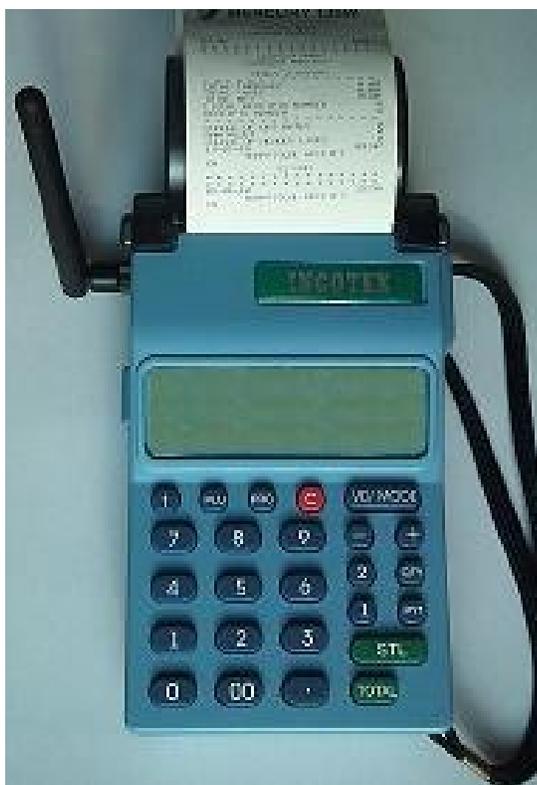




INCOTEX GROUP ELECTRONIC SIGNATURE DEVICE (ESD)

INCOTEX 500F

QUICK START GUIDE



2011

PROPRIETARY INFORMATION

This document contains proprietary information of INCOTEX GROUP. This document and the information it contains may only be used in the design, production, or manufacture of products for INCOTEX GROUP.

This is an Unpublished Work which contains Confidential and secret Information which is protected under the copyright laws. The existence of the copyright notice is not to be construed as an admission or presumption that publication has occurred. Unauthorized copying is strictly prohibited.

INCOTEX GROUP

TABLE OF CONTENTS

PURPOSE.....	6
SECTION 1: TECHNICAL SPECIFICATIONS.....	6
SECTION 2: OPRETION START.....	7
2.1. ESD initialization.....	8
2.2. Command mode.....	8
2.2.1. Data entering.....	8
2.2.2. Entering ESD serial number.....	9
2.2.3. Memory card activation.....	9
2.2.4. Fiscalization.....	9
2.2.5. Changes of user's data.....	10
2.2.6. Date and time setting.....	10
2.2.7. Tests.....	10
2.2.8. Changing the VAT rates.....	12
2.2.9. Daily reports.....	12
2.2.10. Fiscal memory reports.....	12
2.2.11. Printing information for a specific invoice.....	15
SECTION 3: USING A SERVICE PROGRAM.....	16
3.1. Set Date and Time.....	16
3.2. Header programming.....	16
3.3. Set tax rates.....	16
3.4. Daily Z Report.....	16
3.5. Set connectivity parameters.....	17
3.6. Set SN.....	17
3.7. Fiscal Start.....	17
3.8. Paper Feed.....	17
3.9. Exit.....	17
SECTION 4: INSTALLING A PRINTER	17
SECTION 5: INSTALLING THE ESD.....	25
5.1. Contents of E.S.I. application.....	25
5.2. Installing the program driver.....	25
5.3. Installing the Client.....	28
5.4. Installing a Server.....	32
SECTION 6: STARTING AND TRAINING THE APPLICATION.....	38
6.1. E.S.I. activation.....	38
6.1.1. "Settings" window.....	39
6.2. ESD list.....	40
6.3. Properties.....	41
6.3.1. Printer properties.....	41
6.3.2. E.S.I. Settings.....	42

6.3.3. Connection settings.....	52
6.3.4. Using batch files.....	53
6.4. Verification button.....	54
6.5. Signing invoices from multiple PCs with one ESD.....	57

PURPOSE

The present document is a quick start guide of INCOTEX 500F - Electronic Signature Device. This device gives opportunity to companies that issue receipts or invoices to be performed via special accounting software. It is designed to authenticate PC – produced financial documents, applying unique electronic signatures to each of them.

The present document is a quick start guide of INCOTEX 500F - Electronic Signature Device. This device gives opportunity to companies that issue receipts or invoices to be performed via special accounting software. It is designed to authenticate PC – produced financial documents, applying unique electronic signatures to each of them.

The ESD can be trained to recognize and sign up to four different types of financial documents (up to four templates). When a document from the user's PC is sent to the text printer it is automatically captured by the ESD which determines whether the document matches any of the trained templates. If it does, the document is recognized as a valid financial one. In this case the ESD gives the document an electronic signature and then returns it to the printer. If the document does not match any of the trained templates, it is not recognized as a valid financial document and is returned to the printer without an electronic signature.

When training the templates the user sets specific parameters of the financial document and their values on particular places in the template. During the recognition the ESD searches for these parameters in the registry. If the values and places of all the parameters match the recognition rules set in any of the templates, the document is recognized to be a valid financial one.

The parameters that can be set in the template as recognition rules are:

- Type of the document
- Number of the document
- Date of issuing
- Amount to be paid (in four rate groups)
- VAT (in four rate groups)

This guide gives directions how to start the system – installing the ESD and training to recognize valid financial documents.

SECTION 1: TECHNICAL SPECIFICATIONS

- Quick and noiseless thermal printer
- 13-digit 7-segment LCD display
- Connection to a PC via USB
- Fiscal memory with the capacity of 2400 records of daily Z reports.

- Thermal printer - easy paper loading:
 - type TPM 021L;
 - printing rate - 40 mm/sec;
 - thermochemical paper, one-layer, width - 57 mm, external diameter – max. 42 mm;
 - characters per line – 32;
- Keyboard:
 - 12 digit keys
 - 13 functional keys
- Built-in tests
- Dimensions (mm) – 191 x 96 x 61
- Weight (kg) – 0,370
- External adapter (9V, 3,5 A) 220V (-15%,+10%) 50Hz;
- Operating temperature interval - 15° to 60° C
- Relative air humidity - 20% to 85%
- Lithium battery supporting the real time clock when the fiscal printer is switched off.
- Automatic Z report issuing
- Up to 2GB SD card for storage of signed invoices
- At least 1 200 000 invoices per single SD card
- Invoice amount recognition by VAT groups
- Built-in GPRS modem for sending the data to the administration server
- Built-in verification functionality
- Built-in real time clock

Please read this manual carefully before operating your ESD in order to gain a full understanding of its function and performance.

Please keep this manual for future reference. It will help you, if you encounter any operational problems.

SECTION 2: OPERATION START

2.1. ESD initialization

First switch on and off the ESD using the key at the right side its box.

Before starting operating with the EDS it has to be initialized. The initialization should follow the given sequence:

2.1.1. Switch on the ESD, using the button at the right side of the ESD box. The message '**FOR CORRECT WORK ENTER DATE AND TIME**' is printed.

2.1.2. Press the  button to start the GSM initialization.

Note: At this time Err 70 or Err 71 can occur, due to SIM card absence or weak GSM signal. To exit the error message and continue with the initialization, press .

2.1.3. When the GSM initialization is complete on the display appears the message '**dAtE**'. Enter the date in format DDMMYY. Press **STL** for confirmation.

2.1.4. The ESD displays message '**t**'. Enter the time HH:MM and press **STL** for confirmation.

2.1.5. The ESD displays '**SP** _ _ _ _ _' requiring the service password. The default service password is **2104204134**. Press **TOTAL** for confirmation.

2.1.6. A message for '**service intervention**' is printed.

2.1.7. The ESD displays the date. To view the time, press **VD / MODE**. To correct the date/time press **—** and repeat the procedure. To confirm the date/time press **TOTAL**.

2.1.8. A message for successful initialization '**RAM IS RESET**' is printed.

2.1.9. The ESD displays '**ESd rdY**'.

2.2. Command mode

After the ESD is initialized every time it is switched on the displays shows '**ESd rdY**'. To enter command mode enter the service password and press **TOTAL**. The ESD enters command mode and displays '**ESd EntEr**'. To exit command mode press **C**.

2.2.1. Data entering

- **Data entering in a digital field**

When a digital field is selected, the item number is displayed on the left, followed by the contents of the field. If the display positions are not enough, only the content is displayed.

New content can be entered using the digit keys. In case of an error, press key **C** as many times as necessary – each pressing clears one digit from the right to the left. If the key **C** is pressed and held down, all the entered digits will be cleared.

- **Data entering in a character field**

When a character field is selected, the item number is displayed on the left, followed by the number of the first character and the ASCII code of the character.

To enter the characters ASCII codes use the digit keys. If an ASCII code includes a leading zero, it must be entered. After entering 3 digits an automatic transition to the next character will be performed (the displayed character number increases by 1).

Pressing the key **QTY**, when a character field is entered, prints the current text.

Pressing the key combination **SH** **STL** when a character field is entered prints a table of the ASCII codes. A character code can be calculated by adding the column number to the number printed at the end of the row, where the character is printed.

ATTENTION! Pressing the key **00** in a character field clears its contents and performs positioning for entering the first character in the field.

Character codes:

Space - 032	0 - 048	A - 065	R - 082	a - 097	q - 113
! - 033	1 - 049	B - 066	S - 083	b - 098	r - 114
“ - 034	2 - 050	C - 067	T - 084	c - 099	s - 115
# - 035	3 - 051	D - 068	U - 085	d - 100	t - 116
\$ - 036	4 - 052	E - 069	V - 086	e - 101	u - 117
% - 037	5 - 053	F - 070	W - 087	f - 102	v - 118
& - 038	6 - 054	G - 071	X - 088	g - 103	w - 119
‘ - 039	7 - 055	H - 072	Y - 089	h - 104	x - 120
(- 040	8 - 056	I - 073	Z - 090	i - 105	y - 121
) - 041	9 - 057	J - 074	[- 091	j - 106	z - 122
* - 042	: - 058	K - 075	\ - 092	k - 107	{ - 123
+ - 043	; - 059	L - 076] - 093	l - 108	- 124
, - 044	< - 060	M - 077	^ - 094	m - 109	} - 125
- - 045	= - 061	N - 078	_ - 095	n - 110	~ - 126
. - 046	> - 062	O - 079	` - 096	o - 111	
/ - 047	? - 063	P - 080		p - 112	
	@ - 064	Q - 081			

2.2.2. Entering ESD serial number

In command mode, when the display shows message 'ESd rdY', the operation is started by pressing the key **+**. The number 01 (1-st character) and its code are displayed, for instance 01.048 0. The default characters (letters of the approval) are **03TZ**. They are confirmed by pressing **TOTAL**. If you need to add more characters enter their codes and press **TOTAL**. If **some other** characters have to be entered instead of **03TZ**, their codes are entered first and then **TOTAL** is pressed. The prompt 'rEG' is displayed next. Up to 9 digits (ESD serial number) can be entered and press **TOTAL** at the end. The ESD prints its serial number and additional confirmation is required by pressing **STL**. If an error occurs, quit the operation by pressing **C** (instead of **STL**). If confirmed, the EFD serial number is recorded in the FM and cannot be changed. Pressing the key **+** prints a short receipt including the serial number.

2.2.3. Memory card activation

To activate the memory card in command mode press **2**. 'Set Sd' is displayed. To quit the operation press **C** or proceeded by pressing key **TOTAL**. An additional confirmation is required and **STL** has to be pressed. 'FrT' is displayed and the process of initialization takes a few minutes. At the end 'FrT rdY' is displayed, the active card SN and the activation date is printed.

Fiscalization of the ESD is not possible, if there is no activated memory card in the ESD. After fiscalization, all receipts and reports, printed by the ESD are automatically stored in an electronic journal. The electronic journal is stored in the memory card with every daily Z report.

2.2.4. Fiscalization

To start the operation press **-** (in command mode). 't no' is displayed and the user's TIN has to be entered first (using the characters' codes – page 3). Press **TOTAL** to finish the operation. The TIN is printed, press **STL** for confirmation. After 'dt no' is displayed, enter the TIN of approved ESD distributor/supplier (using the characters' codes – page 3). Press **TOTAL** at the end. The TIN is printed, press **STL** for confirmation.

'U no' is displayed, enter VRN of the approved ESD supplier (using the codes' characters – page 16).

Press **TOTAL** at the end. The VRN is printed and press **STL** for confirmation. 'SEt' is displayed. If an error occurs, the operation must be canceled with **C**. For confirmation press **TOTAL** and **STL**. A receipt about the event is printed after recording all the necessary data on the FM.

2.2.5. Changing user's data

To start this operation press the key **PY1**. The message 'SP' is displayed. Enter the service password and press **TOTAL**. The ESD prints a message about the service intervention and records the event in the fiscal memory.

The digit '1' is displayed, that corresponds to the first text line of the header message. To enter the field press **STL**. Number 01 (1st character) and its code are displayed, /ex. 01.214 0/.

To clear the previous contents of the text line press **00**. Up to 32 characters can be entered using their 3-digit codes shown in the table above. Press **STL** to confirm the text line. The message 'rdY' is displayed for a while.

By using keys **+** or **-** different text lines can be reached in ascending or descending order. Each text line can be changed as described, as first press **STL** to enter the field.

Note: The texts are automatically centered when printed.

Note: If an empty line is left, neither it, nor the following header lines will be printed, except the last one (containing the TAX OFFICE ADDRESS).

When all the necessary data is entered in the header, press **TOTAL**. The newly entered data is printed and with a corresponding message additional confirmation is required to be executed by pressing **STL**. When confirmed, the new data is recorded in the fiscal memory (if the EFD is fiscalized) and a message about the event is printed, including the number of header changes left.

2.2.6. Date and time setting

To start first press **QTY**. The current date is displayed. Next press **-**. The message 'dAtE' is displayed. Enter the date in format DDMMYY and press **STL**. The message 't' is displayed. Enter the time in format HHMM and press **STL**. If the EFD prints a message about additional confirmation, press **STL**. The message '5P' is displayed. Enter the service password and press **TOTAL**. The EFD prints a message about the service intervention and records the event in the fiscal memory. The newly entered date and time are also printed in the receipt. Press **TOTAL** to end the operation.

2.2.7. Tests

To perform tests press **PLU** in command mode.

The following tests are available by pressing the corresponding digit key:

0 – Display test

No	Description	Display	Exit
0	Visual examination of all segments	8.8.8.8.8.8.8.8.8.	C

1 – Check sum of the EFD firmware.

No	Description	Exit
1	The EFD calculates and displays the check sum.	C

2 – RAM test.

No	Description	Display	Exit
2	RAM test is performed	FrA rdY	Automatic

3 – Keyboard test.

No	Description	Display	Exit
3	<p>All the keys have to be pressed one by one in the following sequence (by columns) :</p> <p> , 7, 4, 1, 0, , 8, 5, 2, , , , 9, 6, 3, ., , , , , , , ,   </p> <p>If the sequence is observed and no error is detected, the display remains 't 3' until all the keys are pressed. In case of an error, the test is automatically canceled, regardless the fact if the sequence is finished</p>	t 3	

4 – Printer error test

No	Description	Display	Exit
4	The EFD tests the paper end sensor and the printing head sensor	no Error	

5 – Printer test

No	Description	Display	Exit
5	The EFD prints a printout with characters and codes every 3 seconds.	t 5	

6 – FLASH test

No	Description	Display	Exit
6	It is an overall FLASH test. If no error is detected, *FLASH OK* is printed.	t 6	

7 – Barcode scanner test.

No	Description	Display	Exit
7	A barcode scanner is connected to the corresponding interface input. When a barcode is scanned, the EFD prints its numeric equivalent.	t 7	

9 –FM test

No	Description	Display	Exit
9	“FLASH OK” is printed if no error is encountered.		

2.2.8. Changing the VAT rates

Start the operation by pressing **1**. The first VAT group is displayed: 1.X.XX. Use keys **+** and **-** for cyclic going through the VAT rates.

When a VAT rate number is reached and displayed, enter the new value pressing the digit keys. To confirm press **STL**.

After entering all the new rates, press **TOTAL** to finish the operation. The new VAT rates are printed and recorded in the FM (if the EFD operates in fiscal mode). A message about the number of tax changes left is also printed.

2.2.9. Daily reports

To print a daily Z report press key **TOTAL**.

To print a daily X report press “200 **TOTAL**”.

2.2.10. Fiscal memory reports

Generally there are two types of FM reports – FM reports by record numbers (detailed and short reports) and FM reports by dates (detailed and short reports).

Note: Pressing the key **C** cancels currently printed FM report. A corresponding message for a canceled report is printed.

- **FM reports by record numbers**

This kind of report is specified for detailed report- '2 **STL**' or a short one '12 **STL**'. The prompting message '**n_bGn**' is displayed. Enter the number of a selected initial record (up to 4 digits) and press **QTY**. The prompting message '**n_End.**' is displayed. Enter the number of a selected final record (up to 4 digits) and press **VD / MODE**.

If the number of the initial record is not entered in the above-described sequence, the default initial number is 1. If the number of the final record is not entered, the default number is the one of the latest FM record.

It is admissible that the initial and the final numbers are the same, but if the final number is less than the initial one, a corresponding error message is displayed (Err 25).

Example: A short FM report from record 1 to record 2

12 **STL** 1 **QTY** 2 **VD / MODE**

```

ILLEGAL RECEIPT PUNISHABLE
BY LAW

TRADER NAME
TRADER ADDRESS
COMMERCIAL ESTABLISHMENT
COMMERCIAL ESTABLISHMENT ADDRESS

TAX OFFICE ADDRESS
TIN 123231312
URN 456564564
01/1131/798897879/123231312/
03T254000011

SHORT FM REPORT
REPORT BY 'Z' NUMBERS
FROM 0001
TO 0002
SET IN OPERATION
08-07-10 10:52
-----
DEFAULT VAT RATES
08-07-10 10:52
A=18.00
B=0.00
*****
UAT*A.....27139.57
UAT*B.....0.00
NET (A+B).....270438.43
TURNOVER <EX.>.....13219.00
LEGAL RECEIPTS 92
VAT CHANGES 1
CMOS ERRORS 0
HEADER LINES CHANGES 0
PRINTER DISCONNECTION 0
SERVICE INTERVENTIONS 0
*****
DATE 09-07-10 TIME 20:08:58
SERIAL NUMBER 03T254000011

ILLEGAL RECEIPT PUNISHABLE
BY LAW

```

Requested initial and final record numbers

Date (ddmmyy) and time (hh:mm) of fiscalization (fiscal start)

VAT rates, date (ddmmyy) and time (hh:mm) of recording in the FM

Summary data, referring to the selected FM records

Example: Detailed FM report from record 1 to record 2: STL 1 QTY 2 VD / MODE

```

DETAILED FM REPORT
REPORT BY 'Z' NUMBERS
FROM          0001
TO            0002
SET IN OPERATION
08-07-10          10:52
-----
DEFAULT VAT RATES
08-07-10          10:52
A=18.00
B=0.00
=====
Z              0001
08-07-10          19:35
TURNOVER <EX.>..... 5655.00
TURNOVER TOTAL*A..... 90480.00
TURNOVER VAT*A..... 13802.03
TURNOVER NET*A..... 76677.97
TURNOVER TOTAL*B..... 58435.00
TURNOVER VAT*B..... 0.00
TURNOVER NET*B..... 58435.00
LEGAL RECEIPTS          48
-----
ACTIVE CARD SN:      1675473506
-----
VAT CHANGES          0
CMOS ERRORS           0
HEADER LINES CHANGES 0
PRINTER DISCONNECTION 0
SERVICE INTERVENTIONS 0
=====
Z              0002
09-07-10          19:56
TURNOVER <EX.>..... 7564.00
TURNOVER TOTAL*A..... 87435.00
TURNOVER VAT*A..... 13337.54
TURNOVER NET*A..... 74097.46
TURNOVER TOTAL*B..... 61228.00
TURNOVER VAT*B..... 0.00
TURNOVER NET*B..... 61228.00
LEGAL RECEIPTS          44
-----
ACTIVE CARD SN:      1675473506
-----
VAT CHANGES          0
CMOS ERRORS           0
HEADER LINES CHANGES 0
PRINTER DISCONNECTION 0
SERVICE INTERVENTIONS 0
*****
VAT*A..... 27139.57
VAT*B..... 0.00
NET (A+B)..... 270438.43
TURNOVER <EX.>..... 13219.00
LEGAL RECEIPTS          92
VAT CHANGES          1
CMOS ERRORS           0
HEADER LINES CHANGES 0
PRINTER DISCONNECTION 0
SERVICE INTERVENTIONS 0
*****
DATE 09-07-10      TIME 20:03:42
SERIAL NUMBER      03T2540000011

ILLEGAL RECEIPT PUNISHABLE
BY LAW

```

- Record number
- Date and time of daily Z report
- Turnover, calculated VAT and net amounts in tax groups
- Serial number of memory card, in which the electronic journal was recorded
- Events, registered during the corresponding daily period
- Next record in the selected range
- Summary data, referring to the selected FM records

- **FM reports by dates**

This kind of report is specified for a detailed report- '1 STL' or a short one '11 STL'. The prompting message 'd_bGn' is displayed. Enter the selected initial date (ddmmyy) and press QTY. The prompting message 'd_End' is displayed. Enter the selected final date (ddmmyy) and press VD / MODE. If the initial date is not entered in the above-described sequence, the default initial date is the date of ESD fiscalization. If the final date is not entered, the default final date is the date of the latest FM record. It is admissible that the initial and the final dates are the same, but if the final date precedes the initial one, a corresponding error message is displayed (Err 25). The FM reports by dates resemble those by record numbers; only the reported period in the report beginning is printed in a different way:

DETAILED FM REPORT	
REPORT BY DATES	
FROM	08-07-10
TO	09-07-10

SHORT FM REPORT	
REPORT BY DATES	
FROM	08-07-10
TO	09-07-10

- **FM monthly reports**

This kind of report is specified for a detailed report '1 STL' or a short one '11 STL'. The prompting message 'd_bGn' is displayed. Enter the selected month (mmyy) and press QTY. The monthly FM reports are similar to those by dates; only the reported period at the top of the record is printed differently

SHORT FM REPORT	
REPORT BY MONTHS	
07-10	

_____ 07-10 stands for July 2010

The digit 1 is displayed, which corresponds to the first text line of the header message. Press STL to enter the field. The number 01 (1-st character) and its code are displayed, for instance "01.214 0". Key 00 can be pressed to clear previous contents of the text line. Up to 32 characters can be entered using their 3-digit codes shown in the table above. To confirm text line press STL. The message 'rdY' is displayed for a while. By using keys + or - different text lines can be reached in ascending or descending order. Each text line can be changed as described, as first press STL to enter the field.

Note: The texts are automatically centered when printed.

Note: If an empty line is left, neither it, nor the following header lines will be printed, except the last one (containing the TAX OFFICE ADDRESS).

When all the necessary data is entered in the header, press TOTAL. The newly entered data is printed and with a corresponding message additional confirmation is required to be executed by pressing STL. When confirmed, the new data is recorded in the fiscal memory (if the EFD is fiscalized) and a message about the event is printed, including the number of header changes left.

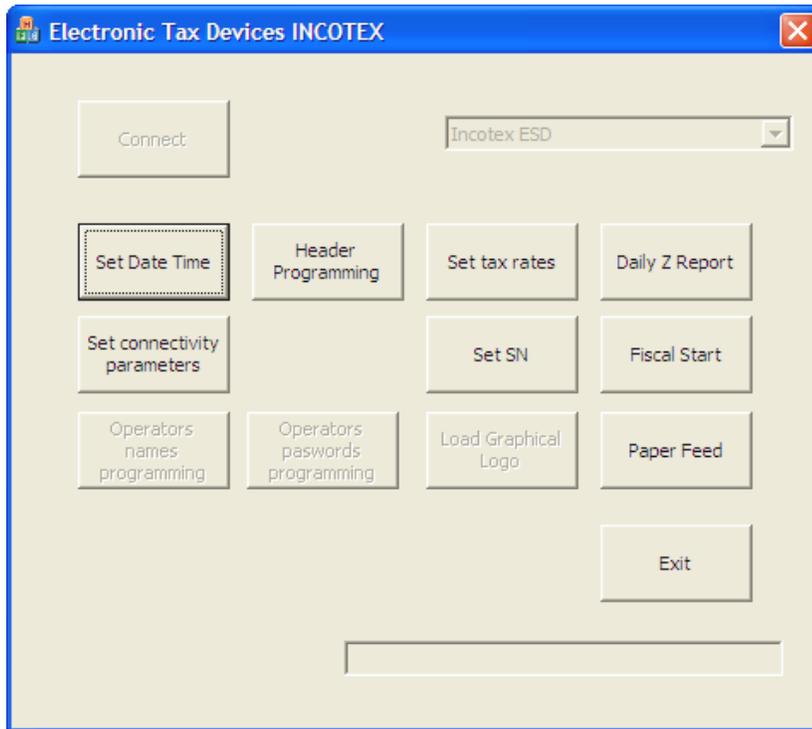
2.2.11. Printing information for a specific invoice

To print an information for a specific invoice enter the individual number of the invoice and then press VD / MODE.

This function is especially useful when there is a printed invoice and has to check if the invoice has been printed by the certain ESD as well as if the information in it hasn't been deleted.

SECTION 3: USING A SERVICE PROGRAM

To set a certain settings of the ESD instead a button combination a service program could be used. To perform this setting copy files 'ICLtest.exe' and 'msg.txt' from the provided CD and past them in a folder to the PC. When starting the 'ICLtest.exe' file a main window of the service program appears.



The actions available from the service program are:

3.1. Set Date and Time

Pressing this button gives opportunity for setting the date and time of the ESD. Make sure the date and time are the same format as they are on the PC the ESD is being connected. For setting the date and time the program will ask you first to enter the service password.

3.2. Header programming

Pressing this button gives you opportunity to program the header lines of the invoice. It allows up to 8 header lines to be filled.

3.3. Set tax rates

The ESD has three VAT groups set by default – A, B and E. A group is set with VAT rate 18%, B group is set with VAT rate 0%, and E group is exempt from VAT. If one wants to change the VAT rates of these groups this could be executed by pressing the button “Set tax rates”.

3.4. Daily Z Report

Pressing this button will print the Daily Z report from the ESD and sending it to Revenue Agency. By default the Daily Z reports are automatically sent to Revenue Agency. This button forces a manual transmission of all unsent Z reports up to date.

3.5. Set connectivity parameters

Pressing this button gives opportunity to set the GPRS, Server and Dial number parameters.

GPRS:

- APN
- GPRS USER
- GGPRS PASSWORD

Server:

- IP
- PORT
- FTP USER
- FTP PASSWORD
- FTP PAT

Dial number

3.6. Set SN

After pressing this button a window appears where the Serial number of the ESD can be entered.

3.7. Fiscal Start

Pressing this button will start the fiscalization of the ESD.

3.8. Paper Feed

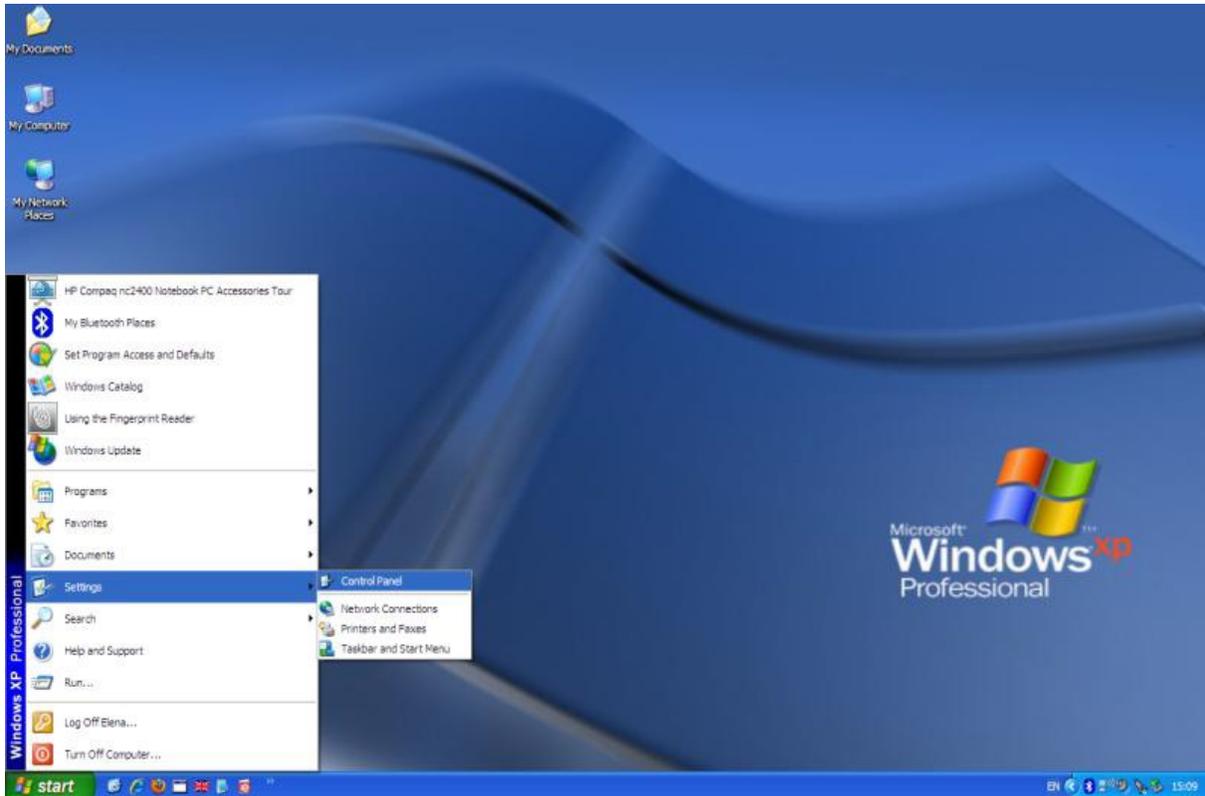
3.9. Exit

Pressing this button will exit the main window saving all the changes made by the operator.

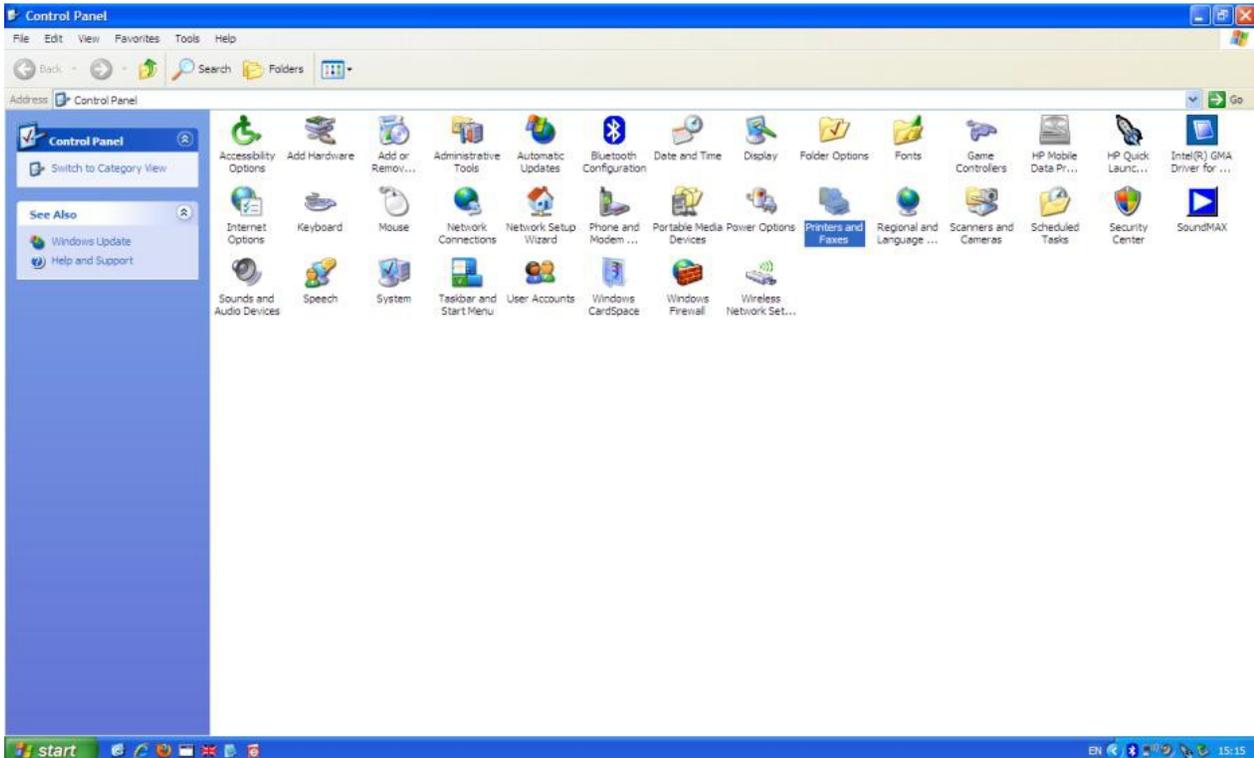
SECTION 4: INSTALLING A PRINTER

To use the ESD first a “Generic / Text Only” printer should be installed on the PC. To do these follow the steps as described.

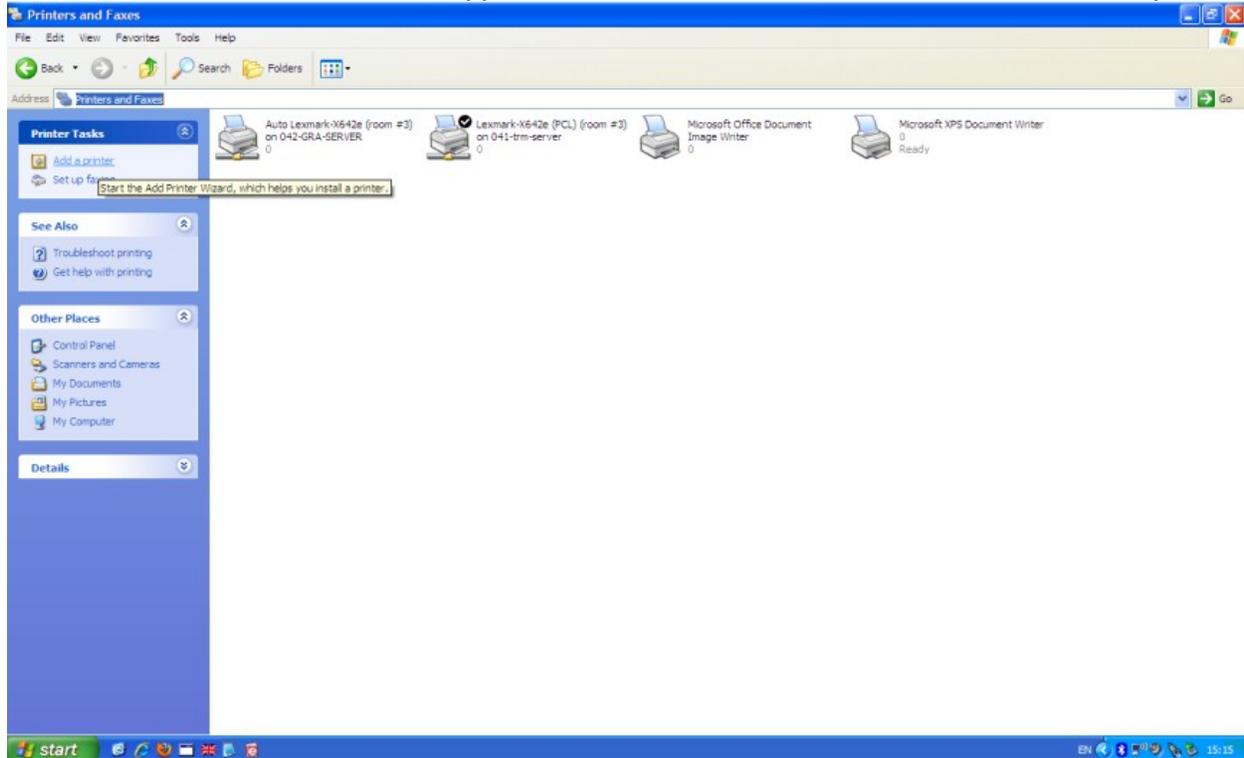
From the “Start” menu select “Settings” and then “Control panel”.



In “Control Panel” find and select “Printers and Faxes”.



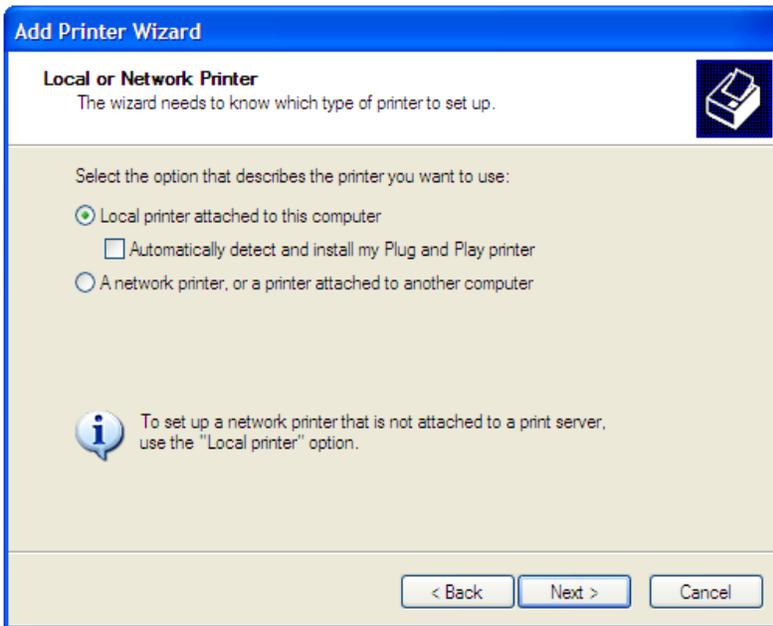
From the “Printer Tasks” menu in the upper left corner in “Printers and Faxes” select “Add a printer”.



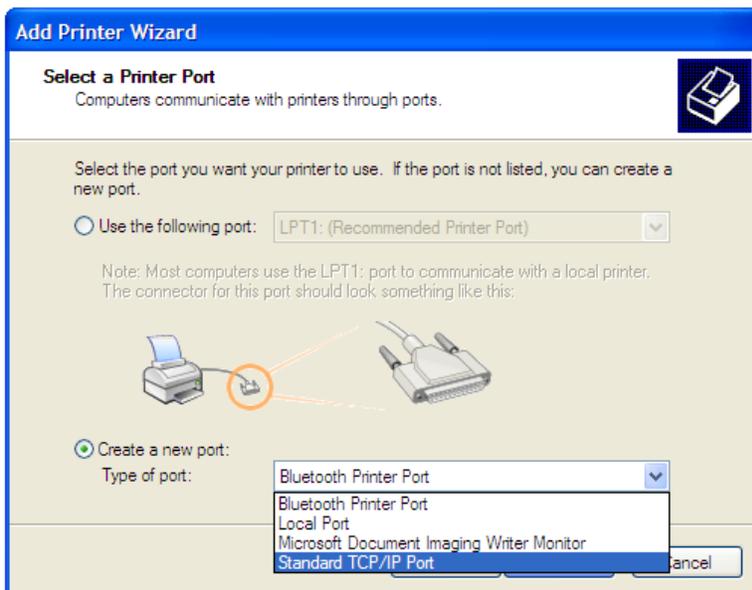
The “Add Printer Wizard” appears. Click “Next” to add a new printer.



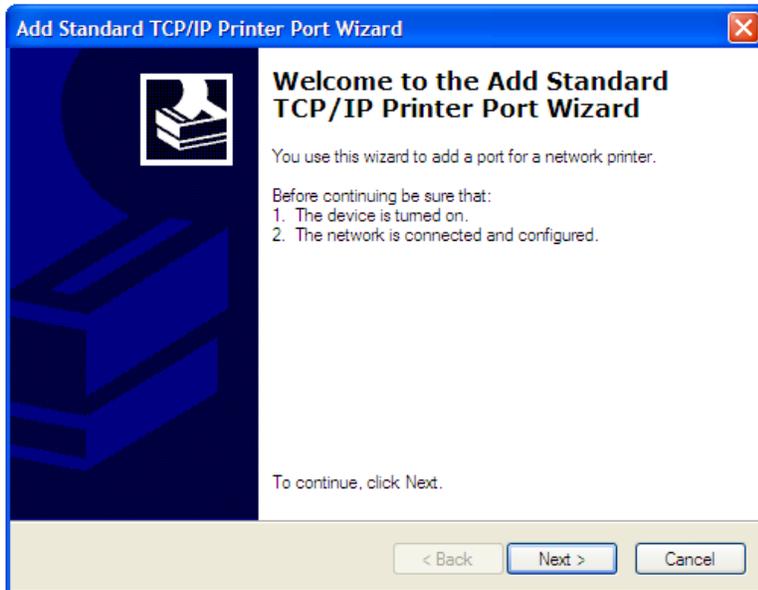
Two options for adding a printer are available. Choose “Local printer attached to this computer” and then click “Next”.



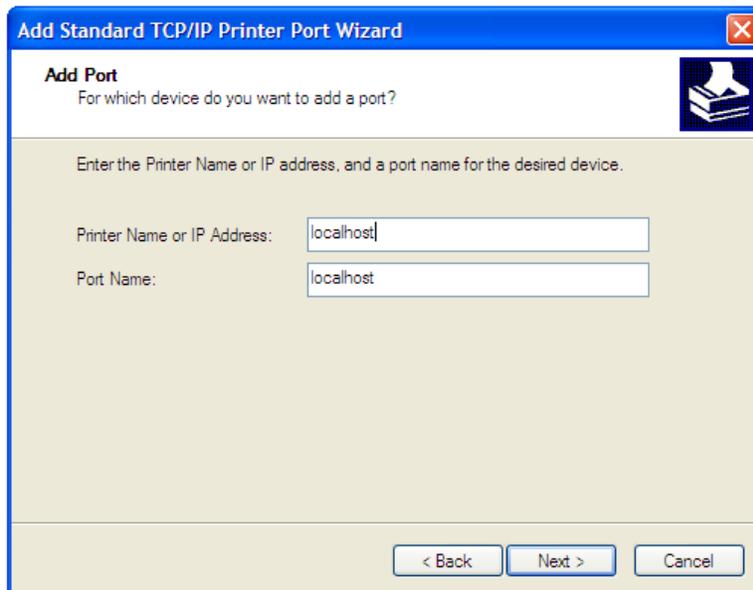
The wizard will ask you to select a port for the communication between your PC and the new printer. For this communication you should use a TCP/IP port. In the Wizard window choose “Create new port”, and then for the “Type of port” select “Standard TCP/IP Port”. Click “Next” to continue.



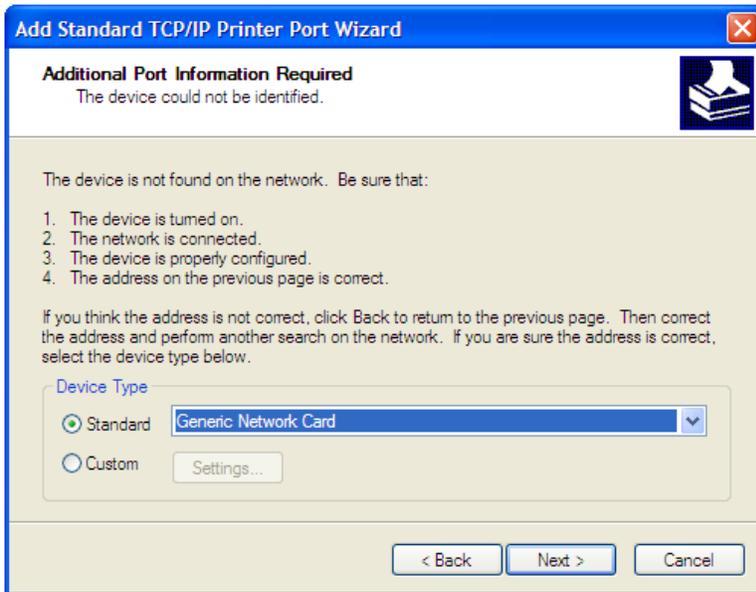
The “Add Standard TCP/IP Port Wizard” appears. Before continuing with the installation, make sure that the ESD is connected to the PC. Click “Next” to continue.



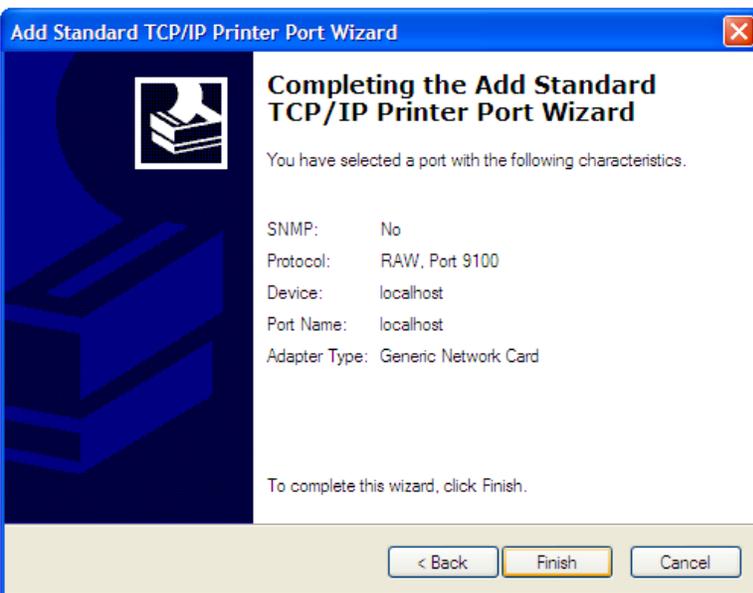
Enter the printer name and a port name for the device. In “Printer Name or IP Address” you can either set the IP address of your PC, or name the printer “localhost”, which automatically gets the needed IP address. For the port name any desirable name can be chosen.



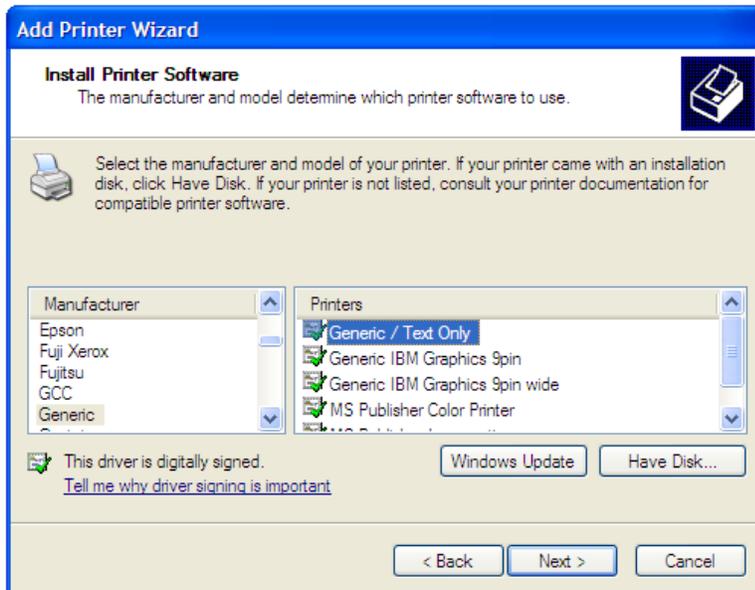
The Wizard will ask you for the device type. Choose “Standard: Generic Network Card” and click “Next”.



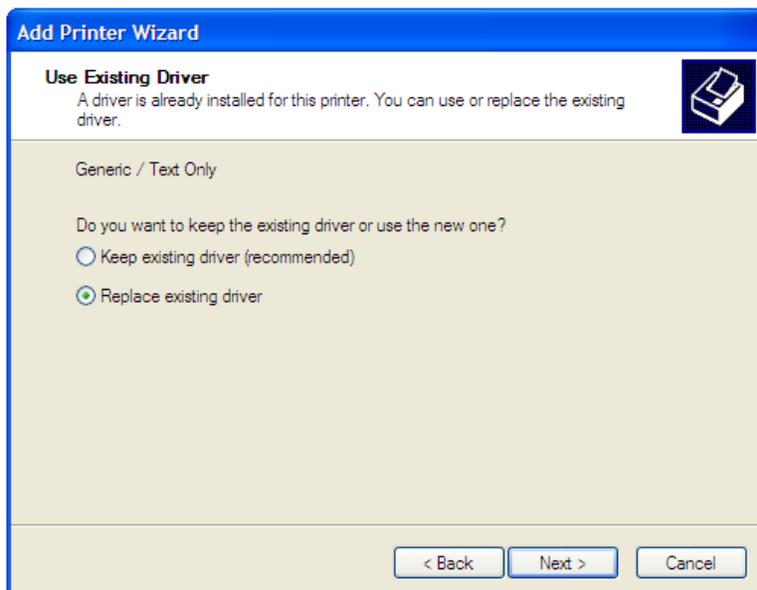
The Wizard now shows the characteristics you have set for the new port. To complete the installation select “Finish”.



The Wizard will ask you for the manufacturer and model of our printer. Select “Generic” for manufacturer and “Generic / Text Only” for the printer. Click “Next”.



Then the Wizard asks whether to use the existing driver with the new printer, or to replace it. Select “Replace the existing driver” and click “Next”.



Then give a name of the printer you installed and set it to be the default printer. Click “Next”.



Add Printer Wizard

Name Your Printer
You must assign a name to this printer.

Type a name for this printer. Because some programs do not support printer and server name combinations of more than 31 characters, it is best to keep the name as short as possible.

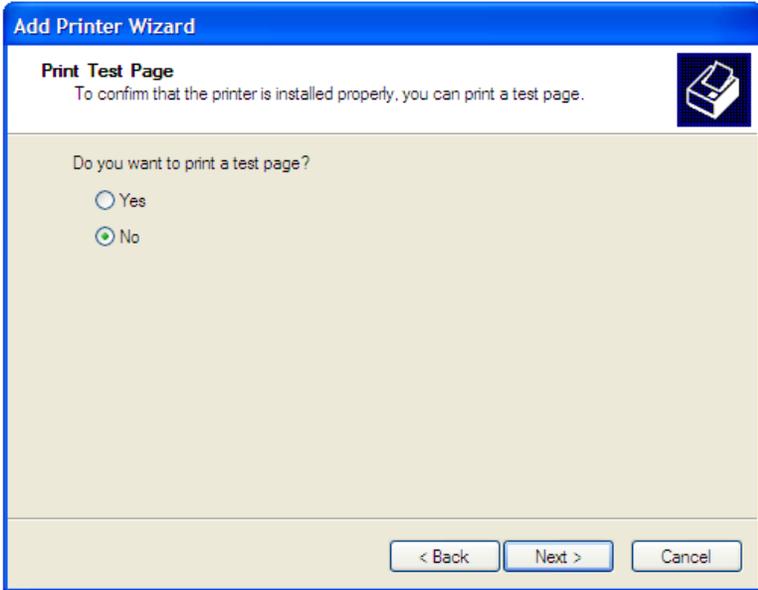
Printer name:

Do you want to use this printer as the default printer?

Yes
 No

< Back Next > Cancel

The Wizard asks whether to print a test page on the new printer, or not. Select “No” and click “Next”.



Add Printer Wizard

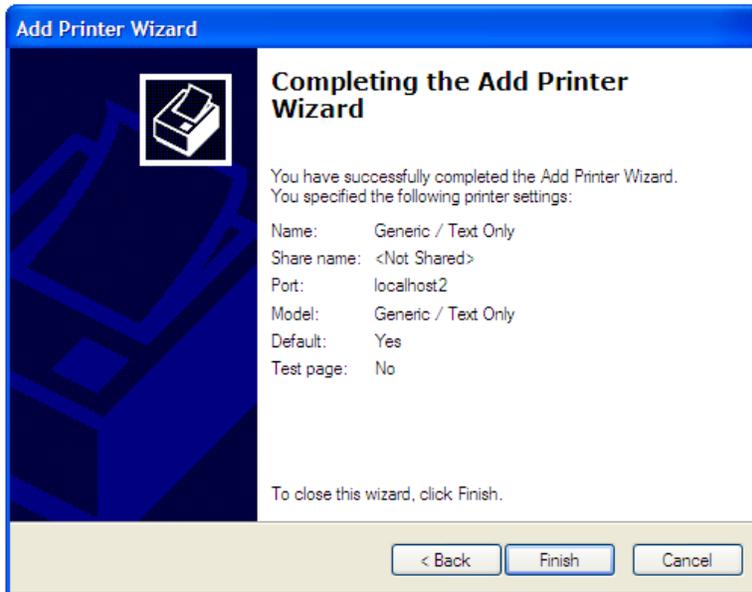
Print Test Page
To confirm that the printer is installed properly, you can print a test page.

Do you want to print a test page?

Yes
 No

< Back Next > Cancel

The Wizard now shows the settings you have specified for the newly installed printer. To complete the installation select “Finish”.



Now you can continue with the ESD installation.

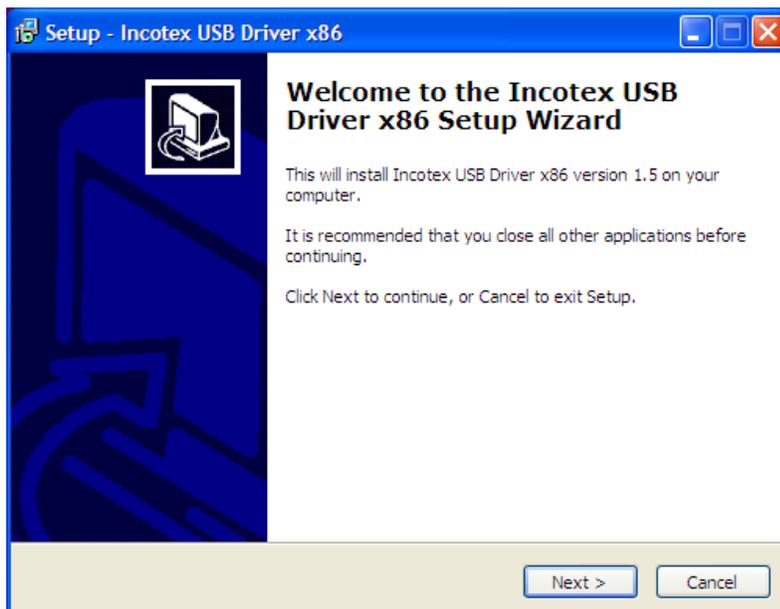
SECTION 5: INSTALLING THE ESD

5.1. Contents of the ESI Application

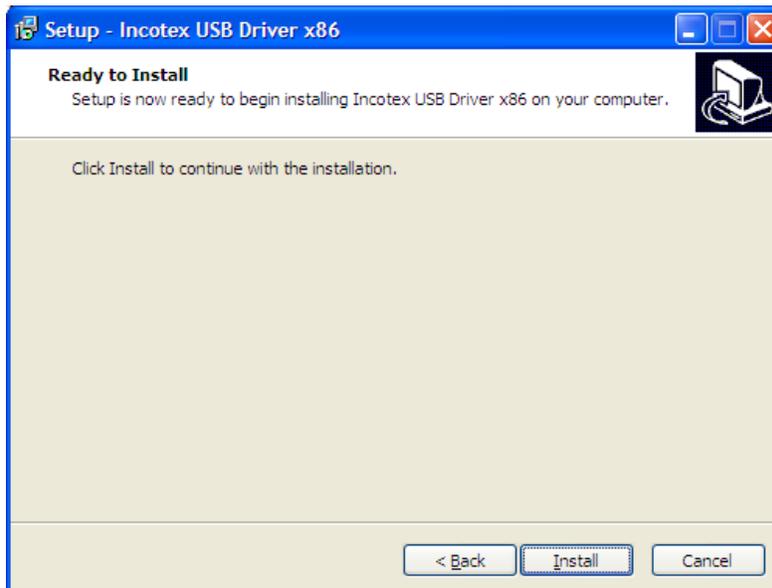
- Client
- Server
- USB Driver

5.2. Installing the program driver

Connect the ESD to the PC using the USB cable provided and switch the ESD on. The welcome window of the Installation Wizard appears. Click **Next** to continue.



Click **install** to proceed with the installation or click **Back** to review or change settings.



Copy the “redist.rar” file from the CD provided to your PC. Extract the “redist.rar” file in a directory on your PC, open this directory and start the file “install.bat”. The following window appears:

```

C:\WINDOWS\system32\cmd.exe
C:\redist>wdreg -inf usbESD_driver.inf install
WDREG utility v10.20. Build Jul 15 2010 13:30:40

Processing HWID idrvUSB
Installing a non-signed driver package for idrvUSB
LOG ok: 1, ENTER: DriverPackageInstallW
LOG ok: 1, ENTER: DriverPackageInstallW
LOG ok: 1, Looking for Model Section [DeviceList1...
LOG ok: 1, Installing INF file 'C:\WINDOWS\system32\DRUSTORE\usbESD_dri_54F4B019
B9424A868367D9A6392D47BB8F535213\usbESD_driver.inf' of Type 6.
LOG ok: 1, Looking for Model Section [DeviceList1...
LOG ok: 1, Installing devices with Id "idrvUSB" using INF "C:\WINDOWS\system32\DR
USTORE\usbESD_dri_54F4B019B9424A868367D9A6392D47BB8F535213\usbESD_driver.inf".
LOG ok: 1, ENTER UpdateDriverForPlugAndPlayDevices...
LOG ok: 0, RETURN UpdateDriverForPlugAndPlayDevices.
LOG ok: 1, Installation was successful.
LOG ok: 0, Install completed
LOG ok: 0, Installation completed with code 0x0.
LOG ok: 1, RETURN: DriverPackageInstallW (0x0)
LOG ok: 1, RETURN: DriverPackageInstallA (0x0)
difx_install_preinstall_inf: err 0, last event 0, last error 0. SUCCESS
install: completed successfully

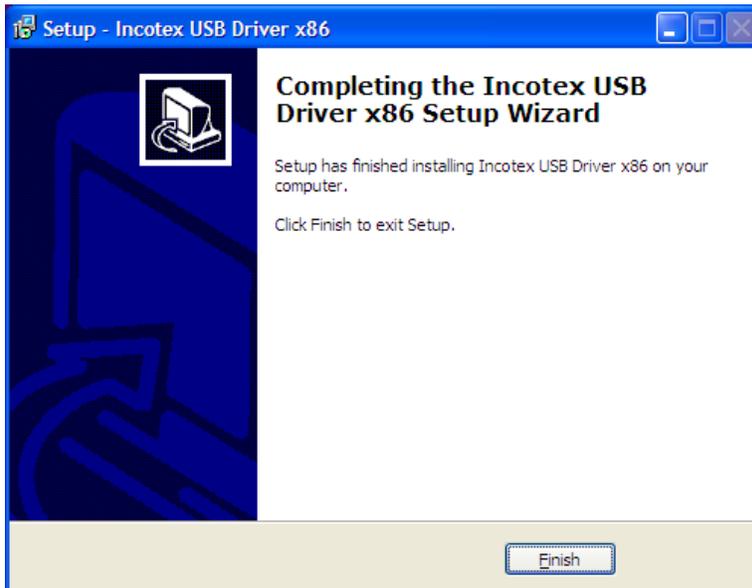
C:\redist>wdreg -inf usbESD_device.inf install
WDREG utility v10.20. Build Jul 15 2010 13:30:40

Processing HWID USB\UID_0483&PID_5741
Installing a non-signed driver package for USB\UID_0483&PID_5741
Device node (hwid:USB\UID_0483&PID_5741): does not exist and is not configured.
Pre-installing.
LOG ok: 1, ENTER: DriverPackagePreinstallW
LOG ok: 1, ENTER: DriverPackagePreinstallW
LOG ok: 0, C:\redist\usbESD_device.inf is preinstalled.
LOG ok: 1, RETURN: DriverPackagePreinstallW (0xB7)
LOG ok: 1, RETURN: DriverPackagePreinstallA (0xB7)
difx_install_preinstall_inf: err b7, last event 0, last error 0. ERROR_ALREADY_
EXISTS
install: completed successfully

C:\redist>pause
Press any key to continue . . .

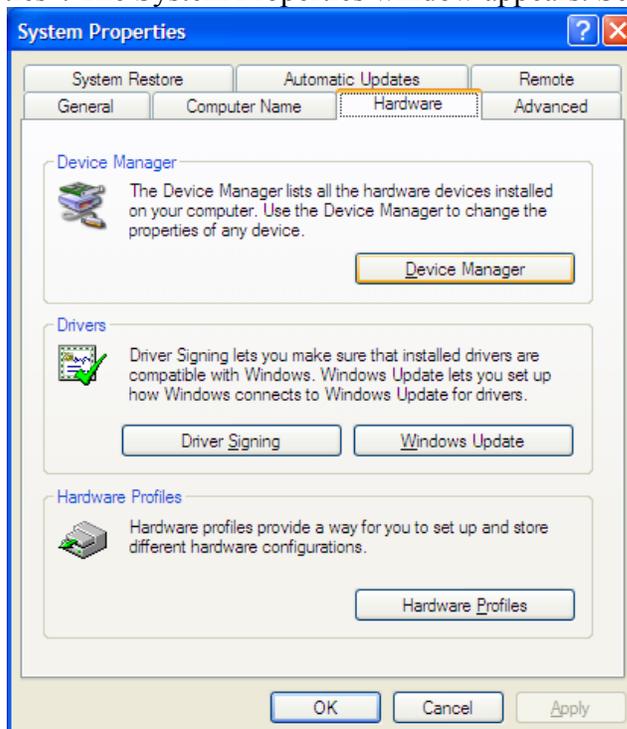
```

Press any key to continue the setup of the ESD.



Click **Finish** to complete installation

To check if the driver is properly installed right-click on the icon “My Computer” and select “Properties”. The System Properties window appears. Select “Hardware” and press “Device Manager”.

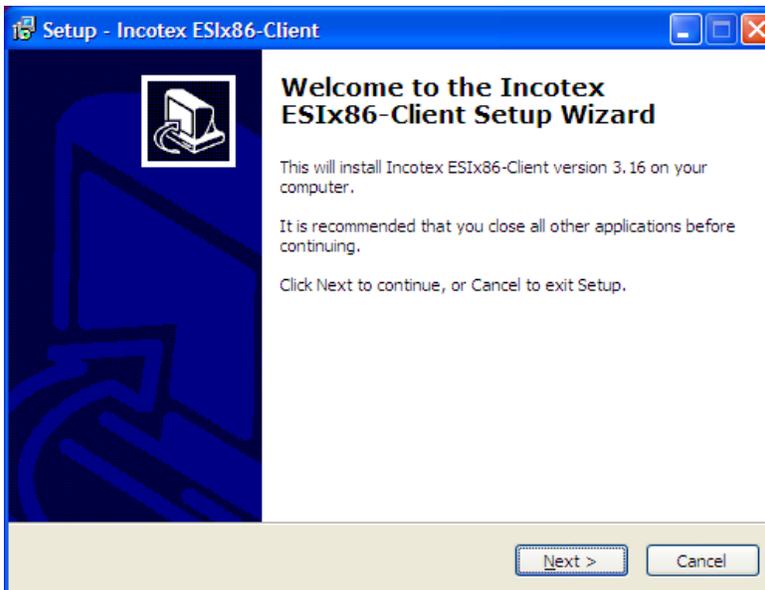


If the driver installation is successful a device called “Incotex” should have appeared with two objects in it: “idrvUSB” and “ESDEVICE”.

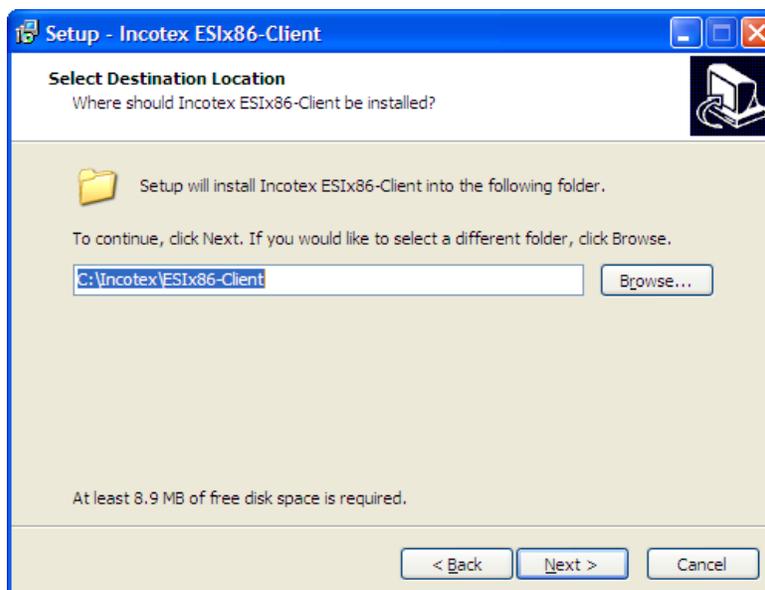
If the device “Incotex” or any of the objects is missing make sure the ESD is connected to the PC and switched on. Then run the “install.bat” file again.

5.3. Installing a Client

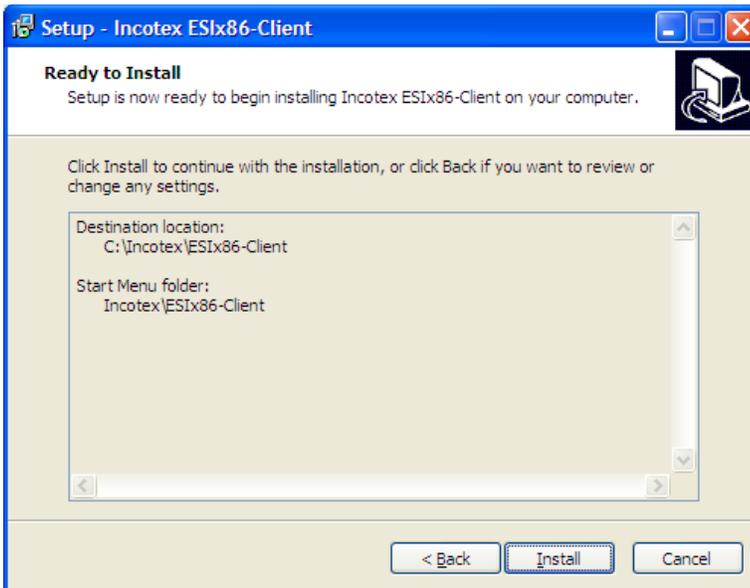
To install the Client click on ESIX86-Client.exe or ESIX64-Client.exe
The welcome window of the Installation Wizard appears. Click **Next** to continue.



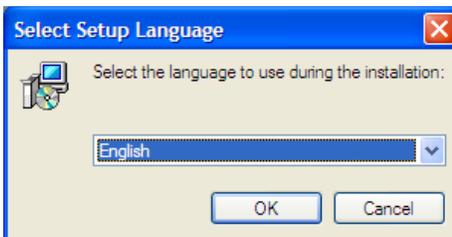
Then you will be asked to select a location where Incotex to be installed. By default it will be installed in C:\Incotex\ESIX86-Client. To confirm the installation in this directory, click **Next**. If prefer another directory, use the **Browse** button. Click **Next** to proceed with the Installation



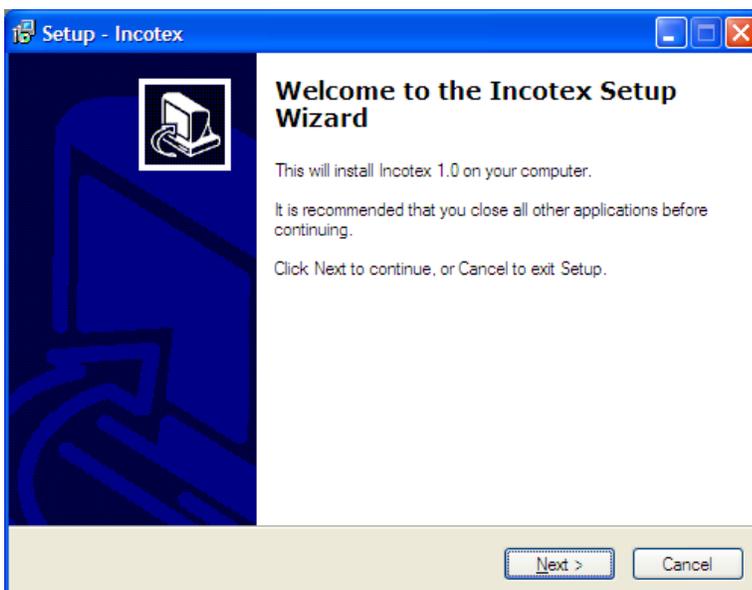
Select where the program's shortcuts to be placed. By default the folder for this purpose is in the Start



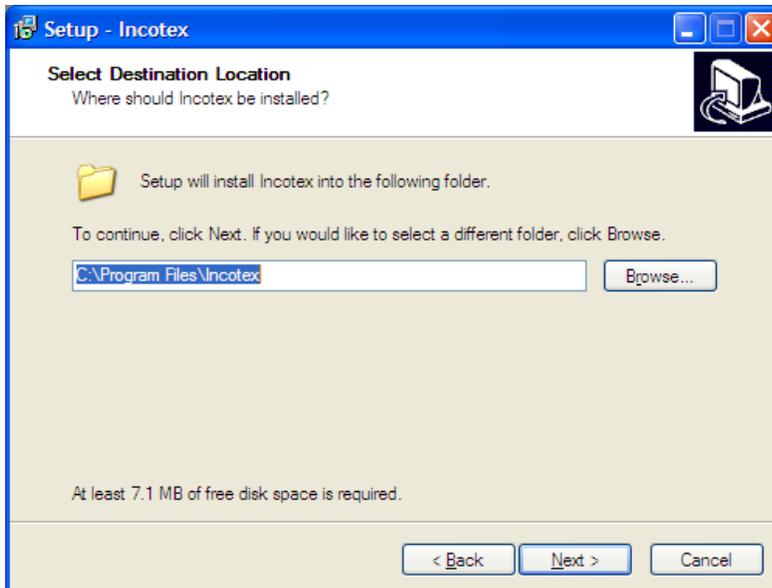
Then the program automatically starts the installation of the virtual printer "Incotex". First select a language for the installation from the falling menu and then follow the steps in the installation wizard as follows:



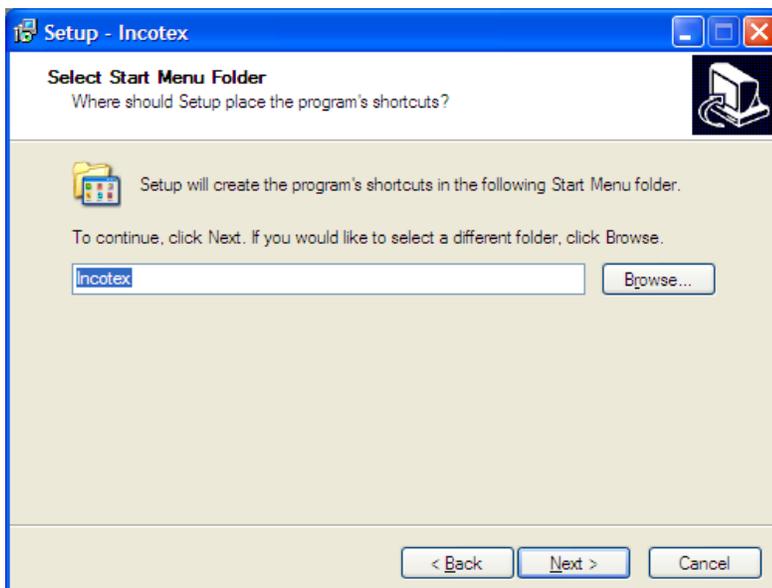
The welcome window of the Installation Wizard appears. Click Next to continue



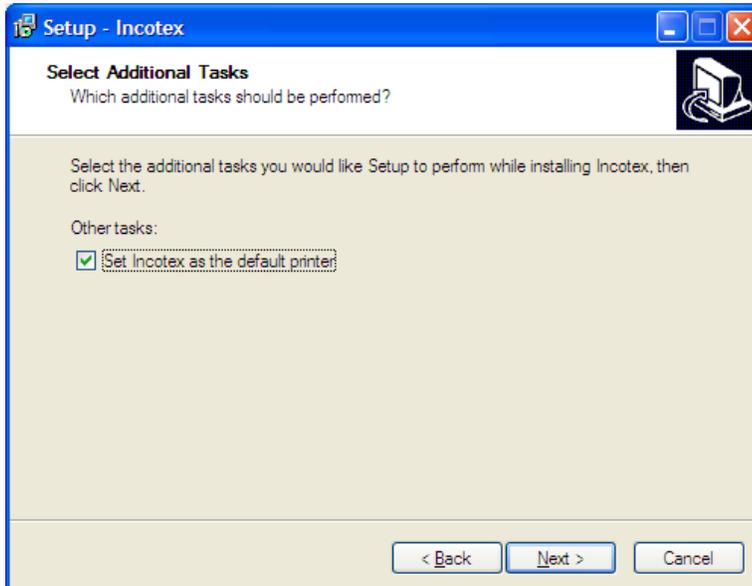
Then you will be asked to select a location where Incotex to be installed. By default it will be installed in C:\Incotex\ESIX86-Client. To confirm the installation in this directory, click **Next**. If prefer another directory, use the **Browse** button. Click **Next** to proceed with the Installation



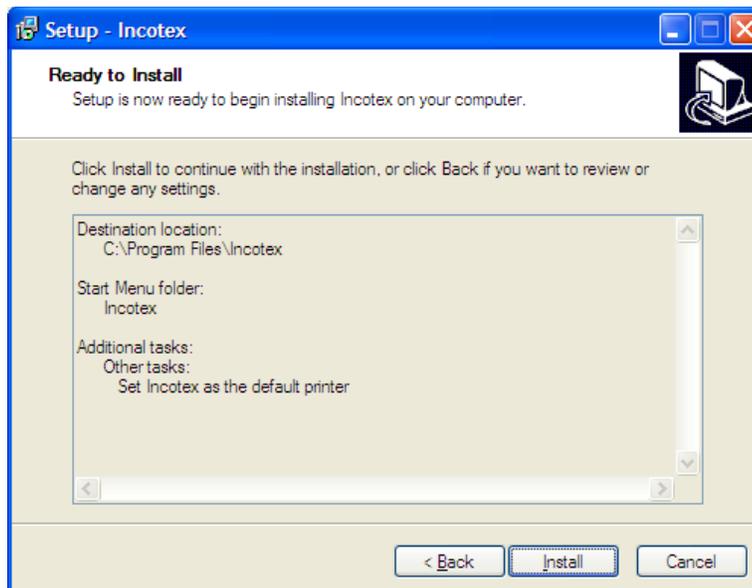
Select where the program's shortcuts to be placed. By default the folder for this purpose is in the Start Menu named as "Incotex". To confirm click **Next**. It can be changed if necessary. Click **Next** to proceed with the Installation



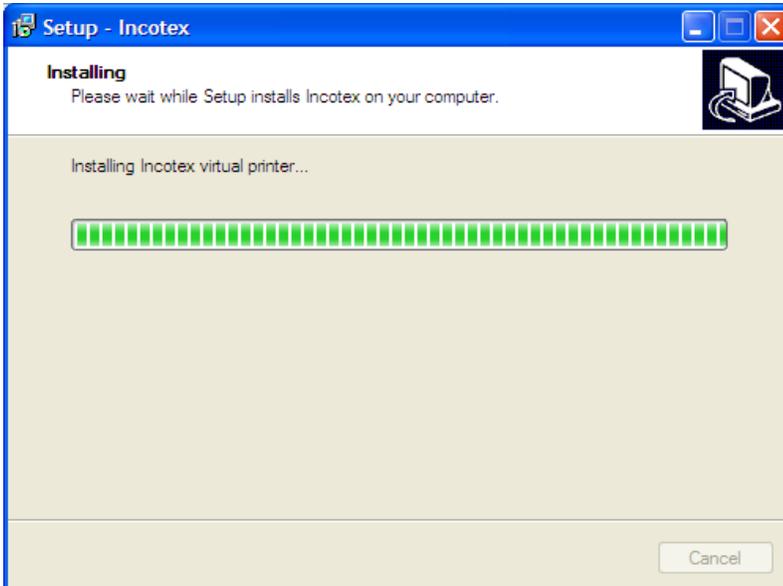
Set the “Incotex” printer to be default printer and click **Next**.



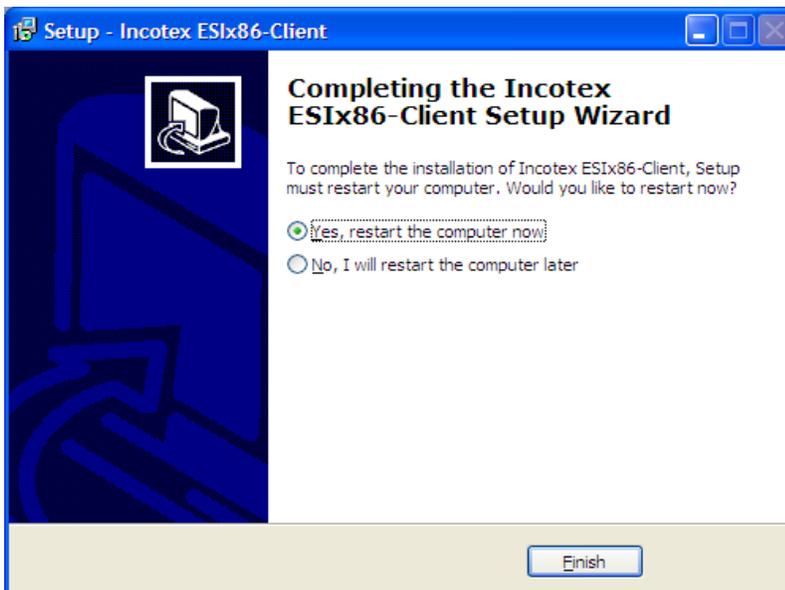
Now the Setup is ready to start the installation of “Incotex” on your computer. Click **Install** to proceed with the installation, click **Back** to review or change settings, or click **Cancel** to terminate the installation.



Wait until the process of installation is completed.



When the Setup has completed the installation of “Incotex”, click **Finish**. After finishing the installation the computer will restart.



5.4. Installing a Server

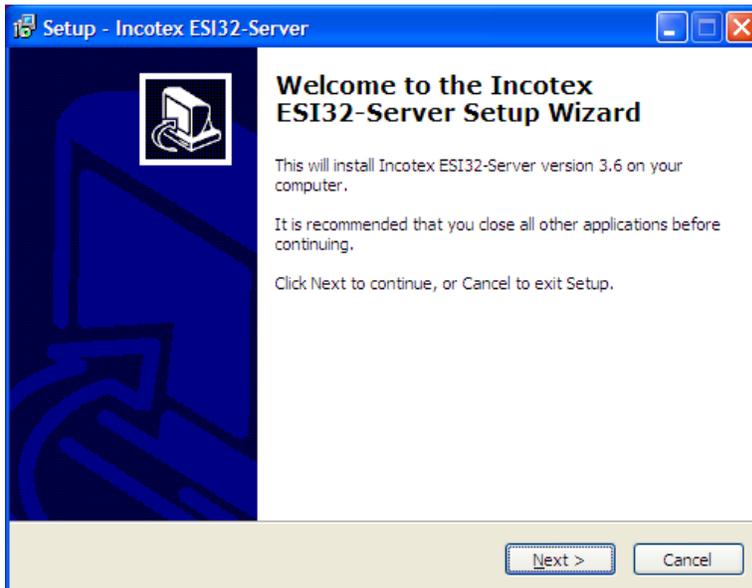
If the ESD will be used in a network the 'setup_server.bat' has to be run on the host server. This is not necessary if only one PC will be used.

Caution: If the 'setup_server.bat' has already been run but isn't going to be used (this is not your server PC, or you will use only one PC) it has to be uninstalled. To do this follow the steps below:

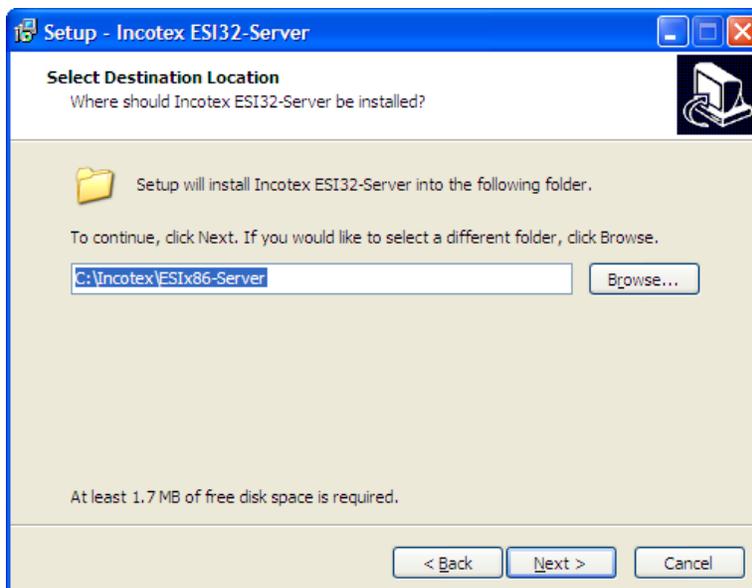
Program Files->Incotex->ESI Server, and run the 'uninstall.bat' file.

Installing the setup

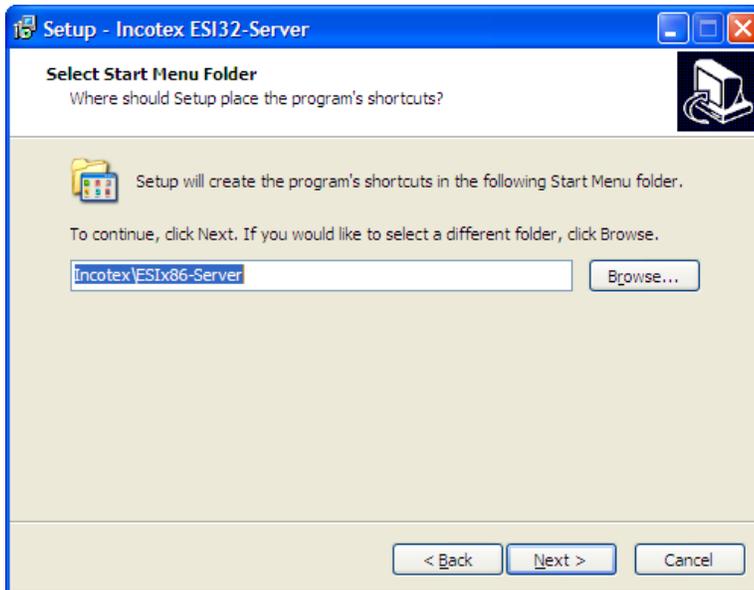
The welcome window of the Installation Wizard appears. Click **Next** to continue.



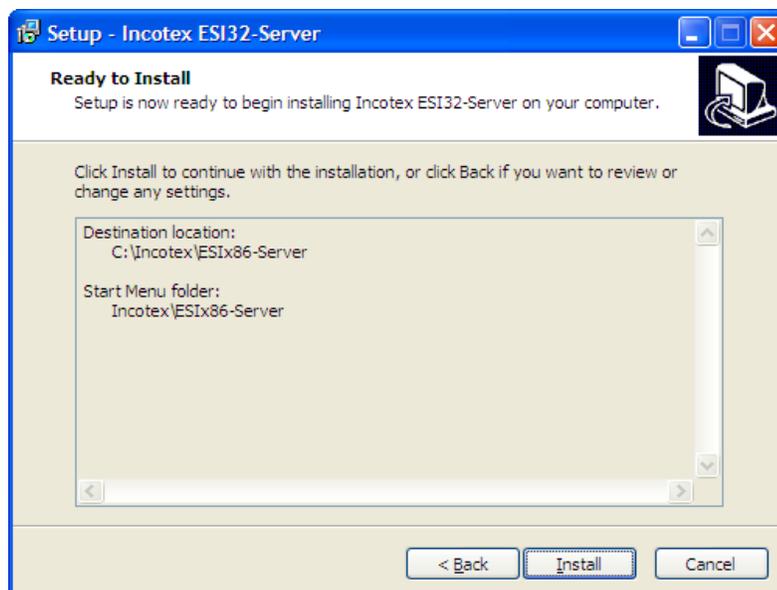
Then you will be asked to select a location where Incotex to be installed. By default it will be installed in C:\Incotex\ESIx86-Client. To confirm the installation in this directory, click **Next**. If prefer another directory, use the **Browse** button. Click **Next** to proceed with the Installation



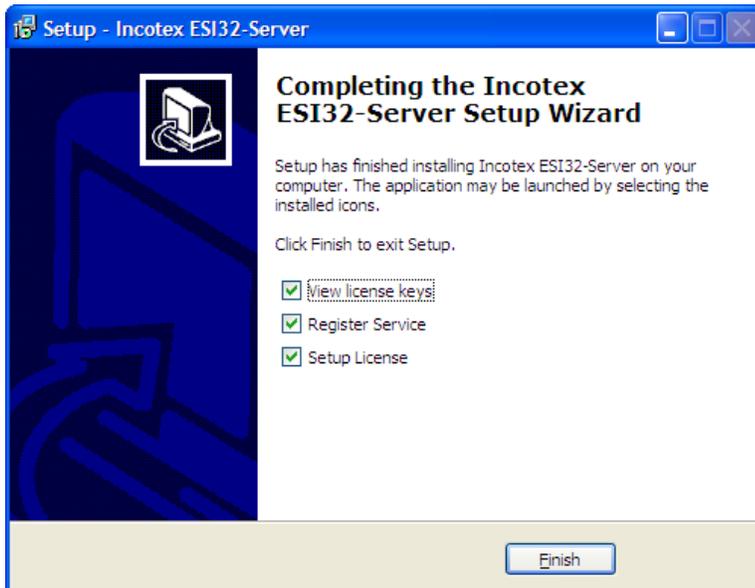
Select where the program's shortcuts to be placed. By default the folder for this purpose is in the Start Menu named as "Incotex". To confirm click **Next**. It can be changed if necessary. Click **Next** to proceed with the Installation



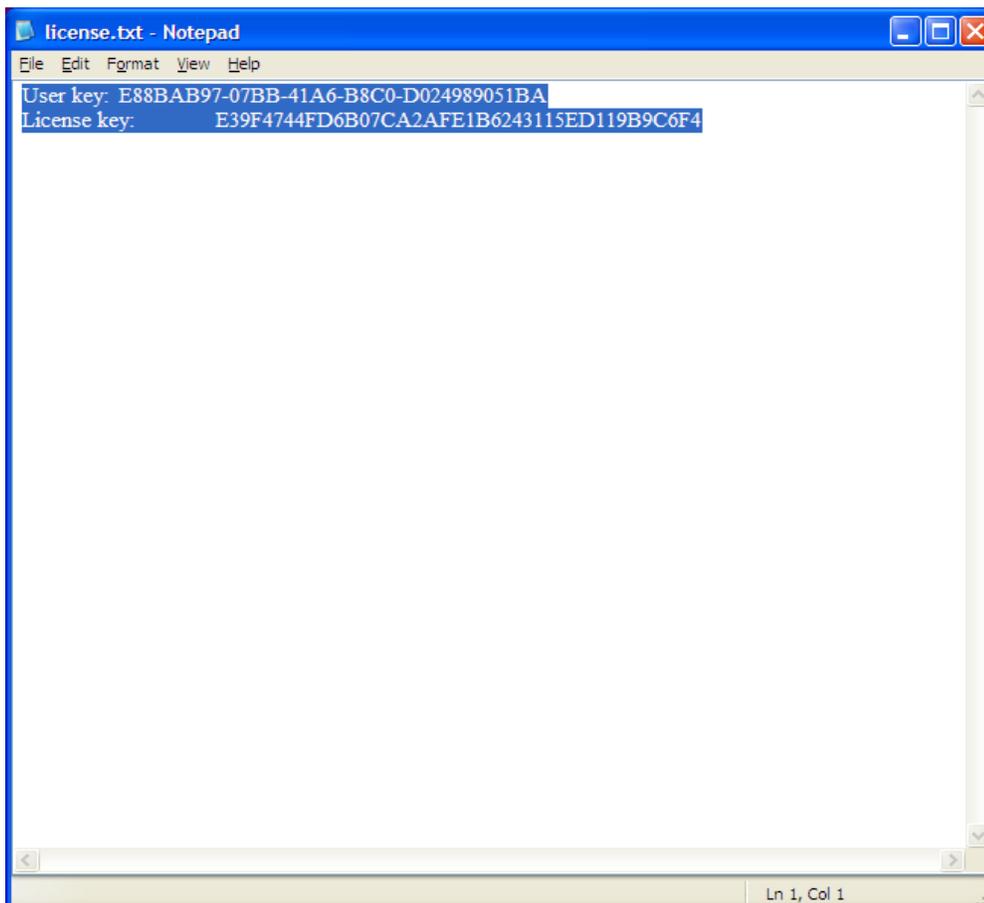
Now the Setup is ready to start the installation of "Incotex" on your computer. Click **Install** to proceed with the installation, click **Back** to review or change settings, or click **Cancel** to cancel the installation.



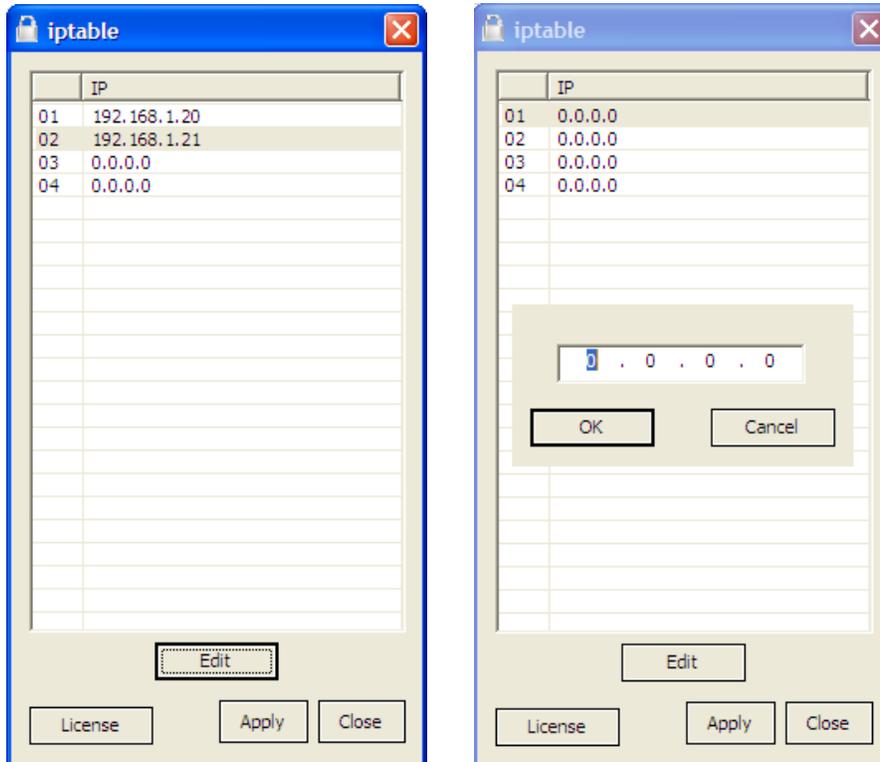
When the Setup has completed the installation of “Incotex”, click **Finish**.



This window contains user and license keys.

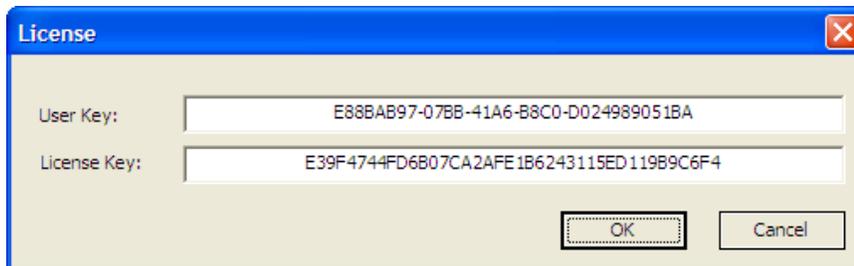


This window contains IP addresses. (4 by default)
Click on **Edit** to change the IP. Click **Apply** to set new IP.



Shows the unique user key and license key of the product.

Depending on the keys below (user and license) the number of the clients using the server vary between 0- 255.

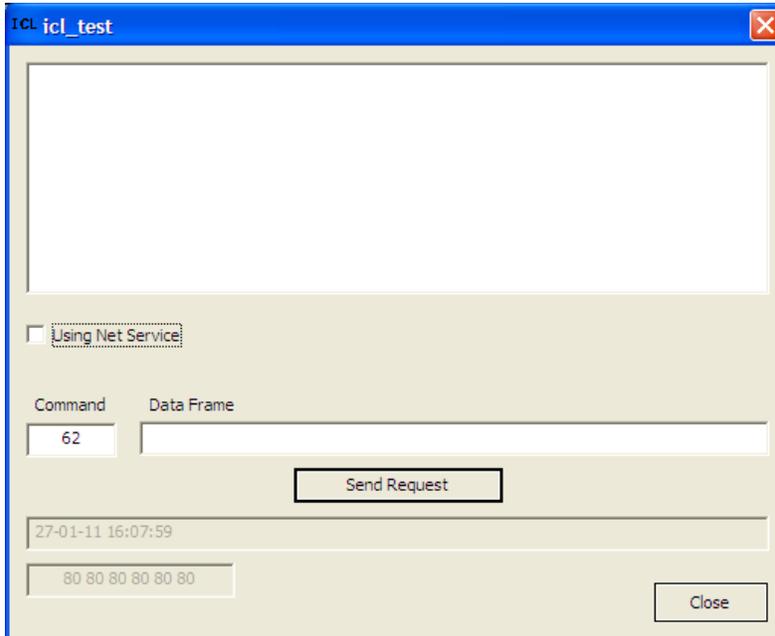


This application tests the communication between the devices- local and remote.

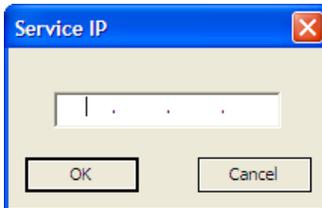
Ticking the box **Using Net Service** the following window appears and the IP has to be entered. If there is a connection it remains on the window , if the IP doesn't comply with the server there isn't connection.

Command- a certain command applies by using a number. Each number has its specific meaning. For example 62 is date- as shown in the window row below.

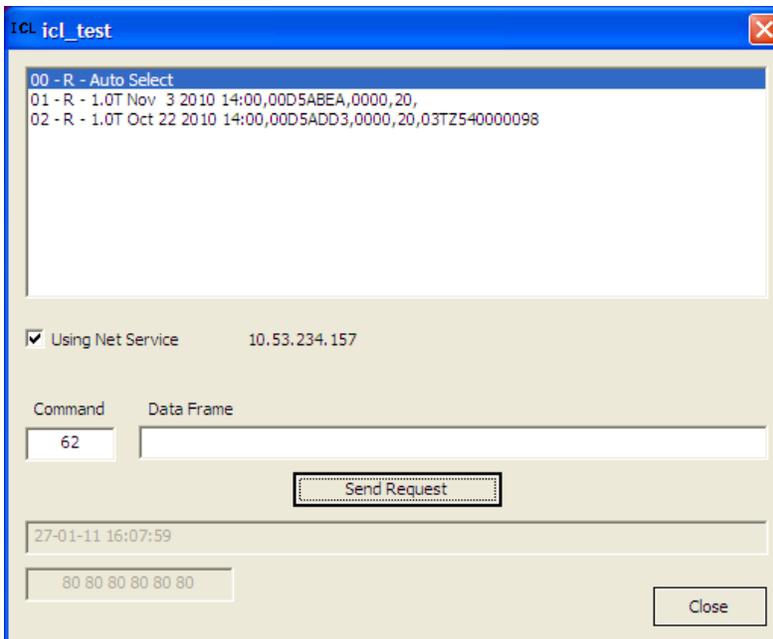
Data frame contains command parameters.



Enter the IP address here



This window shows that two remote devices have been connected. Letter R is for remote devices; letter L is for local.

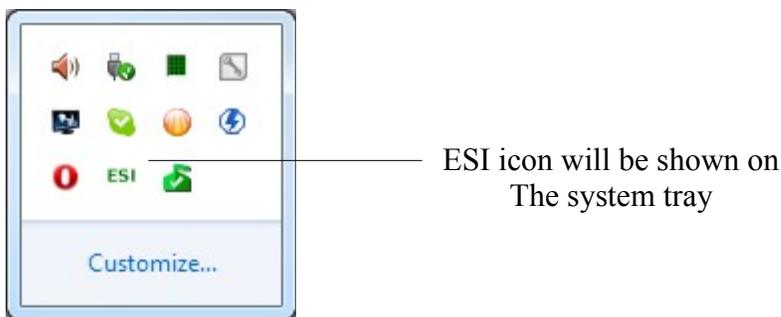


By clicking on Send Request button the fields below are being filled with response by the default device

SECTION 6: STARTING AND TRAINING THE APPLICATION

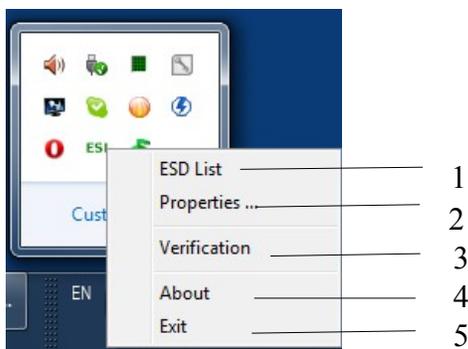
Start the ESI application. The first time you want to start the application after its installation you will need to do it manually. For this purpose go to Start Menu -> Incotex ESIX86-Client-->. The application will be installed in the default application which is: C:\Incotex\ESIX86-Client\Electronic Signature Interface). If prefer different location press 'Browse' and select where to save. The “Incotex” logo is displayed on the desktop and an icon “ESI” appears on the system tray. If the ESD is properly connected and switched on, and the driver and application are properly installed, the icon “ESI” should be colored green. If there is a problem it will be red.

Application state:



6.1. E.S.I. Activation

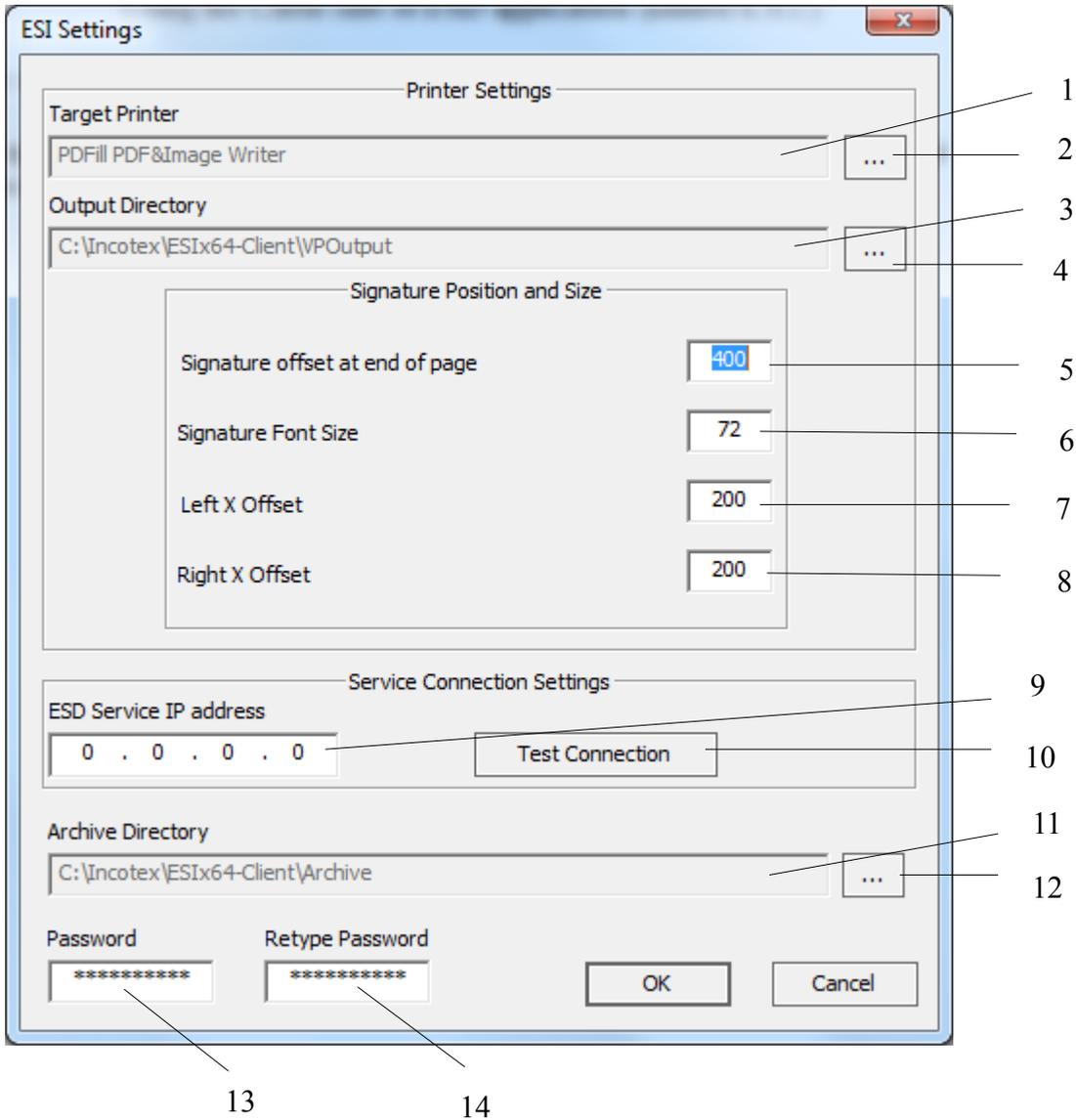
Right-click on the icon will lead to the following menu:



1. ESD list- right click on it opens a window with a list of all available devices.
2. Properties- right click on it opens a window where all the required changes can be performed.
3. Verification – right click opens two windows.
4. About- right click opens a window showing the current version of the product.
5. Exit- right click exits the program

6.1.1. “Settings” window

After entering the menu, in the “ESI Settings” you can change the password. For this purpose type the new password in the field “Password” and retype it in the field “Retype Password”. The new password will be in force after closing the window



After installing the E.S.I. this window appears only once.

1. Target printer - This field identifies the printer that will print the invoice.
2. Button to select the printer (don't select 'Incotex' virtual printer as target printer)
3. Output directory - Directory for temporary files of the virtual printer
4. Button to select the folder for saving temporary files

This window shows two unnamed ESD devices /up to 32 devices can be connected to one PC/ Devices without serial number are labeled as „Unknown“ followed by a number of this type of device in the system.

To sign a document the device should be marked as 'favorite' /tick the box/

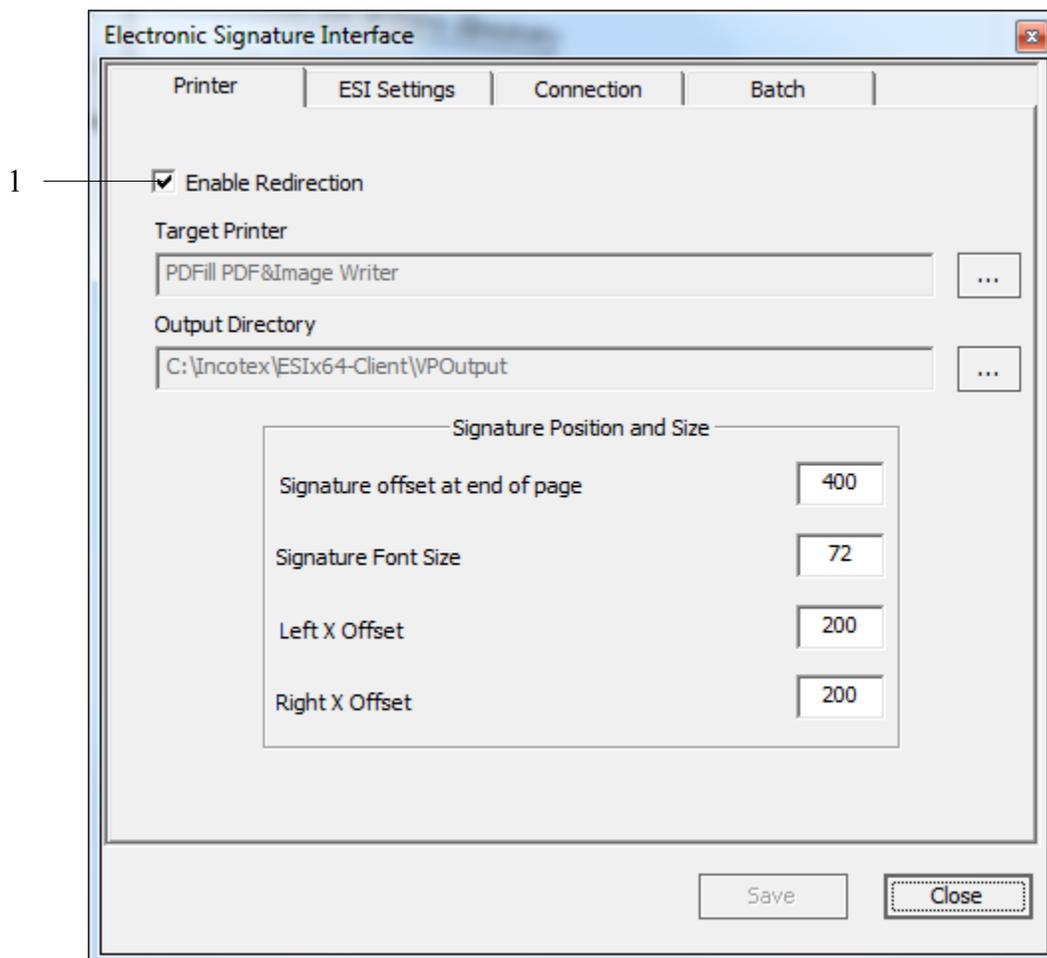
If none of the available devices is marked, the documents will be signed by the first device from the list.

The arrangement of the devices depends on the order of their attachment to the computer.

6.3. Properties

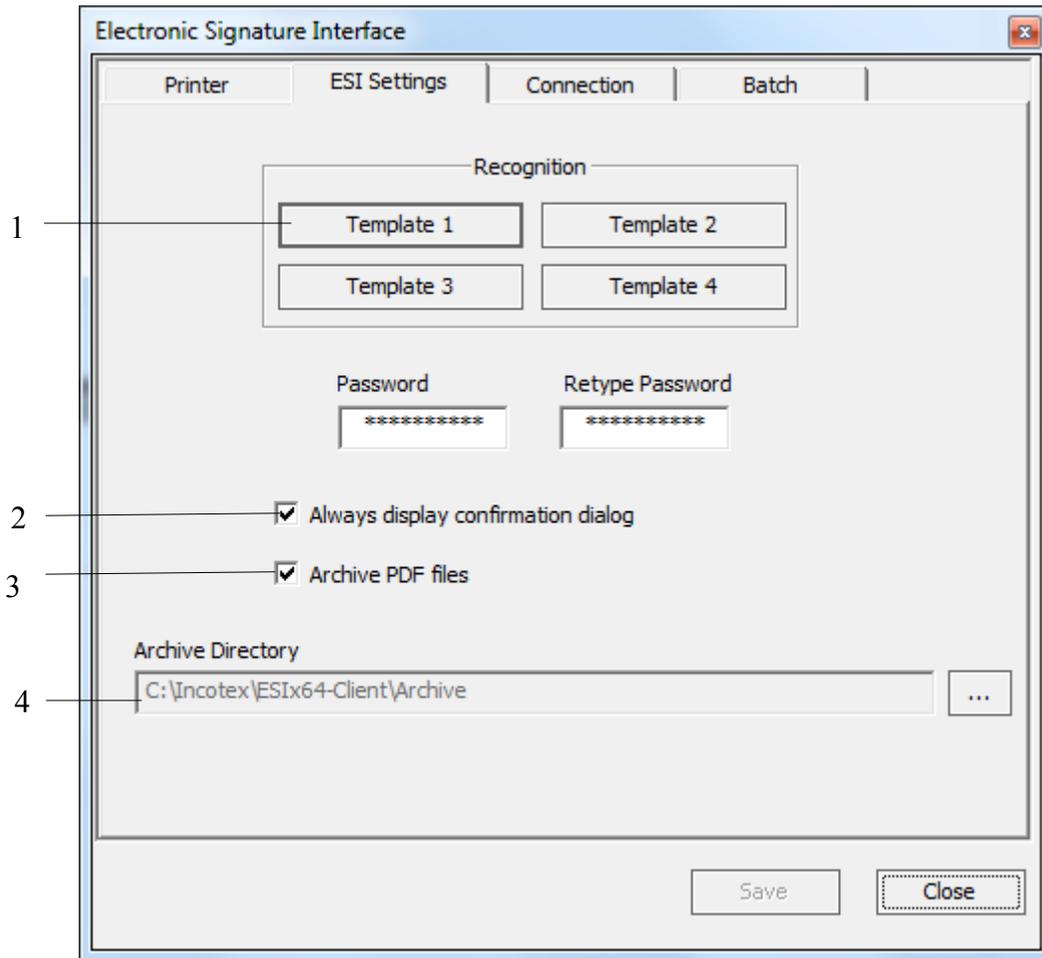
6.3.1. Printer properties

This window shows the settings of virtual printer. All fields in this dialog are described above, except „Enable Redirection“



1. Enable Redirection- The device uses a virtual printer . Ticking this box allows the virtual printer to forward requests to the real printer that can be selected from browse button of 'Target Printer' field. Redirecting is automatically switched off , when the system is in training mode.

6.3.2. E.S.I. Settings



1. Training Templates:

Each of these four buttons will open a corresponding template.

The templates configuration helps the system to recognize certain types of invoices.

More details for the configuration templates (Training) can be found further in this document.

2. Enable or Disable confirmation dialog:

Confirmation is used for user's convenience and protection against errors that can be made during training the system.

Confirmation is the last step before signing the document and storing the information in the fiscal memory of ESD device.

3. Enable or Disable PDF storage:

Storing documents in PDF format is performed automatically by the system.

(see 'Description of archive directory' above).

4. Path to archive Folder: (see 'Description of archive directory' above).

Training mode:

It is important to know that the "training" of this system must be performed by qualified users with accounting experience and being familiar with the ruling legislation in the country.

Mistakes made during 'training' the system can cause financial losses to the company that uses

the ESD device.

The software is designed to recognize up to four different types of documents (invoices).

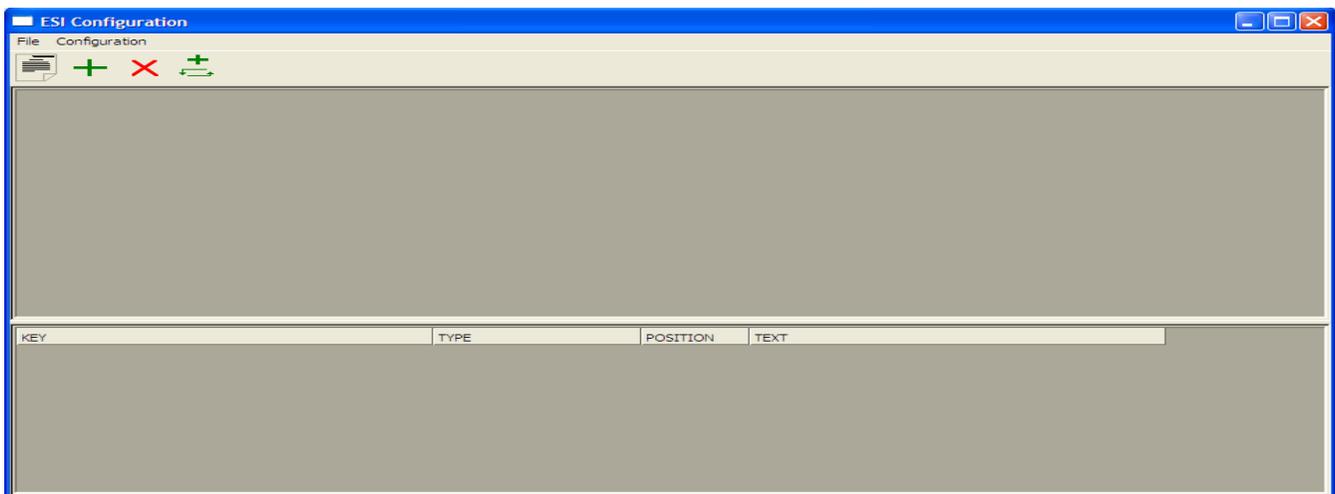
The software is designed to recognize up to four different types of documents (invoices).

Recognition of the documents is performed by so called 'templates'.

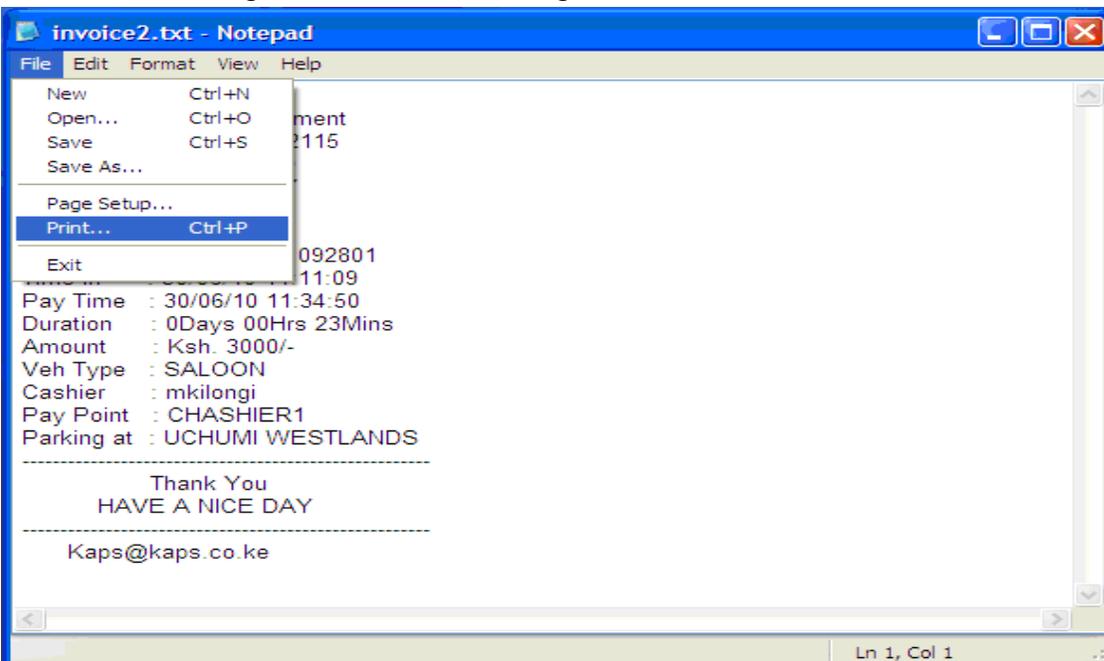
During the 'training' REAL SIGNATURES ARE NOT BEING GENERATED as well as amounts are not being accumulated in the ESD device.

To make the 'learning mode' easy to understand by the user, we would like to introduce you a simple invoice:

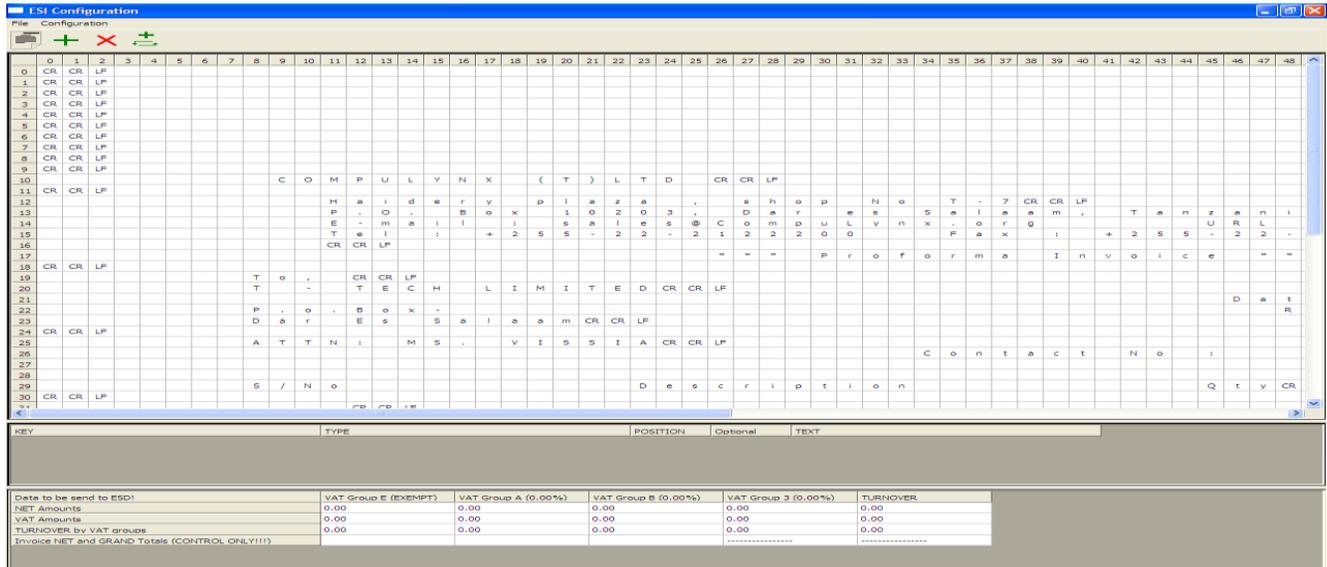
From the “Settings” window select one of the templates to be trained. The following window appears:



Load the invoice in the template. There are two ways of doing it. First is to open the template click on File or the icon /File/. A window will be opened to choose the required invoice to be signed. The second way to load the invoice is to open the invoice itself, click print and choose Incotex printer. Then open a test invoice and print it on the “Incotex” printer as follows:



The display is captured and displayed on the screen.



After loading the invoice, the system is ready to be trained by setting the recognition rules according to which a document to be recognized as an "Invoice".

To train the system recognizing this type of documents the following steps have to be completed:

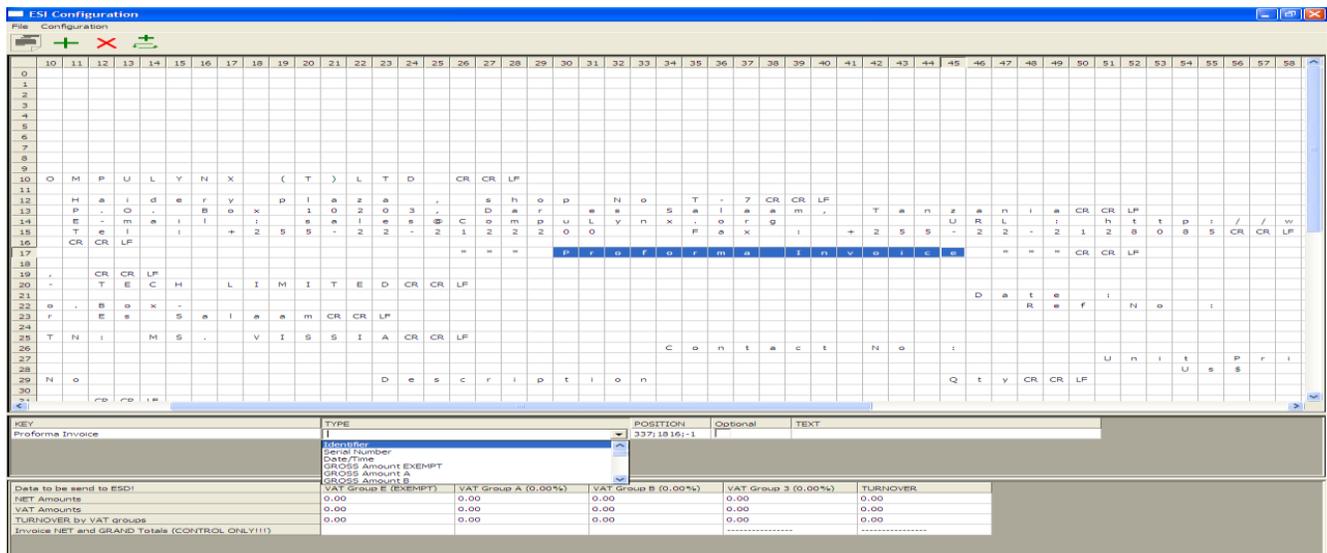
1. Set the recognition rules according to which a document to be recognized as an "Invoice".

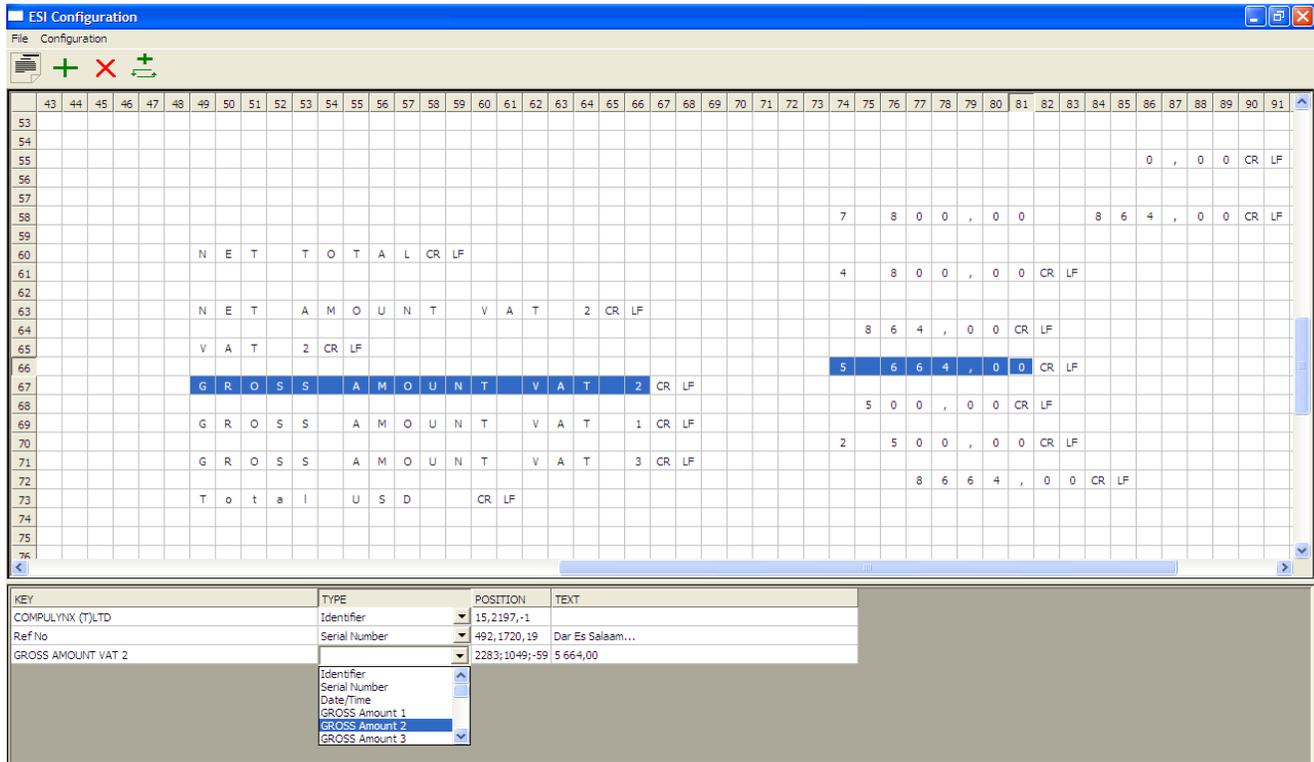
Some of the recognition parameters are optional and others are not. Optional means if there are same "keys" in the different invoices, but written in different ways, tick optional so the system will be able to recognize them / for example: VAT (18%) ; 18% V.A.T. or 18% VAT/.

During signing the invoices the system will search one of set options. If none of the set options do not match the ones in the invoice, this means that we did not set the 'keys' correctly and have to be changed.

Through the recognition section of 'Properties / ESI Settings', open any of four possible templates.

2. Mark the text from the sample invoice and print the selection in virtual printer 'Incotex'. The aim is the printed text to be cashed by the opened template window.





During selection of a certain key the invoice content must be correctly revised. If there are same text sequences in the invoice a UNIQUE text sequence must be chosen as a 'key'. For example VAT is found twice in the invoice text: 'VAT 18% 18000.00' and 'Payable VAT 18% is....' the client must choose as a 'key' VAT 18% that have TWO SPACES before the 'key' ie. any combination of text, spaces and characters is allowed.

When marking the 'key' horizontally the empty field next to it must not be selected.

After you finish the training close the 'ESI Configuration' window and click SAVE. Signed document has to be printed again on Incotex printer. A window with the set 'keys' will be shown, click OK and the signed document will be saved in required directory.

You can train the four templates for four different types of invoices. All the trained templates will be active and each time a valid invoice is sent to the printer it will be recognized from the ESD and given an electronic signature.

Types of 'keys'

The system detects specific number of types of 'keys'.

"Identifier"– used uniquely to identify the document. The program enables more keywords of this type to be defined.

"Serial Number" - Keyword of this type are used to determine the serial number of the invoice (Invoice Number).

It is not recommended to define more than one keyword of this type, except when they are marked as optional.

Using data from this keyword, the program allows to print more than one copy of the invoice, without leading to re-accumulation of amounts in the fiscal memory.

Warning: This applies only to consistently printed invoices.

"Date/Time" – This type is used to define the date and time of invoice.

Interpretation of its value depends on regional settings of the system.

ESD device does not allow signing the invoice with the date and hour earlier than the present.

When not defined keyword of this type, the program takes the system time to time and date of invoice.

"GROSS Amount EXEMPT" – The total amount of the invoice is marked by this field when it have to be accumulated in EXEMPT VAT group.

"GROSS Amount A" – total turnover VAT group A

"GROSS Amount B" - total turnover VAT group B

"GROSS Amount 3" - reserved

"NET Amount EXEMPT" – this field selects the invoice net accumulated in tax group EXEMPT

"NET Amount A" – net turnover VAT group A

"NET Amount B" - net turnover VAT group B

"NET Amount 3" - reserved

"VAT A" – this field sets general taxes in the invoice run up in tax group A(18%)

"VAT B" - set with VAT rate 0%,

"VAT 3" - reserved

"Calculated EXEMPT from Grand Total" – from Grand Total to be calculated the amount attached with tax group EXEMPT. Example: If we have an invoice with sales summary. Grand Total group A in this invoice is 700 units and Grand Total group B is 200. The total amount is 1000 units. In this case EXEMPT can be calculated as from the total amount 1000 the sum of A and B is being deducted. The result is 100. After selecting the amount 1000 from the invoice select the type of this amount from the drop down menu - "Calculated EXEMPT from Grand Total". The result will be shown further in the application.

With the rest of options it works with the same method the only difference is the amount to be calculated.

"Calculated A from Grand Total"

"Calculated B from Grand Total"

"Calculated 3 from Grand Total" - reserved

"Calculated EXEMPT from Grand Net" -

"Calculated A from Grand Net" -

"Calculated B from Grand Net" -

"Calculated 3 from Grand Net" - reserved

"Net TOTAL" - FOR CONTROL ONLY!!!

"Grand TOTAL" - FOR CONTROL ONLY!!!

The screenshot shows the 'ESI Configuration' window. The top part is a grid with columns numbered 11 to 46. The grid contains text for 'Price VAT Total CR LF' and '50000 18% 50000 00000000 CR LF'. Below the grid is a table with columns: KEY, TYPE, POSITION, Optional, TEXT. The table lists 'TAX INVOICE', 'Invoice No', 'Total VAT Exempt', and 'VAT 18%'. Below that is a table with columns: Data to be send to ESD!, VAT Group E (EXEMPT), VAT Group A (18.00%), VAT Group B (0.00%), VAT Group 3 (0.00%), TURNOVER. The table shows values for 'NET Amounts', 'VAT Amounts', and 'TURNOVER by VAT groups'.

Note the last section of the third window template. It changes with each modification of the template, which affects calculations of amounts.

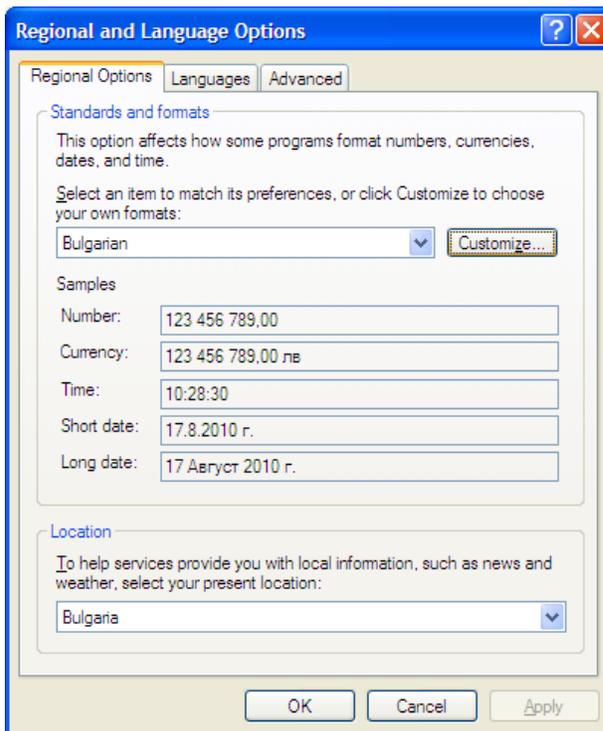
Caution: To train the system properly, with the help of this section of the window template, the system must be connected with at least one ESD device to enable the program to be informed of available rates.

Group E (EXEMPT)	VAT Group A (18.00%)	VAT Group B (0.00%)	VAT
00.00	50000.00	0.00	0.00

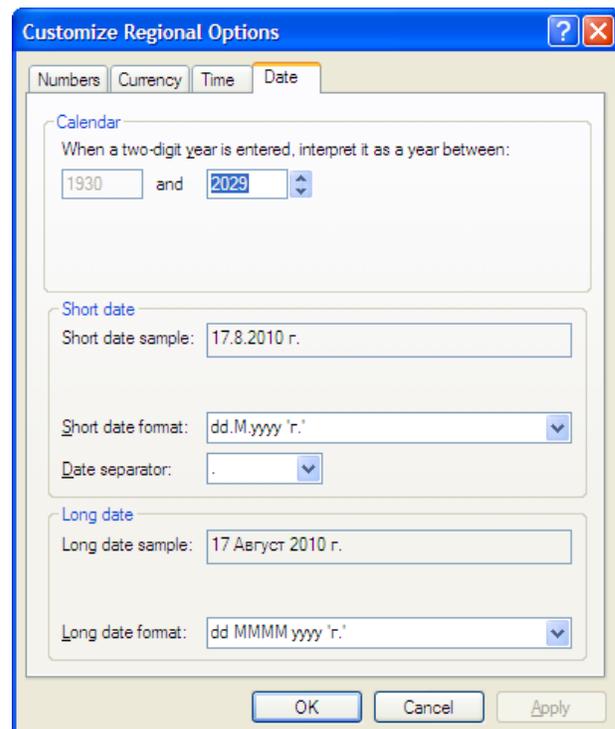
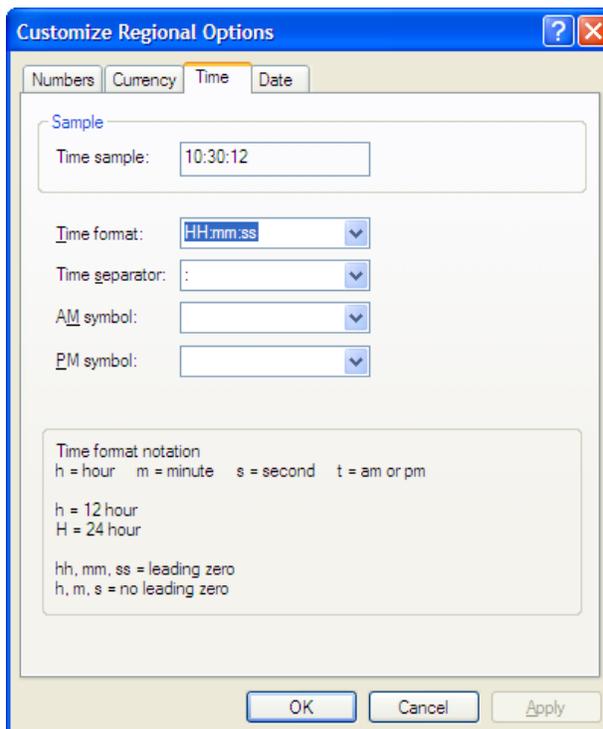
If for any reason, require disabling some of the templates, this is achieved by deleting all of its 'keys' by clicking on button  (one by one).

When you select the value of the date and time in the template make sure that the format they are in is the same as the date and time format of your PC. In this example the date and time are: 16/08/10, 11:34:50.

In Regional and Language Options select “Regional options” and press the “Customize...” button.



Then check the “Time” and “Date” formats.

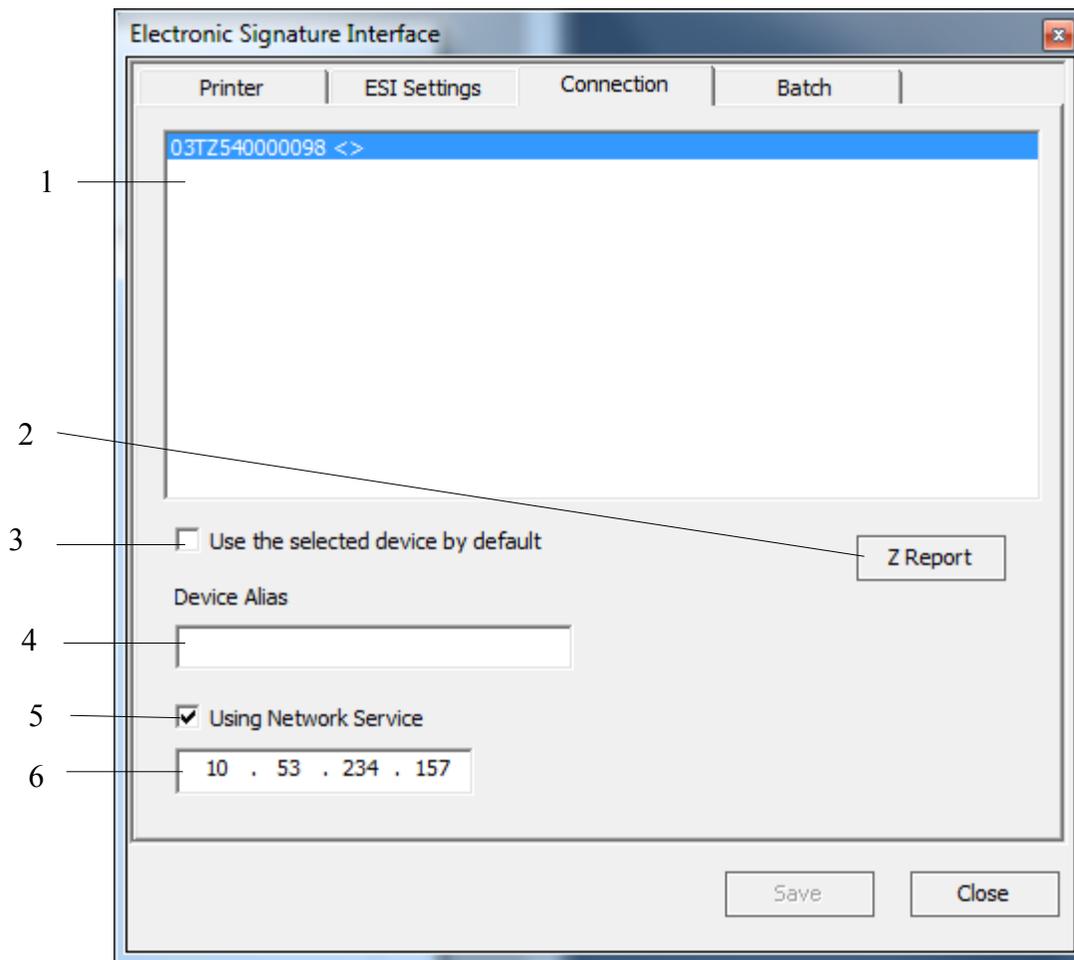


After you finish the training close the 'ESI Configuration' window and click SAVE. Signed document has to be printed again on Incotex printer. A window with the set 'keys' will be shown; click OK and the

signed document will be saved in required directory.

You can train the four templates for four different types of invoices. All the trained templates will be active and each time a valid invoice is sent to the printer it will be recognized from the ESD and given an electronic signature.

6.3.3. Connection settings



1. 'ESD List' - Displays available ESD devices (local and remote)

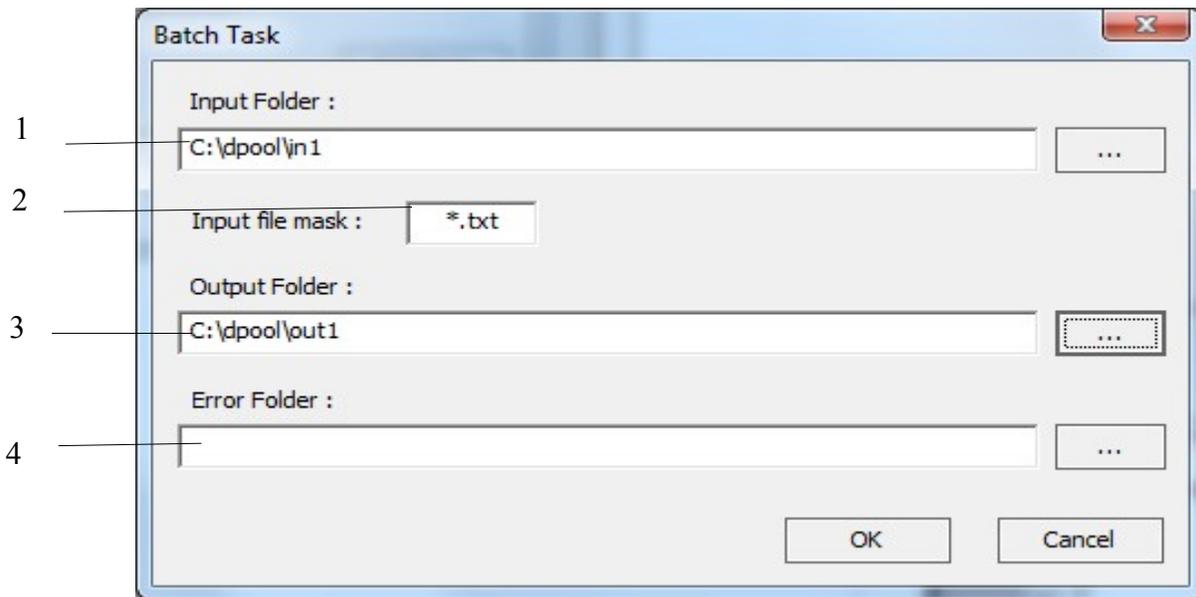
2. 'Manual Z report' - Manually start the 'Z report' of the device selected from the list. By pressing the "Z report" button a daily Z report is printed on the ESD. Then on the display of the ESD a message "SEnd" appears and the antenna sign on the display starts blinking, which means the Z report is being sent to TRA. When the Z report has been sent, the antenna sign stops blinking.

3. Check- box for favorite ESD- only device marked as 'favorite' is used for signing documents. If none of the available devices is marked, documents are signed by the first device from the list. The arrangement of devices depends on the order of their attachment to the computer.

4. 'Device alias' - User chooses any name of ESD device.

5. 'Enable/Disable remote ESD' - This check-box enables or disables the connection to the server part of software that allows the use of remote devices.

6. 'IP address of ESD server' - IP address of the machine which has installed the server package.

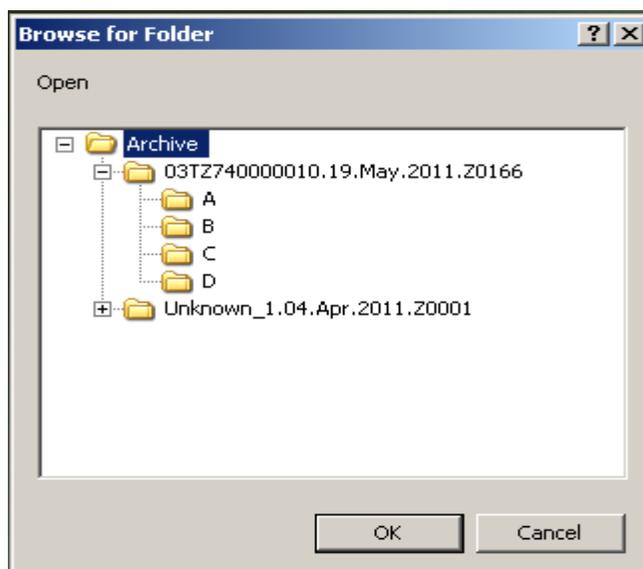


1. Batch input location
2. Input mask (filter)
3. Batch output location
4. Errors location (optional)

6.4. Verification button

The official way to verify a signed invoice is using a verification dialogue, which is the “Verification” button in the start menu. The verification works as follows:

For each signed invoice four files are created and saved in the Archive folder, situated in C:\Incotex\ESIx86-Client. This Archive folder contains four more folders each of them containing different information.



This window shows the daily archive to be analyzed. To open the file click on the required day and then OK.

Any sub-folder in the archive directory has the following structure:

name- formed by <ESD serial number><date>Z<z report number>

A – contains a text file with text information about the signed invoice, but without the electronic signature itself

B – contains text information about the electronic signature

C – contains text information about the signature of all electronic signatures for the day named 'Z signature'

D – contains signed documents in PDF format with name like 'A' and 'B'

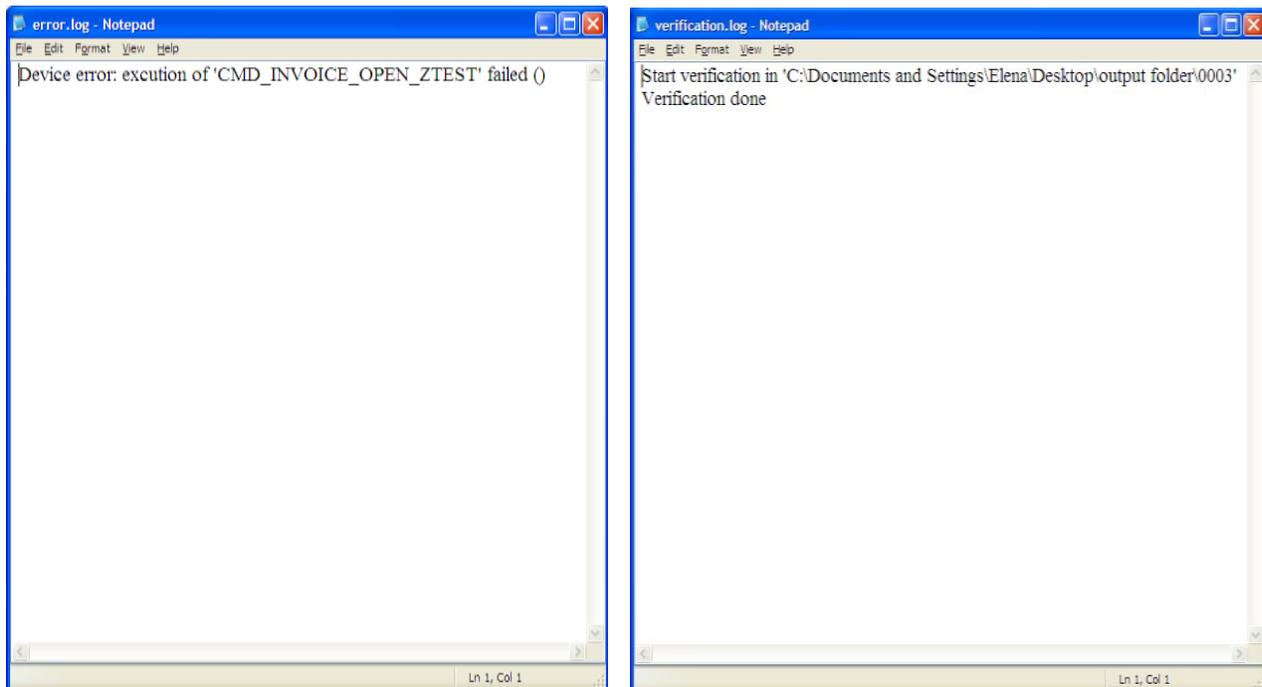
Verification starts and on the other window /shown below/ the counter starts counting the invoices and errors. If there is no error the row remains blank.

Actually in a day in folder A are created files for all the invoices signed, in folder B are created files for the electronic signatures of each of these invoices, in folder C is created one file only – with the signature of all the electronic signatures of the day and in folder D are saved all the signed invoices in PDF format.

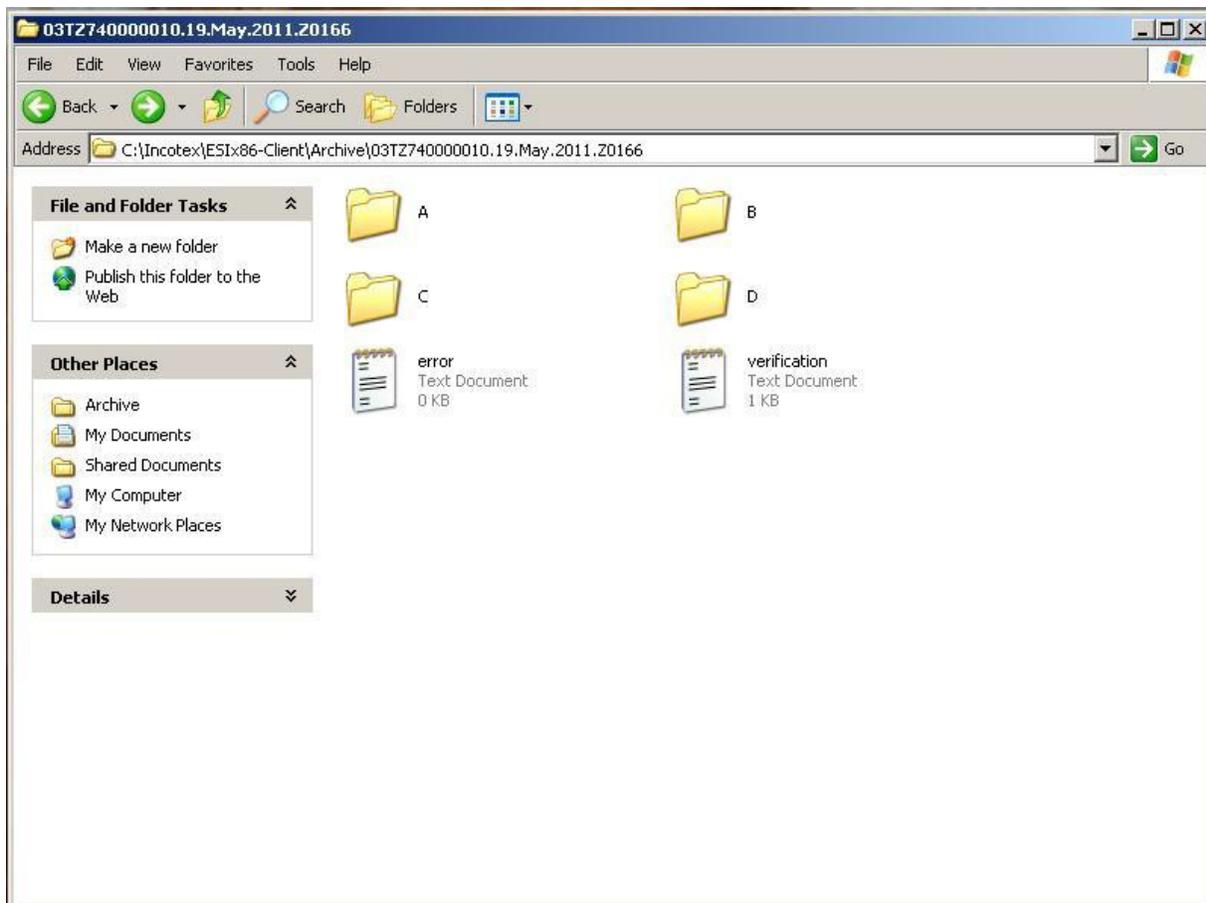
All this information is saved on the PC where the driver of the ESD is installed. The owner of the device should make a back-up of the information in the Output folder.

The verification of the invoices is made over the information in these three folders – A, B and C. The verification procedure is in the driver of the ESD. For correct verification the ESD device is also used.

To verify the information about a certain invoice one should open the Archive folder and choose the directory named with the number of the invoice. Then all the information saved about the invoice in folder A is sent to the ESD for calculating its electronic signature. The result from this calculation is compared to the electronic signature saved in folder B. Meanwhile the signature of the day is also calculated and compared to the one saved in folder C. If an invoice has been changed or deleted, a mismatch between the calculated and saved information will occur and the verification will fail. This will reflect in a message in an ERROR LOG, created in the current testing directory. A VERIFICATION LOG is also created in this directory to follow the procedure of verification.



This is a view of Archive folder and its content.



6.5. Signing invoices from multiple PCs with one ESD

One ESD can work with a few PCs in a network, each of which will be able to send invoices to it. The ESD will sign the invoices and print them on the target printer selected in the Settings of the “esi.exe” application.

For this purpose one should:

- connect the ESD to one of the PCs in the network and install the ESD driver and esi.exe, the way described above.
- install and configure Generic/Text only printers on all the other computers in the network, which will send invoices to the ESD and set these printers as default. Then right click on each of them and select “Properties”. In the Properties window choose “Ports” and click “Configure port” button. The “Configure Standard TCP/IP port Monitor” appears. In the field “Printer Name and IP Address” enter the IP Address of the PC, where the ESD is connected and the esi.exe application is working. To confirm click “OK”.

