in a different directory (on a server for instance) is done by modifying the settings's file entry as described in chapter Advanced settings (§4.2.2 - Log file name).

4. C:\ProgramData\PMS.NEXO30.CEGID Y2 Driver\Doc

This directory is where all supporting documents (like this one) are stored.

2.2.3. REGISTRY

When lauching the Y2 system and accessing the driver, the settings file is determined using a registry entry:

1. HKCU\Software\PMS\NexoSale\SettingsFileName

That entry identifies the path to the driver's settings file.

2.3. PACKAGE DESCRIPTION

The package is composed of:

1. PMS.NEXO30.CEGID.dll

The Y2 driver itself.

2. PMS.NEXOSALE30.dll, PMS.NEXO30.dll, PMS.COMMON.dll

Fully equipped interface to the PMS.NEXO30.CEGID server, it requires the Microsoft .NET 4.7 framework to be installed on the target computer.

3. Newtonsoft.Json.dll

Utility module used by PMS.NEXO30.CEGID.dll.

4. PMS.NEXO30.CEGID - Y2 Interface - User guide.pdf

Support document.

5. nexoSaleTest.exe, nexoDSaleTest.exe

Programs allowing to test accessing the terminal (nexoSaleTest.exe) and the driver's settings (nexoDSaleTest.exe).

6. nexoBuilder30.exe, nexoSimulator30.exe

Programms allowing to build nexo retailer 3.0 messages (nexoBuilder30.exe) and to simulate a terminal (nexoSImulator30.exe).

2.4. Installation process

Running *InstalPMS.NEXO30.CEGIDYInstallPMS.NEXO30.CEGID-vx.x.x.x-vYYYY-MM-DD.exe* will allow to copy all files inside the directories. No directory modification is allowed or even suggested, the user only has to agree to install the Driver.

INSTALLATION REQUIRES TO HAVE ADMINISTRATOR PRIVILEGES, TO REGISTER SOME COMPONENTS ON THE COMPUTER AND FINALISE PROCEDURE.

2.5. DEINSTALLATION OVERVIEW

To deinstall the driver it is necessary to go to the system settings using:

Windows Settings-> Applications-> Deinstall application

And choose

PMS.NEXOSALE 3.0 Driver for CEGID Y2

2.6. REINSTALLATION OVERVIEW

When reinstalling the driver (after an update) it is always a good practice to review the Advanced settings (§4.2.2) before proceeding.

3. SETTING UP THE DRIVER

3.1. Prerequisites

Setting up the driver requires no specific information from the acquirer.

The merchant must however keep in mind the Y2 system communicates with the terminal by TCP/IP and the network must be configure accordingly to allow that communication.

3.2. SETUP PROCEDURES

Setting up the driver is made as follows:

- **a.** Display the Minimum settings window (§4.2.1).
- **b.** Manually enter the Mandatory settings (§3.3).
- **c.** Verify the connection to the POS using the self tests provided.

3.3. MANDATORY SETTINGS

To access the PMS.NEXO30.CEGID server and perform transactions, the Driver must be configured by entering at least the following settings:

1. Sale ID

It indicates the sale the merchant wants to give to its Y2 system when it communicates with the terminal.

2. POIID

T It indicates the terminal name the merchant wants to give to the terminal the Y2 system will communicate with.

3. Application name

It can be any string identifying the application running on the Y2 system.

4. Manufacturer name

It can be any string identifying the Y2 system provider.

5. Software version

It can be any string identifying the application running on the Y2 system.

6. Certification code

It can be any string name validated by the terminal.

Note that at this stage the PAX terminals provided by Dalenys and Natixis do not check that Certification code.

7. Terminal IP

This is the IP address of the terminal onto the network.

8. Terminal port

This is the port to reach in the terminal.

Note that the PAX terminals all use port 2018.

All other settings as described below are not mandatory or will find a default value

4. SETUP AND MODIFY PARAMETERS

4.1. SETTING UP THE Y2 SYSTEM

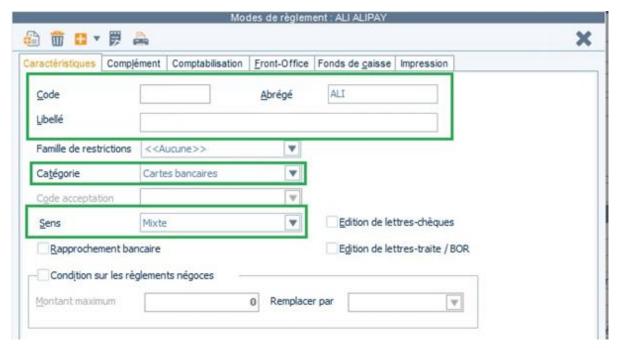
The screens presented in this chapter are all fully native CEGID Y2 screens.

4.1.1. SETUP Y2 POS

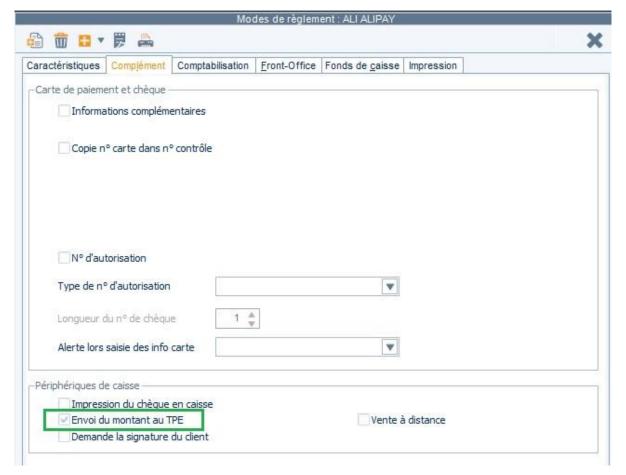
Create Payment modes

The payment modes must be created inside Y2 before setting the EFT settings. These payment methods will be used <u>to book</u> the payment after the transaction has succeeded (using the mapping table).

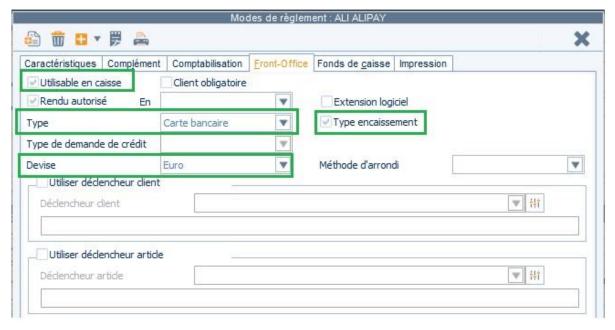
The payment codes used hereafter are customer specific but will be used when creating the mapping table.



First payment mode creation step

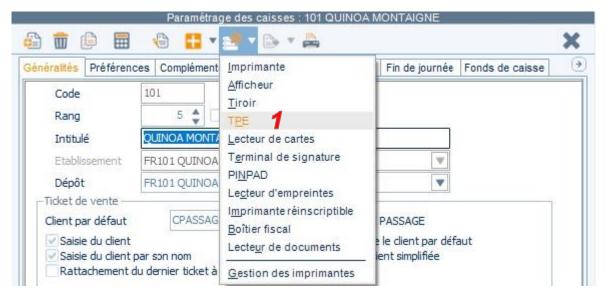


Second payment mode creation step



Third payment mode creation step

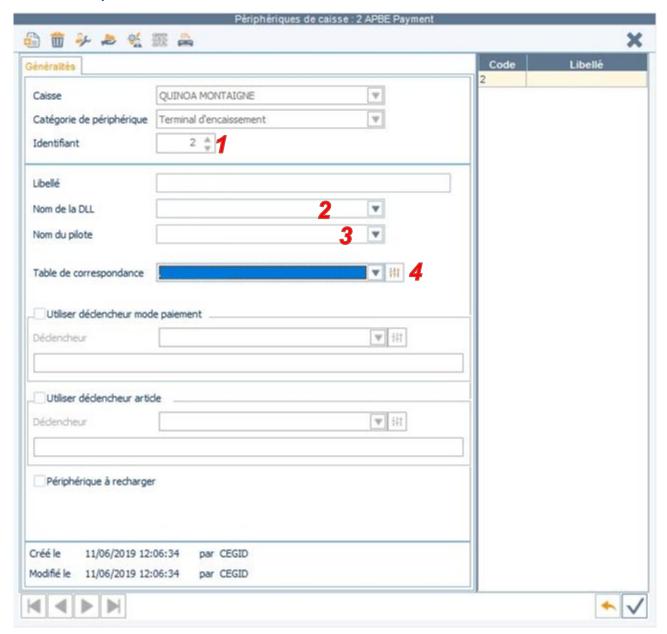
Call EFT settings



1. TPE

Call "TPE" (EFT) specific settings.

Set EFT parameters



1. Identifiant

This ID must be greater than 1 (reserved for gift cards).

2. Nom de la DLL

Choose PMS.NEXO30.CEGID.

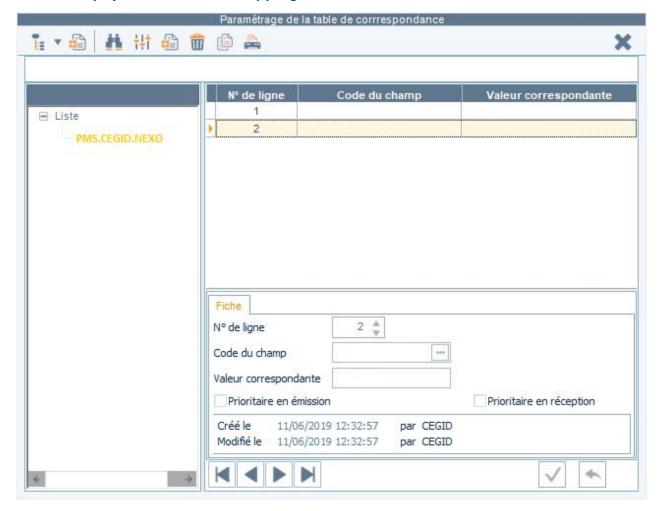
3. Nom du pilote

Choose PMS.NEXO30.CEGID Driver.

4. Table de correspondance

A mapping table must be created to allow identifying the payment method and print it on receipts.

Create payment methods mapping table



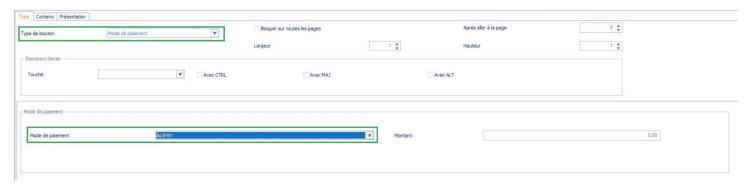
Create Till Mapping

Some of the below elements depend on customer functional specifications.

CREATE THE BUTTON IN THE MAPPING



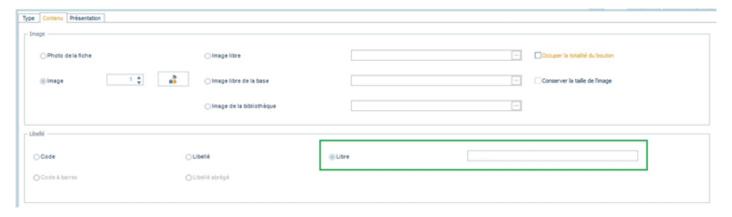
ASSCOCIATE THE PAYMENT MODE



Type of payment must be "Payment mode".

Payment mode name depends on customer specifications. The chosen payment mode must be an EFT payment trigger.

CHOOSE THE NAME OF THE BUTTON TO USE



4.1.2. SETUP THE PMS.NEXO30.CEGID Y2 POS

Call PMS.NEXO30.CEGID Y2 driver settings

1. Call the PMS.NEXO30.CEGID driver settings by clicking onto the dedicated button at the top of the screen. Doing that will bring the merchant to display the screen described in Minimum settings (§4.2.1).

Call PMS.NEXO30.CEGID Y2 driver advanced setting

The Y2 system must be put in SAV mode to allow calling Advanced Setting Putting the Y2 system in SAV mode is done as follows:

1. Press ALT+F11, display Y2 settings and call the "Préférences" screen.



2. The "Préférences" screen is displayed.



a. Debug

Click on "Debug" tab to access the "SAV" option.

b. Se mettre en SAV

Check the option puts the Y2 in SAV mode and allows accessing the Advanced Setting instead of the Minimum settings and save.

BEWARE, ONCE IN SAV MODE THE Y2 SYSTEM REMAINS IN THAT MODE UNTIL THE SAV MODE HAS BEEN EXPLICITLY DISABLED. TO DISABLE THE SAV MODE DO THE EXACT SAME PROCEDURE BUT UNCHECK THE "SE METTRE EN SAV" OPTION AND SAVE.

4.2. PMS.NEXO30.CEGID Y2 DRIVER SETTINGS

4.2.1. MINIMUM SETTINGS



PMS.NEXO30.CEGID Y2 driver Minimum settings window

1. Auto close processing window

This flag allows specifying whether the transaction window (showing transaction progress) must be dismissed automatically when the transaction is finished, or not.

Checking this flag will make the window disappear automatically, unchecking it will force the merchant to manually and explicitly close the window when the transaction is finished.

2. Delay before auto close

If the Terminal port flag has been set (checked), this value indicates the delay (in seconds) between the end of the transaction and the moment the window is automatically closed.

A low value might make the window disappear too fast, not giving the opportunity to the merchant to really check the transaction result.

A high value makes the window to stay longer on the screen preventing the receipt to be printed.

The advised value is between 1 and 5 seconds (2 preferable).

3. No autoclose on error

If an error occurs while processing a transaction and Auto close processing window is checked, the transaction window will disappear after the Delay before auto close.

Checking that entry will prevent, in case of an erreor, the window to disappear automatically.

4. Use backup POI

Indicates whether the Y2 system must use the backup POI instead of the nominal one.

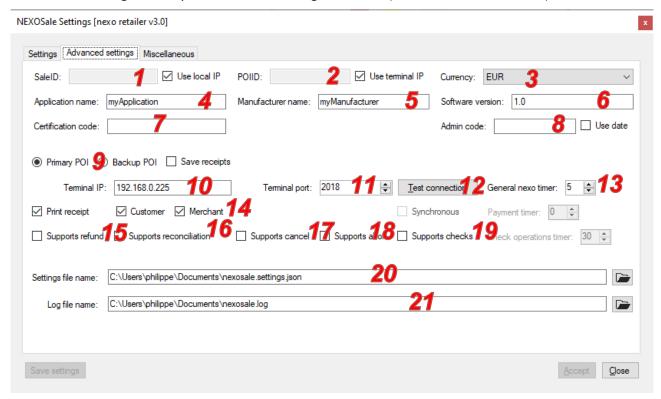
This is useful if the nominal POI is not reachable.

Terminal connection is available in the.

4.2.2. ADVANCED SETTINGS

The advanced setup is only for administration purposes and allows to change internal behaviours of the PMS.NEXO30.CEGID Y2 driver. It can be accessed by calling the PMS.NEXO30.CEGID Y2 driver settings in Y2 "SAV mode". It is strongly advised to not provide advanced setup to regular users.

These settings can only be accessed in Debug/SAV mode (refer to Se mettre en SAV).



PMS.NEXO30.CEGID Y2 driver Advanced settings window

1. SaleID

Enter any ID identifying the sale.

To easily identify the sale it is possible to let the system use the IP address making it unique on the network.

2. POIID

Enter any ID identifying the POI (the terminal).

To easily identify the terminal it is possible to let the system use the IP address making it unique on the network.

3. Currency

Choose the currency that will be used to perform the transactions.

4. Application name

Any string identifying the application on the Y2 system.

5. Manufacturer name

Any string identifying the application manufacturer on the Y2 system.

6. Software version

Any string identifying the software version on the Y2 system.

7. Certification code

Any string accepted by the terminal.

8. Admin code

In case the terminal does not respond to a teller request, a code s requested to unlock the system. That code can be entered here. If no code is provided a date will be requested for that operation.

9. Primary POI / Backup POI

Allows indicating which POI settings to display and manipulate.

10. Terminal IP

The IP of the terminal to reach to perform a transaction (depends on Primary POI / Backup POI).

11. Terminal port

This IP port to reach on the terminal (depends on Primary POI / Backup POI).

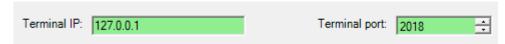
The advised value is 2018 to address a PAX terminal provided by Dalenys and Natixis

12. Test connection

Allows to test the connection to the specified POI using the indicated IP + port data.

Testing the connection allows verifying whether the terminal is reachable or not. Testing is done by selecting the terminal to reach (Primary POI / Backup POI), checking the Terminal IP and Terminal port and pressing the Test connection button. Doing this will:

If the terminal is reachable Terminal IP and Terminal port will turn to green.



• If the terminal is reachable Terminal IP and Terminal port will turn to red (after a few seconds): in that case check the settings or check you're network configuration.



13. General nexo timer

The timer to wait for when a non blocking operation is in progress (login, logout,...).

The advised value is 5 and 10 seconds.

14. Print receipt

Allows indicating the Y2 system must print the transaction receipt when finished.

If checked it is possible to indicate which receipts are to be printed (merchant and/or customer).

15. Supports refund

Indicates if the terminal accepts to perform refunds.

16. Supports reconciliation

Indicates if the terminal accepts to perform reconciliation.

17. Supports abort

Indicates if the terminal accepts to perform abort.

Note that PAX terminals do not support abort at this time.

18. Supports cancel

Indicates if the terminal accepts to perform cancellation (reversal).

19. Supports checks

Indicates if the terminal accepts to perform checks operations.

For more information please refer to a Dalenys representative.

20. Settings file name

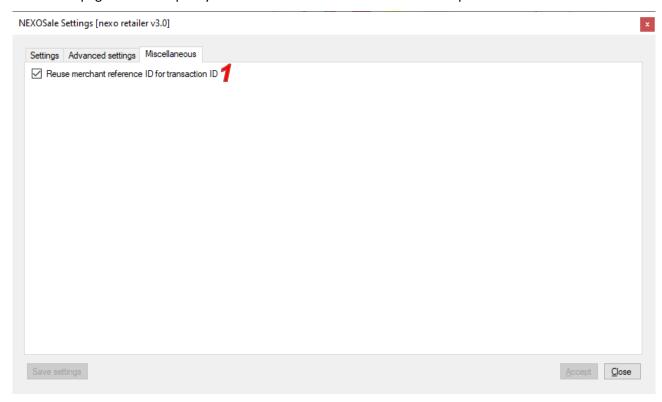
Allows indicating where the settings file is stored. It can be stored locally or on a network.

21. Log file name

Allows indicating where the log file is stored. It can be stored locally or on a network.

4.2.3. ADVANCED SETTINGS - MISCELLANEOUS

That page allows to specify how some transactions data will be manipulated.



PMS.NEXO30.CEGID Y2 driver Advanced settings - Miscellaneous window

1. Reuse merchant reference ID for transaction ID

Allows forcing to use the Y2 receiptRef entry during a transaction to populate all nexo transaction IDs.

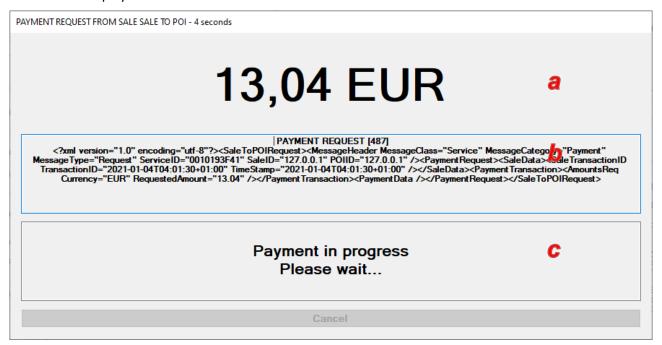
The advised value is to leave this entry checked.

5. MAKING TRANSACTIONS

The following transactions are accessible through the Driver.

5.1. Purchase

- 1. The merchant enters or compute the amount to pay for and calls the PMS.NEXO30.CEGID payment procedure (the procedure for calling this functionality might vary on cash registers).
- 2. The amount is sent to the POI for processing.
- **3.** Once the transaction has been initiated onto the POI the purchase processing window is displayed.



Purchase processing window: purchase in progress

a. AMOUNT

This upper part displays the amount of the transaction along with the transaction currency.

b. INFORMATION

The middle part displays information about how the transaction is being performed.

c. MESSAGE/RESULT

The lowest part displays messages to the merchant and the result of the transaction.

4. When the transaction is completed (accepted or not) the RESULT part indicates it with a colour code and a message indicating the final result.

This transaction has been accepted (RESULT is GREEN)

This transaction has been declined (RESULT is RED)

Please note that cancelling the transaction using the "Cancel" button will also decline the transaction (RESULT is RED) with a different message indicating the transaction was cancelled.

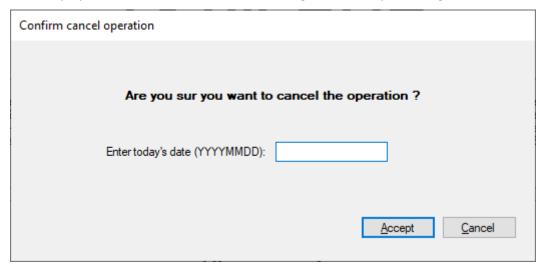
5.2. STOP PROCESSING

In case the terminal does not answer the Y2 system is blocked.

In that case it is possible to unlock it by doing as follow:

- **1.** Double-click on "AMOUNT" part.
- 2. Double-click on "INFORMATION" part.
- 3. Double-click on "MESSAGE/RESULT" part.

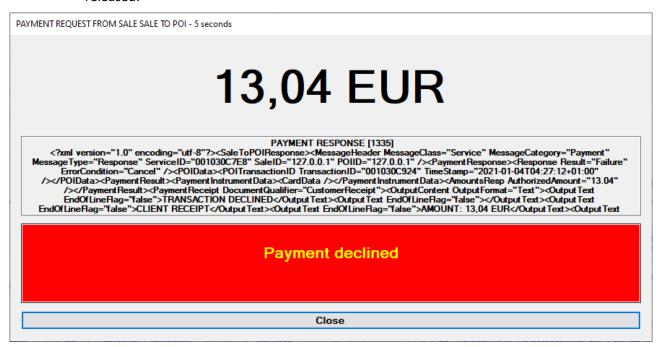
That will display a window which will allow cancelling the current processing.



Window to cancel processing in progress

The operator must then enter either (i) the

- **4.** Admin code if defined or (ii) the date in the indicated format (YYYYMMDD) and validate (entering the date has no effect if an admin code has been defined).
- **5.** If a valid admin code or date has been entered the transaction is aborted and the Y2 system is released.

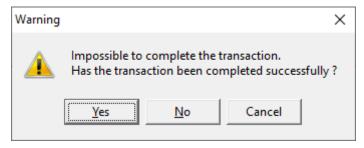


Beware, aborting the transaction that way does not abort the transaction on the POI. The operator must use that option only in specific cases (terminal does not answer, no more network,,...).

5.3. MANUAL TRANSACTION ENTRY

If the terminal can't be reached the transaction window will display a message requesting the clerk to indicate whether the transaction is being performed without a connectino to the POS or not.

Beware in this case the transaction is stored as successful or not based on what the clerk will answer.



1. Yes

The transaction will be stored inside the Y2 database as a successful transaction without the ability to cancel it (purchase).

2. No, Cancel

The transaction is not saved as a successful transaction.