



# Preparation of E-programmes & T-forecast

Using Excel converters

## Instruction manual

### Amendments to register:

Version	Date	Responsible	Description
0.0	11 January 2001		Initial version
0.1	17 January 2001		Amendment to front page
0.2	24 January 2002		Textual changes, two-hour to one-hour interval
0.3	22 January 2004	B.Wismans	Actualisation
0.4	28 January 2004	B.Wismans	Textual changes, period to nominate import and export has been changed.
0.5	05 november 2007	C. van Houten	Textual changes, concerning integration NorNed
0.6	21 december 2010	F. Nobel	Process schedule adapted for CWE Market Coupling

THIS IS NOT A LEADING DOCUMENT, BY CONTRAST TO ENERGIENED'S MESSAGE IMPLEMENTATION GUIDE (MIG), WHICH IS LEADING.

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## Foreword

This instruction manual provides an insight into the cycles to be negotiated by comprehensively Programme Responsible Parties (PRPs) as well as providing further details regarding the composition of EDINE messages. In this documentation called Excel converters are available on the Internet site of TenneT. You can find them under the bookmark Edine converter on the page [http://www.tennet.org/english/transmission\\_system\\_services/procedures\\_regulations/edine/index.aspx](http://www.tennet.org/english/transmission_system_services/procedures_regulations/edine/index.aspx)

### Target audience

This documentation is intended for those who are already, or are about to be, involved in Programme Responsibility who wish quickly to familiarise themselves with the following topics:  
Processes within PR;  
Composition of EDINE messages.

We would for the sake of completeness point out that the information set out in this document is not leading, by contrast to EnergieNed's Message Implementation Guide (MIG), which is leading.

Composition of instruction manual  
The composition of this instruction manual is as follows:

### Chapter 1: Introduction

This chapter provides a summary of the various Programme Responsibility phases.

### Chapter 2: Process schedule day n-1

This chapter outlines the process schedule as at the day of preparation.

### Chapter 3: Preparation of E-programme

This chapter explains how to prepare an E-programme and convert it to an EDINE message using the Excel converter.

### Chapter 4: Submission/receipt of EDINE messages

This chapter contains a step-by-step explanation of how to submit an EDINE message using the two most commonly used E-mail applications, viz. Netscape, and Microsoft Outlook.

### Chapter 5: Preparation of T-Forecast

This chapter is intended as a source of insights and skills pertaining to the preparation and submission of T-programmes, as well as discussing the completion of the various tab sheets making up the T-forecast.

### Chapter 6: Amendment of E-programmes

This chapter is intended as a source of insights and skills pertaining to the general aspects of the amendment of E-programmes.

### Chapter 7: Process schedule day n+1

This chapter sets out the process schedule for the day following that of implementation.

### Chapter 8: Processing of received APERAK/REQDOC

This chapter provides for a step-by-step explanation of how to generate/process APERAK/REQDOC messages.

## Chapter 1: Introduction

### 1.1 Introduction

This chapter discusses the general aspects of the preparation of E-programmes.

### 1.2 Phasing of Programme Responsibility

The planned PR transactions are clearly phased, as follows.

#### Preparation

Trading by market players, which communicate to the grid administrators the transmission runs expected for the next day in the form of T(for Transmission) Programmes, so that it is known per connection how much electricity is to be sourced from or fed into the grid.

The E (for Energy) Programme notifies the national grid administrator of the aggregate energy requirement for the next day, inclusive of all imports and exports (these are listed on the “Import/export breakdown” tab sheet forming part of the E-programme). Once TenneT SO has performed a consistency check of the E-programme, the latter is approved, following which a V (for “Verrekening” = set-off) Programme is sent to base the set-off on.

#### Implementation

Physical supply follows on the day of implementation once the national grid administrator has checked and approved the E-programme. Measurements are performed on this day, to be forwarded to the PRPs the next day using MSCONS\_MW.

#### Settlement

Reporting of data to the national grid administrator and PRPs. The national grid administrator determines the imbalance and reports same to the PRPs.

#### Set-off

The national grid administrator calculates and settles, per individual PRP, the cost of the PRP-caused departures from the E-programme. Using the CPS network, all PRPs are notified of the discrepancies; this is done through a V Programme. The imbalance E-programmes and sales reports are also sent during this period.

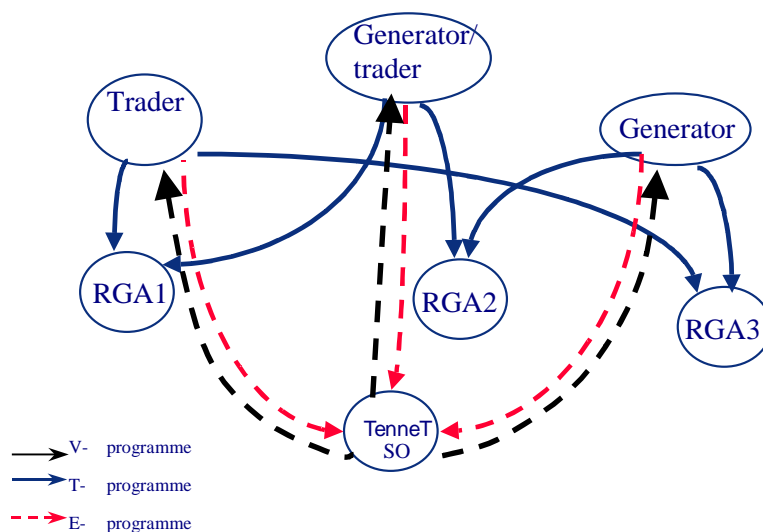
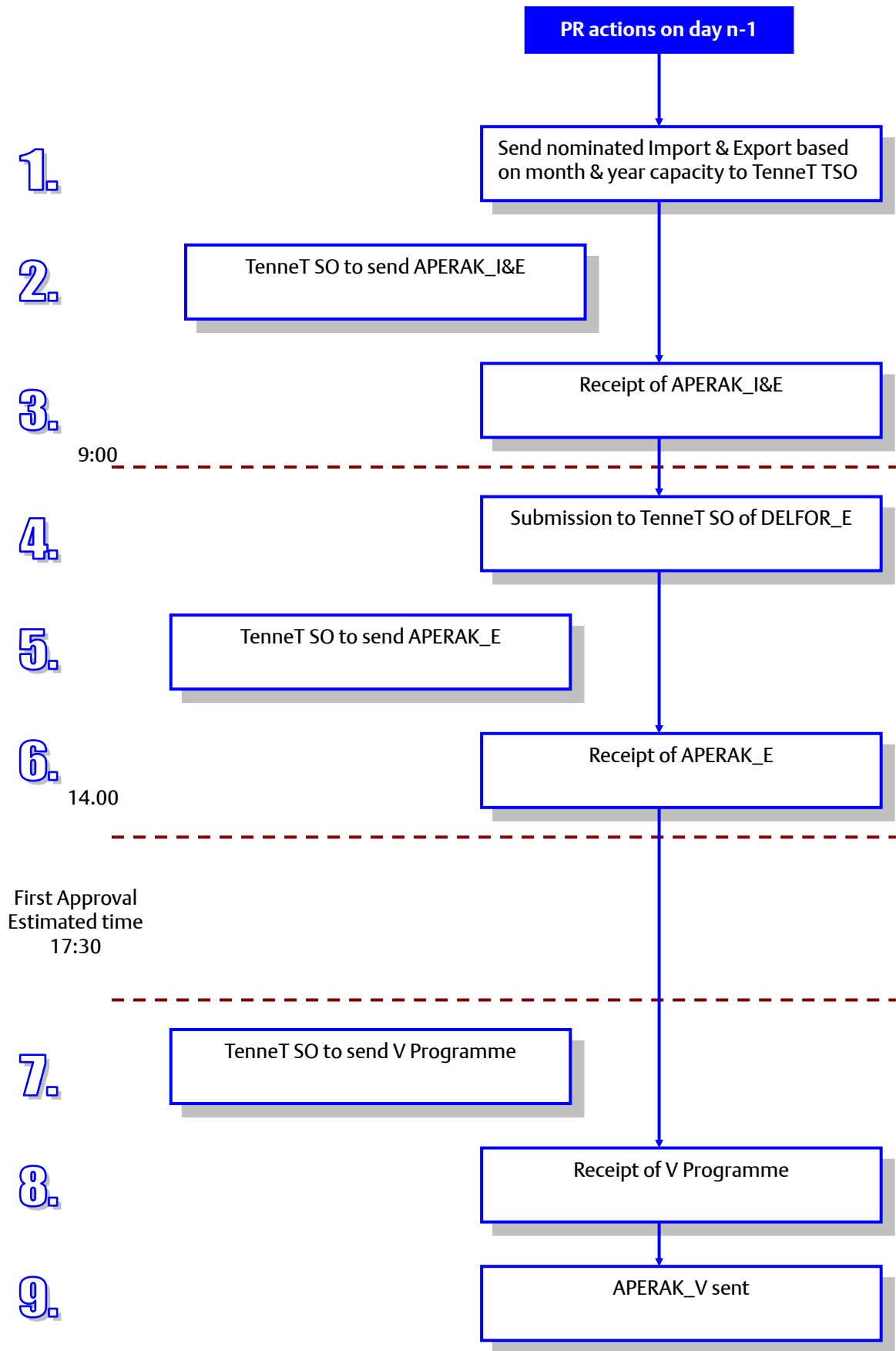


Figure 1.1: PR flow; E, T and V Programmes

## Chapter 2: Process schedule day n-1



## Chapter 3: Preparation of E-programme

### 3.1 Introduction

This chapter is intended as a source of insights and skills pertaining to the preparation and submission of E-programmes, as well as discussing the completion of the various tab sheets making up the E-programme.

### 3.2 Preparatory stage

PRPs are each required to submit their E-programme to TenneT SO one day ahead of the day of implementation (prior to 14 noon). On receipt of the E-programme, a confirmation to that effect (APERAK) is generated and sent to the sender. The E-programme is checked for internal consistency prior to being processed. If it is found to contain inconsistencies, TenneT SO will send an error message to the sender; if not, the sender will receive notification to the effect that its "Programme (has been) accepted for further processing". In the event of TenneT having rejected an E-programme for reasons of inconsistency, it will expect a revised and internally consistent version to be submitted by the relevant PRP.

Each PRP has the opportunity of submitting more than one E-programme prior to the 14 noon deadline. The first version may not be submitted more than seven days ahead of the date of implementation, with the most recent internally consistent E-programme prevailing.

#### No E-programme submitted

In the event of failure by a PRP to submit an E-programme prior to the deadline (of 14 noon on the day of implementation), TenneT SO will get in touch with the PRP by telephone. Depending on the reason for not submitting an E-programme, the following actions may be initiated:

1. If the PRP has forgotten to submit its E-programme, TenneT SO will schedule an appointment for the belated submission of same at the shortest possible notice.
2. If the PRP has solved its technical (transmission) problems, TenneT will issue an application number to be referred to (a so-called REQDOC) when the E-programme is belatedly submitted.
3. In the event of extreme technical problems, an alternative solution will be looked for, such as submitting the E-programme by fax and E-mail.
4. In the event of the LIBRA application causing technical problems, it will be impossible to process the E-programmes automatically. TenneT SO will then notify all PRPs accordingly of the process being delayed by two hours. If this two-hour window turns out not to be enough to fix the problems, a further two-hour extension will follow.
5. If the entire CPS network is unavailable, a special procedure will kick in
6. **In the event of the PRP not submitting any import/export information, everything will be siphoned off to the capacity for the day.**

In the event of combinations of the above problems occurring or where all data have to be manually processed by TenneT SO, TenneT has the option of shutting down the PR system. This document does not go into detail on the special procedures that kick in when PR system shut-down occurs.

### 3.3 Completion of E-programmes

As soon as the entire energy requirement has been charted, a start can be made on the completion of the E-programme.

#### Excel messages

A range of Excel converters have been developed in the context of the revised PR protocol for those market players which have not yet developed EDINE equipment, as the option of transmitting Excel messages using the CPS network has no longer been available since 1 January 2001, with effect from

which date all messages have had to be sent in accordance with the EDI (Electronic Data Interchange) standard.

### EDI

TenneT puts the Excel templates with an EDI macro at the disposal of PRPs that do not have proprietary equipment via its web site. The macro converts the Excel template to the required EDI standard. TenneT will not provide for administration of versions.

### 3.3.1 General

The templates are based on 15-minute PTUs (with the exception of the Measuring information and Accumulated measuring information, both of which are based on 5-minute PTUs), so that they comprise:

- 96 lines for a typical day;
- 100 lines for the transition from summer to winter time;
- 92 lines for the transition from winter to summer time.

The two illustrations below show what an Excel template looks like for the two transitional days.

Transition from summer to winter time		Transition from winter to summer time	
Period	Clocktime	Period	Clocktime
....	....	....	....
01:45 - 02:00	01:45 - 02:00	01:45 - 02:00	01:45 - 02:00
02:00 - 02:15	02:00 - 02:15	02:00 - 02:15	03:00 - 03:15
02:15 - 02:30	02:15 - 02:30	02:15 - 02:30	03:15 - 03:30
02:30 - 02:45	02:30 - 02:45	....	....
02:45 - 03:00	02:45 - 03:00	....	....
03:00 - 03:15	02:00 - 02:15	22:15 - 22:30	23:15 - 23:30
03:15 - 03:30	02:15 - 02:30	22:30 - 22:45	23:30 - 23:45
03:30 - 03:45	02:30 - 02:45	22:45 - 23:00	23:45 - 24:00
03:45 - 04:00	02:45 - 03:00	23:00 - 23:15	Not applicable
04:00 - 04:15	03:00 - 03:15	23:15 - 23:30	Not applicable
....	....	23:30 - 23:35	Not applicable
....	....	23:45 - 24:00	Not applicable
24:00 - 24:15	23:00 - 23:15	24:00 - 24:15	Not applicable
24:15 - 24:30	23:15 - 23:30	24:15 - 24:30	Not applicable
24:30 - 24:45	23:30 - 23:45	24:30 - 24:45	Not applicable
24:45 - 25:00	23:45 - 24:00	24:45 - 25:00	Not applicable

Figure 3.1: Processing of tender on transition from summer to winter time

### 3.3.2 E-programme templates

The E-programme is made up of the following three tab sheets:

- Import/export breakdown;
- E-programme;
- Parameters.

You should bear in mind when completing the templates that the header in the templates will be automatically checked for accuracy, in addition to which the consistency of the submitted programme will be checked. This consistency check focuses on the template's control table, which for a correctly completed template should be set at zero for all PTUs. If this is not the case, an error message will be automatically generated and transmitted to the sender, with TenneT SO expecting to receive a revised programme.

### 3.3.3 The import/export breakdown tab sheet

When preparing an IET-programme, you should make allowance for the fact that the programme may be submitted no more than two working days (from 10h00 on d-2) ahead of the implementation date (d-2). If d-2 is not a working day, the period will be enlarged until the first working day before. For example, nominations for a monday or a thuesday can be sent in on friday, because sunday and saturday are not working days.

On arrival of the programme (prior to 8.00 . on d-1), the LIBRA system performs an automatic check of the header texts. It is therefore important that you fill these in properly or you will receive an error message. In order to fill in the IET data, you start by activating the Import/export breakdown tab sheet, then fill in the following fields only if there is actually a question of imports and/or exports taking place:

Bericht		Import- en exportspecificatie	
IET-contractnummer		<nummer>	
EAN-13 code leverancier/ontvanger		<code>	
Code Land herkomst/bestemming	DE	Duitsland	
EAN-128 code (Grensstation)	87168679999888873	Duitsland Hengelo	
Import- en export specificaties			
15-min	Saldo	Controle	Hevev alheid gespecificeerd per contract
00:00-00:15	5.000	0	5000
00:15-00:30	5.000	0	5000
00:30-00:45	5.000	0	5000
00:45-01:00	5.000	0	5000
01:00-01:15	5.000	0	5000
01:15-01:30	5.000	0	5000
01:30-01:45	5.000	0	5000
01:45-02:00	5.000	0	5000
02:00-02:15	5.000	0	5000
02:15-02:30	5.000	0	5000
02:30-02:45	5.000	0	5000
02:45-03:00	5.000	0	5000
03:00-03:15	5.000	0	5000
03:15-03:30	5.000	0	5000
03:30-03:45	5.000	0	5000
03:45-04:00	5.000	0	5000
04:00-04:15	5.000	0	5000
04:15-04:30	5.000	0	5000
04:30-04:45	5.000	0	5000

Figure 3.2: Import/export breakdown tab sheet

Below please find a brief summary of some important fields to be filled in:

1. IET contract number

The Auction Office generates a contract number for contracts.

2. Supplier/recipient

When importing into the Netherlands, you fill in your own EAN code under “recipient” and the counterparty’s EAN code under “supplier”. When exporting out of the Netherlands, you do the reverse.

3. Country of origin/destination

The following abbreviations may be used for the field entitled Country of origin/destination:

BE	België	DK	Denemarken	DE	Duitsland
FR	Frankrijk	CH	Zwitserland	GB	Engeland
NL	Nederland	IT	Italië		
PT	Portugal	AT	Oostenrijk		
SE	Zweden	ES	Spanje		
GR	Griekenland	LU	Luxemburg		
NO	Noorwegen	PL	Polen		

4. Via cross-border substation

There are five cross-border interconnections for imports and exports between the Netherlands, Belgium and Germany. The field entitled Via cross-border substation can be used to fill in the EAN codes of:

EON\_Netz; EAN-code: 403374200000000012

RWE\_Net ; EAN-code: 404232200000000007

ELIA ; EAN-code: 549977030260800000

Statnett ; EAN-code: 707052399999999992

5. Quantities to be filled in

Here the quantity of energy to be imported or exported per (15-minute) PTU is filled in (in kWh).

3.3.4 The “E-programme” tab sheet

The data that are filled in in the IET tab sheet will be copied across to the “E-programme” tab sheet automatically, through cell references.

As for the quantities to be filled in in the templates, the schedule below shows when a number is given a positive (+) or negative (-) signs.

Plus (+)	Minus (-)
Sourcing	Selling
Imports	Exports
Inbound	Outbound
Generation	Consumption

Figure 3.3: use of + and -

By activating the “E-programme” tab sheet at this point, you can fill in the particulars of the domestic transactions. Fill in the following lines in the E-programme:

Figure 3.4: The “E-programme” tab sheet

Once the header text has been filled in, you can start on completing the energy requirement. Prior to submitting the E-programme, a check is required to be performed to ascertain that the values in the control column are set at 0: if any of the PTU values has a value other than 0, the LIBRA system will generate an error message and send this to the sender, which will then be required post-haste to submit a revised E-programme.

Allowance should be made for the following when filling in the particulars:

1. The LIBRA system must be able to cope with the format of the date to be filled in, DD MM YYYY being the standard format.
2. TenneT will issue application numbers after 14 .00 in the event of amendments to the E-programme.
3. Always check whether the reference number has been adjusted.
4. Only fill in the hours from 24.00 to 25.00 for the day on which the transition from summer to winter time is made.
5. Use kWh as the unit for all quantities.
6. The 15-minute value is: hourly value divided by 4.
7. Control column set at zero.

### 3.3.5 The “Parameters” tab sheet

Once the details have been filled in in the tab sheets, the Excel work sheet must be converted to EDI prior to being sent in.

When you activate the “Parameters” tab sheet, the EDI parameters appear on your screen. The following items are required to be filled in prior to the macro being activated.

The screenshot shows two Excel tabs. The top tab, 'Parameters voor E-programma werkblad', contains a form with the following fields and values:

- Testindicator:  Testindicator /  Geen testindicator
- Bestanddirectory: C:\Temp
- Eenheid: KWH
- Verzender EAN-13 code: 8712423009424
- Ontvanger EAN-13 code: 8716867999983
- Time offset UTC: 1
- REQDOC referentienummer: E200012211410N001
- Uniek referentienummer: 10.01.2001
- Datum uitvoering: 2
- Volgnummer: 2
- Receiver EAN-13 code UNB: 8716867999983

Buttons include 'Maak velden leeg', 'Converteren naar EDI', and 'Hulp'. A status indicator shows '1 keer geconverteerd'. A note states: 'Cellen die groen zijn niet invullen, deze worden automatisch gevuld vanuit sheet 'E-programma' of vanuit macro.'

The bottom tab, 'Parameters voor Import- en exportspecificatie werkblad', contains a table with the following data:

IET-contractnummer:	<nummer>	0	0	0	0
EAN-13 code leverancier/ontvanger:	<code>				
Code van land herkomst/bestemming:	DE	0	0	0	0
EAN-128 code grensstations:	87168679999888842				

Figure 3.5: The “Parameters” tab sheet

Below please find some further details regarding the cells to be filled prior to the E-programme being submitted (all green fields in this work sheet will be filled automatically whereas all white fields must be filled in manually).

**E-programme work sheet parameters:**

**1. Test indicator**

Make sure that no test indicator is activated in the production phase.

**2. File directory**

Fill in the path to be used by the E-programme when saving the EDI message.

**3. Unit**

The unit to be filled in is kWh. This is copied across from the E-programme tab sheet.

**4. Recipient**

Fill in the recipient’s EAN-13 code.

**5. Sender**

Fill in the sender’s EAN-13 code.

**6. Timer off/set UTC**

Fill in 2 during summer time, and 1 during winter time.

**7. REQDOC reference number**

This is where the REQDOC number is copied across from the E-programme tab sheet. A REQDOC number can be requested by telephone from TenneT SO.

**8. Unique reference number**

The system generates this automatically.

### 9. Date of implementation

DD MM YYYY is the standard format, and is copied across from the E-programme tab sheet.

### 10. Sequential number

The E-programme's version number.

### 11. Recipient's EAN-13 code

#### Import/export breakdown work sheet parameters:

#### 1. IET contract number

The relevant import or export contract number.

#### 2. Supplier's/recipient's EAN-13 code

When importing into the Netherlands, you fill in your own EAN code under "recipient" and the counterparty's EAN code under "supplier". When exporting out of the Netherlands, you do the reverse.

#### 3. Country of origin/destination

The code of the country of destination (also see Country codes, 3.3.3 sub (3) above).

#### 4. EAN-128 code of cross-border substation

The EAN-128 code of the TSO at which import or export is to take place.

### 3.4 Conversion to EDI



Once you have filled in all relevant cells, click the button marked "Conversion to EDI". Provided all cells have been correctly filled in, the macro will save a file in the designated "File directory" of the "Parameters" tab sheet. If not all fields have been correctly filled in, the macro will generate an error message, which it will display to you through a pop-up screen. Reference is made to 4.3 for an explanation of the contents of an EDINE message.

## Chapter 4: Submission/receipt of EDINE messages

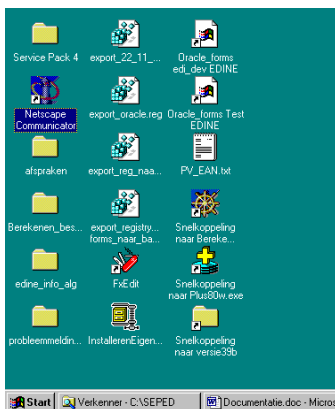
This EDINE file now has to be submitted via the CPS network so as to enable the LIBRA system to process it. This chapter provides for a step-by-step explanation of how to send an EDINE file using the two most commonly used E-mail applications, viz.

- Netscape, and
- Microsoft Outlook.

### 4.1 Sending using Netscape

A step-by-step explanation of how to send an EDINE file is set out below.

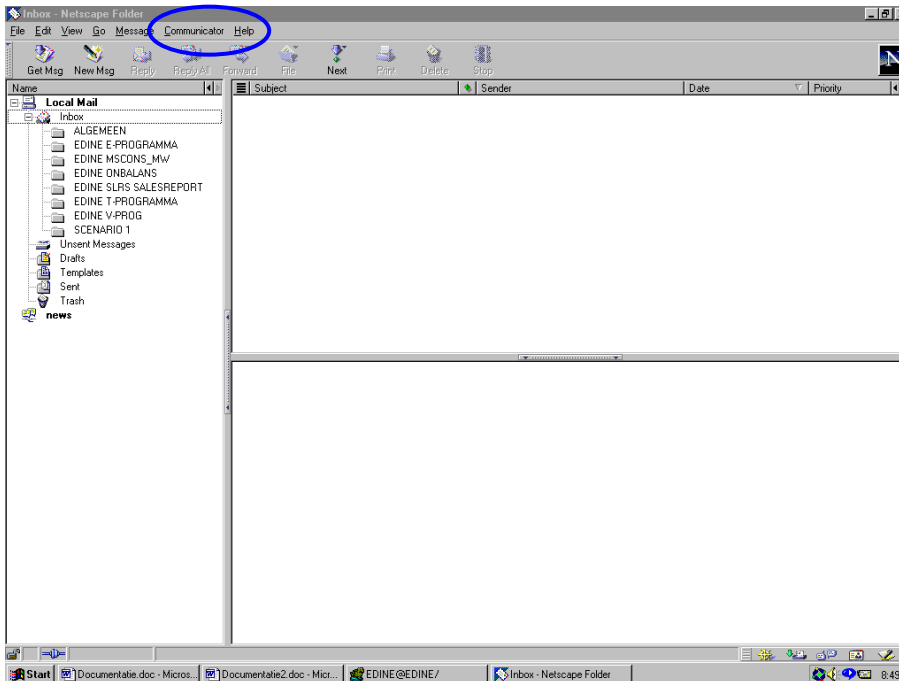
1. First, double-click on the Netscape icon.



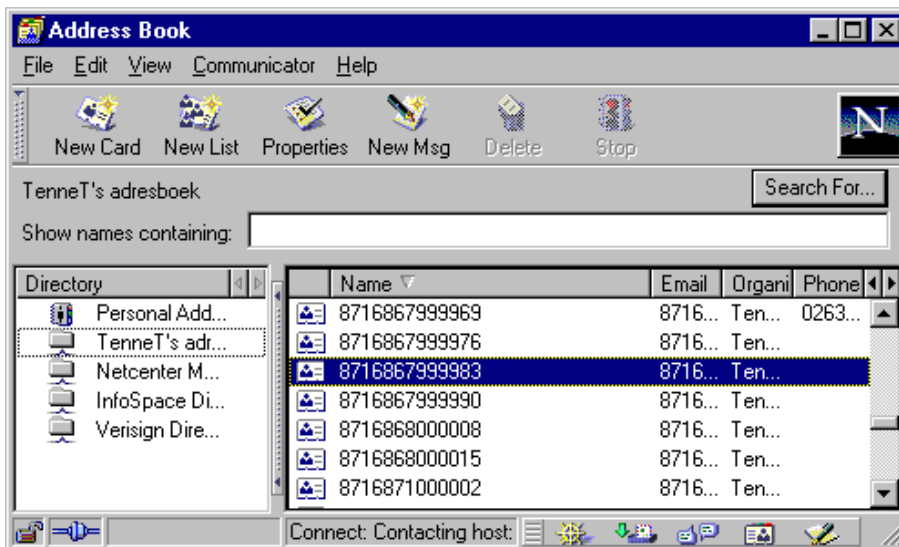
2. At the next pop-up window choose your own profile name, then press “Start Communicator”.



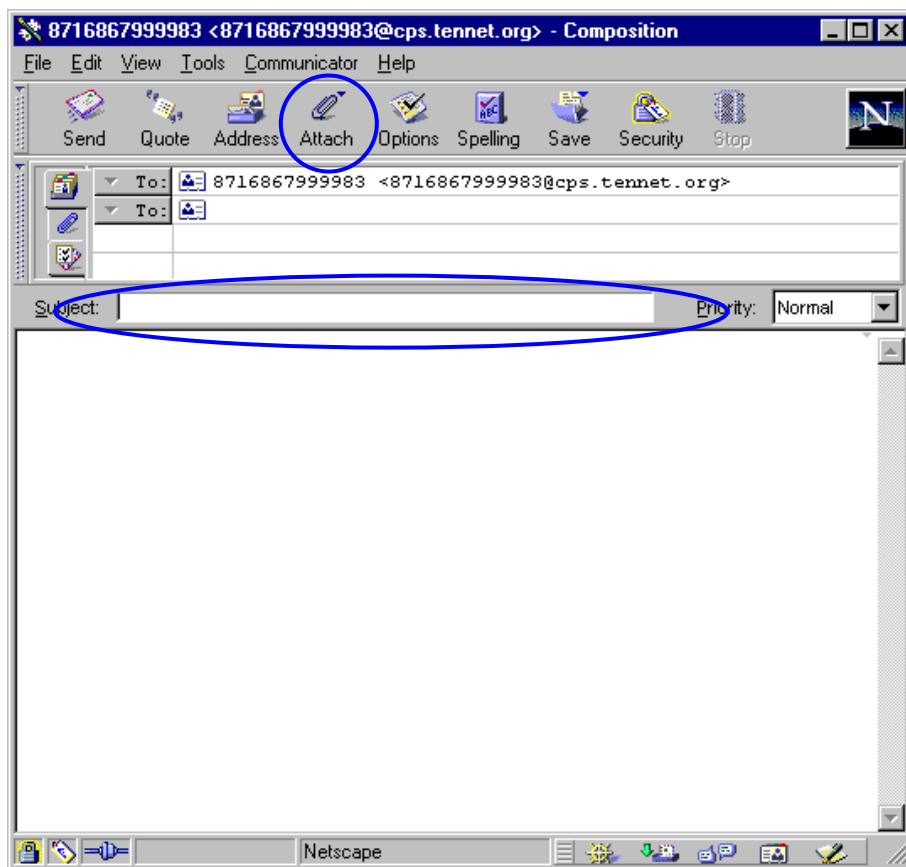
3. This starts up the CPS mailbox, where you select “Communicator – Address book”.



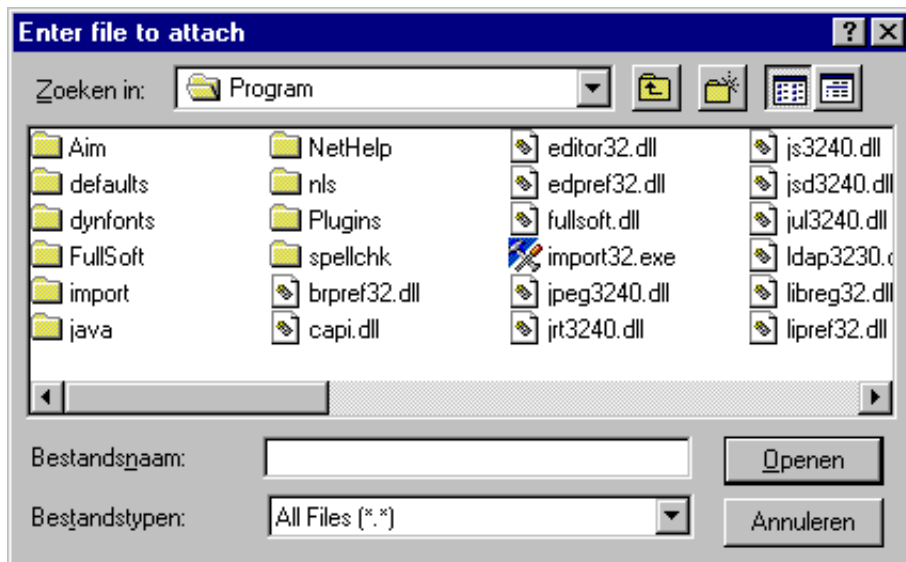
4. In the pop-up screen entitled “Address Book”, choose your own personal address book (which in this example would be TenneT) and look up TenneT SO’s EAN-13 code (i.e. 8716867999983) in the adjacent screen. Click the button market “New Msg” to prepare your message.



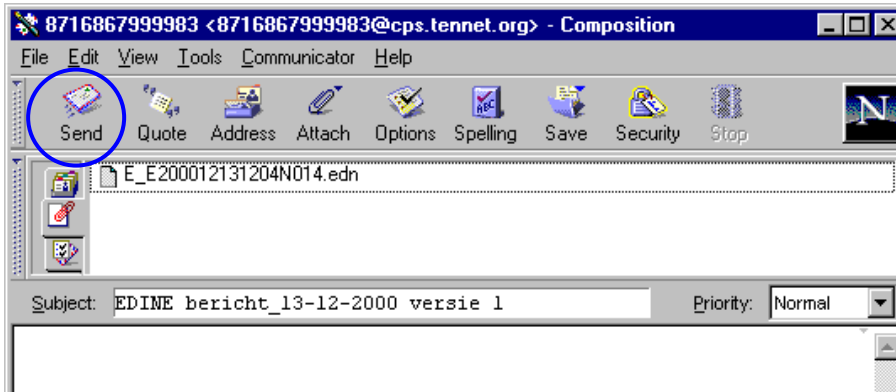
5. The field entitled “Subject” enables you to include a description of the EDINE message to be sent. Press the “Attach” button to send along the EDINE message you have just prepared via the CPS network.



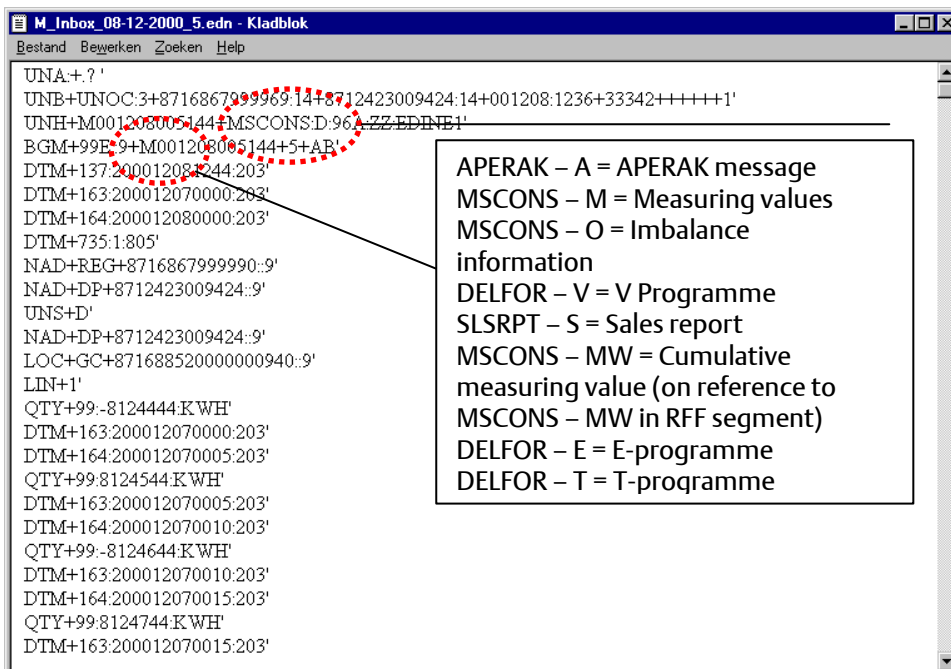
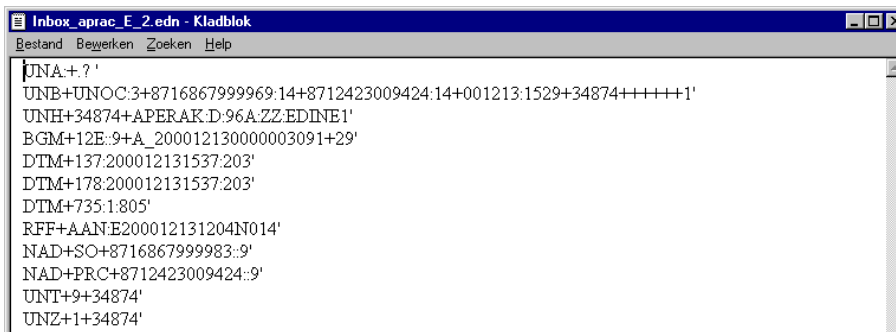
6. The next pop-up screen enables you to browse to the EDINE file you have prepared. Select “Open”.



7. Your EDINE file has now been included in your E-mail message. Press the “Send” button to have the message sent to the System Operator, inclusive of the EDINE file.

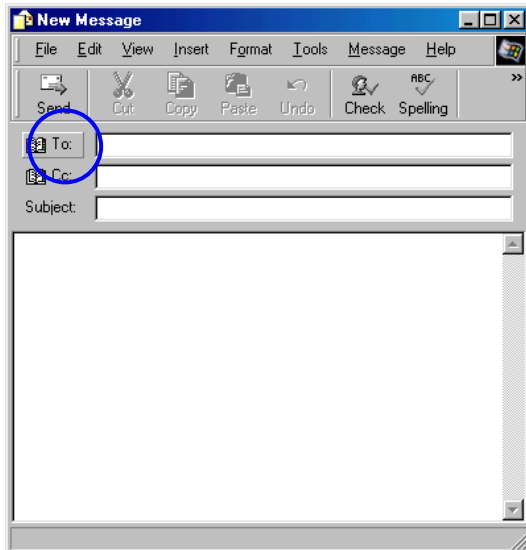


8. The System Operator will receive the EDINE file and send confirmation of receipt through an APERAK, which will end up in your mail box and whose set-up will be as follows:

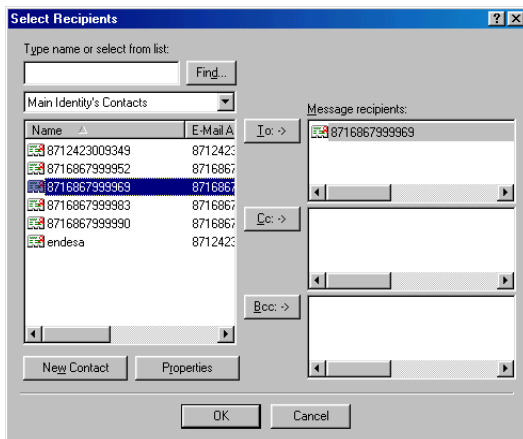


## 4.2 Sending using Microsoft Outlook

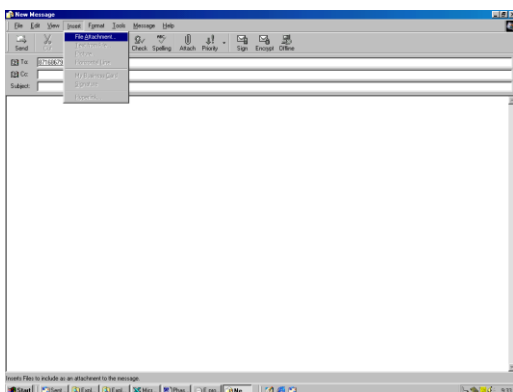
1. Open Outlook Express and press the “New Messages” button. Press the “To” button to send the file to TenneT SO.



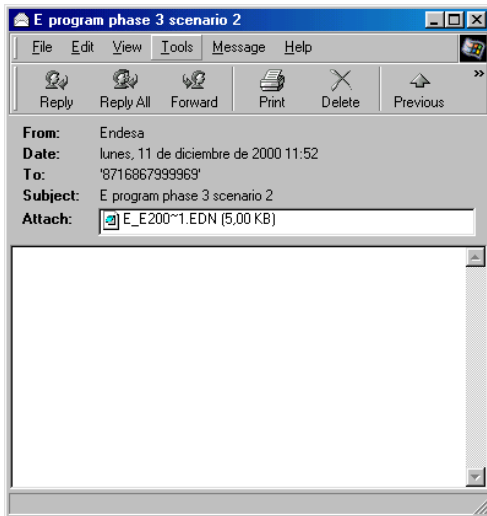
2. Now select the relevant EAN code (which for TenneT SO is 8716867999983) and add it using the “To” and “OK” buttons.



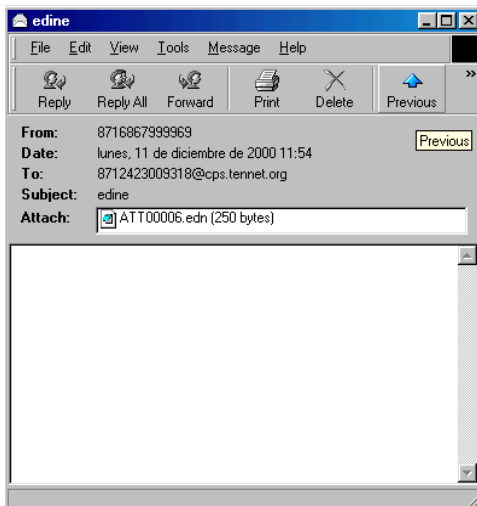
3. Select “Insert – Insert file” to attach the EDINE message.



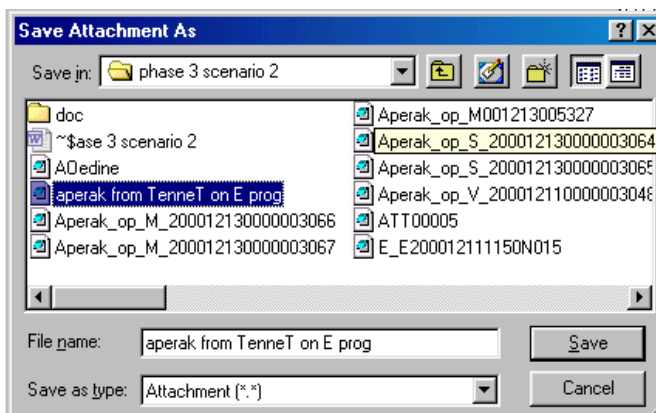
- Now look up the file to be attached and press the “Attach” button. TenneT SO will send back an APERAK by way of confirmation of receipt.



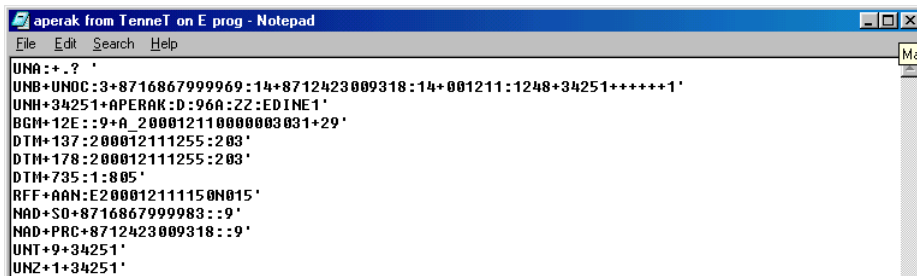
- Incoming messages are opened by double-clicking them (using the left-hand mouse button).



- Save the file in a pre-prepared directory (extension to be used: .edn).



7. You may now open the message in Notepad (using the right-hand mouse button).



```

aperak from TenneT on E prog - Notepad
File Edit Search Help
UNA : + . ? '
UNB+UNOC:3+8716867999969:14+8712423009318:14+001211:1248+34251+++++1'
UNH+34251+APERAK:D:96A:Z2:EDINE1
BGM+12E: :9+a_200012110000003031+29'
DTH+137:200012111255:203'
DTH+178:200012111255:203'
DTH+735:1:805'
RFF+AAN:E200012111150N015'
NAD+SO+8716867999983: :9'
NAD+PRC+8712423009318: :9'
UNT+9+34251'
UNZ+1+34251'
    
```

Reference is made to subparagraph 4(1), Sending using Netscape, item 8, for how to recognise EDINE messages.

## Chapter 5: Preparation of T-forecast

This chapter is intended as a source of insights and skills pertaining to the preparation and submission of T-programmes, as well as discussing the completion of the various tab sheets making up the T-programme, better known as T-Forecast.

### 5.1 T-programme template

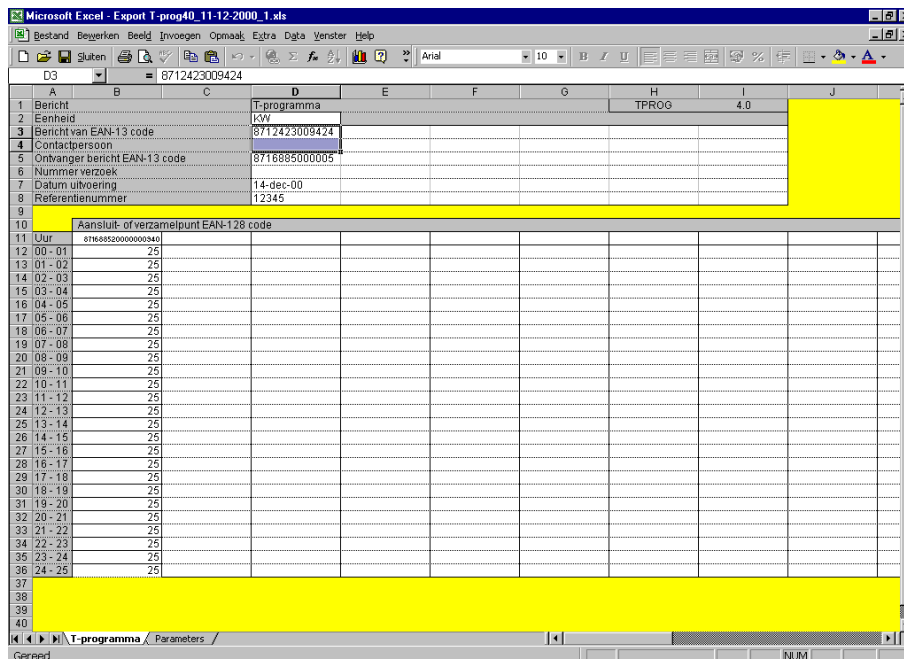
A T-programme is required to be sent to the grid administrator on the day of preparation. To generate an EDINE message, open the E-programme Export T-prog...xls in Excel.

The template comprises two tab sheets, viz.:

- T-programme;
- Parameters.

#### 5.1.1 The “T-programme” tab sheet

The “T-programme” tab sheet is used for filling in the values to be sent to the grid administrator, which collects all T-programmes relating to its own grids for processing into a single T-programme, which it duly submits to TenneT SO. Reference is made to subparagraph 3(4) above for how to complete the header text.



A	B	C	D	E	F	G	H	I	J
1	Bericht		T-programma				TPROG	4.0	
2	Eenheid		KW						
3	Bericht van EAN-13 code		8712423009424						
4	Contactpersoon								
5	Ontvanger bericht EAN-13 code		8716885000095						
6	Nummer verzoek								
7	Datum uitvoering		14-dec-00						
8	Referentienummer		12345						
9									
10	Aansluit- of verzamelpunt EAN-128 code								
11	Uur		8716885200000346						
12	00 - 01		25						
13	01 - 02		25						
14	02 - 03		25						
15	03 - 04		25						
16	04 - 05		25						
17	05 - 06		25						
18	06 - 07		25						
19	07 - 08		25						
20	08 - 09		25						
21	09 - 10		25						
22	10 - 11		25						
23	11 - 12		25						
24	12 - 13		25						
25	13 - 14		25						
26	14 - 15		25						
27	15 - 16		25						
28	16 - 17		25						
29	17 - 18		25						
30	18 - 19		25						
31	19 - 20		25						
32	20 - 21		25						
33	21 - 22		25						
34	22 - 23		25						
35	23 - 24		25						
36	24 - 25		25						
37									
38									
39									
40									

Figure 5.1: The “T-programme” tab sheet

The relevant point of connection will have to be filled in above the column in which the relevant values will be filled in. By contrast to the E-programme, the T-programme (see sample) uses hourly values expressed as kW rather than kWh.

### 5.1.2 The “Parameters” tab sheet

By activating the “Parameters” tab sheet, you will cause the EDI parameters to appear on your screen. The following values must be filled in prior to the macro being activated.

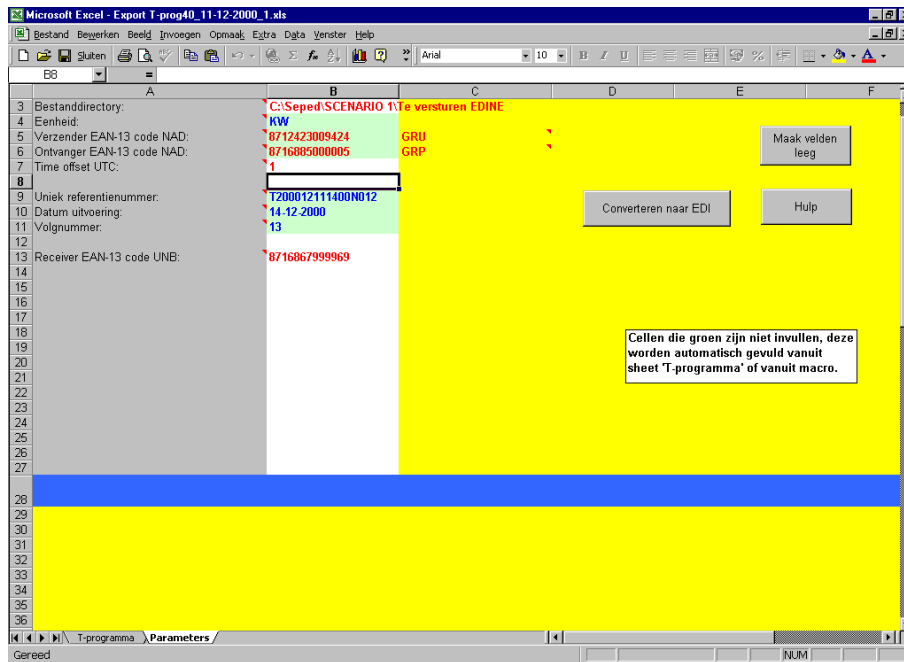


Figure 5.2: The “Parameters” tab sheet

Below please find some further details regarding the cells to be filled prior to the T-Forecast being submitted.

T-Forecast work sheet parameters:

#### 1. Test indicator

Click “No testindicator” in the production phase.

#### 2. File directory

Fill in the path to be used by the E-programme when saving the EDI message.

#### 3. Unit

The unit to be filled in is kW.

#### 4. Sender

Fill in the sender’s EAN-13 code.

#### 5. Recipient

Fill in the recipient’s EAN-13 code.

#### 6. Timer off/set UTC

Fill in 2 during summer time, and 1 during winter time.

#### 7. Unique reference number

The system generates this automatically.

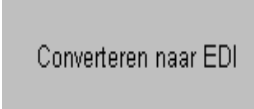
#### 8. Date of implementation

DD MM YYYY is the standard format, and is copied across from the T-Forecast tab sheet.

### 9. Sequential number

The T-Forecast's version number.

## 5.2 Conversion to EDI



Once you have filled in all relevant cells, click the button marked “Conversion to EDI” . Provided all cells have been correctly filled in, the macro will save a file in the designated “File directory” of the “Parameters” tab sheet.

## 5.3 Submission of T-Forecast

This EDINE file now has to be submitted to the relevant grid administrator using the CPS network. Reference is made to chapter 3 above with regard to the sending instructions.

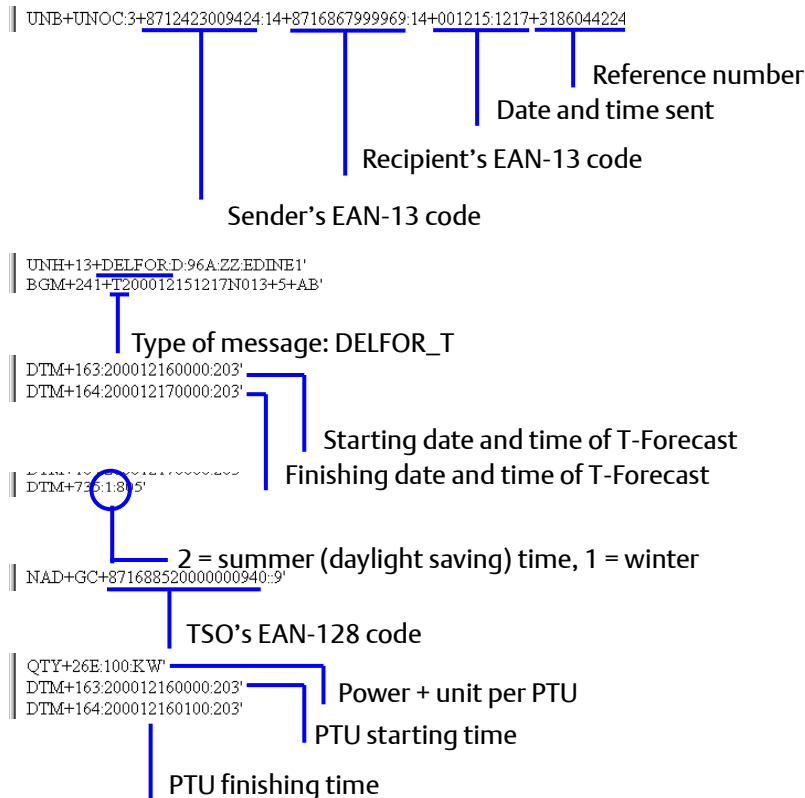
## Chapter 6: Composition of EDINE message

You may render visible the EDINE message having been generated using Notepad. This is what the message will look like:



Figure 6.1: T-Forecast EDINE message

Below please find an explanation of the composition of the message.



## Chapter 7: Amendment of E-programme

### 7.1 Introduction

This chapter is intended as a source of insights and skills pertaining to amendment of E-programmes in general, as well as going into detail on Programme responsibility and the distinct phasing of the relevant transactions.

### 7.2 E-programme amendment procedure

#### Amendment of E-programmes

Amendment of E and T-Forecast between 14:00 and the overall approval is allowed only if there is a question of transmission constraint. E-programmes may not be amended during this interval for any other reasons.

Amendment of an E-programme between 14:00 and first approval is conditional upon the system operator having previously issued an application number. Without reference to such application number the LIBRA system will reject the E-programme and return an error message to the sender.

PRPs do not have the option of submitting amendments at the time  $t-1$ . If transmission constraints occur at such time, TenneT will ensure that comprehensive set-off is effected through the V Programme.

The E-programme amendment procedure continues to apply from the moment of TenneT SO approving the E-programmes on the day of preparation until 23.00 on the day of implementation.

#### Amendment

Amendments to E and T-Forecast may be submitted from the moment of approval until the day of implementation. Each such amendment consists of a comprehensive E-programme. Programme amendments are required to be submitted at least one hour ahead of the start of the one-hour interval during which the amendment is to take effect. The consistency check of amendments having been submitted is performed at regular intervals of at most one hour, and are carried out on the basis of the most recently received, accurate (internally consistent) amended E-programme. Amendments are checked and approved once every 15 minutes.

All programmes forming part of a set of programmes that are not related to other programmes will be approved provided internal consistency has been confirmed. However, as soon as a single party within the set is inconsistent with another party during a particular hour, all programmes making up the set for that hour will be rejected.

#### Example

*Party A amends the E-programme it has with party B, which amends not only its programme involving party A but also that with party C.*

*Party C has failed (accurately) to submit the change to its programme involving party B. Although parties A and B have a mutually consistent-Forecast, party A's amendment is rejected for the hours for which party B's programme involving party C is not yet consistent. As soon as party C has submitted an accurate amendment, the E-programmes of parties A, B and C will be approved.*

### 7.3 Submission of amended E-programme: Sample

PRP A submits its E-programme (A1) for 20-11-2000 (as the day of implementation) at 11.45 . on 19-11-2000 (this being the day of preparation). The schedule below lists the completed programme in respect of the PTUs from 08.30 . till 15:00

Bericht		E-programma				
Eenheid		kWh				
Ontvanger		EAN-13 code (LNB/SO)				
Bericht van		EAN-13 code (PVA)				
Contactpersoon						
Nummer verzoek						
Datum uitvoering		20-11-00				
Referentienummer		A1				
Hoeveelheid per PV						
15-min	E-prog	Controle	Im	export	PVB	PVC
08:30-08:45	-16.000	0	5.000	5.000	6.000	6.000
08:45-09:00	-16.000	0	5.000	5.000	6.000	6.000
09:00-09:15	-16.000	0	5.000	5.000	6.000	6.000
09:15-09:30	-16.000	0	5.000	5.000	6.000	6.000
09:30-09:45	-16.000	0	5.000	5.000	6.000	6.000
09:45-10:00	-16.000	0	5.000	5.000	6.000	6.000
10:00-10:15	-16.000	0	5.000	5.000	6.000	6.000
10:15-10:30	-16.000	0	5.000	5.000	6.000	6.000
10:30-10:45	-16.000	0	5.000	5.000	6.000	6.000
10:45-11:00	-16.000	0	5.000	5.000	6.000	6.000
11:00-11:15	-16.000	0	5.000	5.000	6.000	6.000
11:15-11:30	-16.000	0	5.000	5.000	6.000	6.000
11:30-11:45	-16.000	0	5.000	5.000	6.000	6.000
11:45-12:00	-16.000	0	5.000	5.000	6.000	6.000
12:00-12:15	-16.000	0	5.000	5.000	6.000	6.000
12:15-12:30	-16.000	0	5.000	5.000	6.000	6.000
12:30-12:45	-16.000	0	5.000	5.000	6.000	6.000
12:45-13:00	-16.000	0	5.000	5.000	6.000	6.000
13:00-13:15	-16.000	0	5.000	5.000	6.000	6.000
13:15-13:30	-16.000	0	5.000	5.000	6.000	6.000
13:30-13:45	-16.000	0	5.000	5.000	6.000	6.000
13:45-14:00	-16.000	0	5.000	5.000	6.000	6.000
14:00-14:15	-16.000	0	5.000	5.000	6.000	6.000
14:15-14:30	-16.000	0	5.000	5.000	6.000	6.000
14:30-14:45	-16.000	0	5.000	5.000	6.000	6.000
14:45-15:00	-16.000	0	5.000	5.000	6.000	6.000

Figure 7.1: E-programme breakdowns

PRP A has taken out a bilateral contract for 5,000kW on the day-ahead market, so that its import breakdown will look as follows:

Bericht		Import- en exportspecificatie	
IET-contractnummer		<nummer>	
EAN-13 code leverancier/ontvanger		<code>	
Code Land herkomst/bestemming		DE	Denemarken
EAN-128 code (Grensstation)		87168679999888842	België Zandvliet
Import- en export specificaties			
15-min	Saldo	Controle	Hoeveelheid gespecificeerd per contract
08:30-08:45	5.000	0	5000
08:45-09:00	5.000	0	5000
09:00-09:15	5.000	0	5000
09:15-09:30	5.000	0	5000
09:30-09:45	5.000	0	5000
09:45-10:00	5.000	0	5000
10:00-10:15	5.000	0	5000
10:15-10:30	5.000	0	5000
10:30-10:45	5.000	0	5000
10:45-11:00	5.000	0	5000
11:00-11:15	5.000	0	5000
11:15-11:30	5.000	0	5000
11:30-11:45	5.000	0	5000
11:45-12:00	5.000	0	5000
12:00-12:15	5.000	0	5000
12:15-12:30	5.000	0	5000
12:30-12:45	5.000	0	5000
12:45-13:00	5.000	0	5000
13:00-13:15	5.000	0	5000
13:15-13:30	5.000	0	5000
13:30-13:45	5.000	0	5000
13:45-14:00	5.000	0	5000
14:00-14:15	5.000	0	5000
14:15-14:30	5.000	0	5000
14:30-14:45	5.000	0	5000
14:45-15:00	5.000	0	5000
15:00-15:15	5.000	0	5000
15:15-15:30	5.000	0	5000
15:30-15:45	5.000	0	5000
15:45-16:00	5.000	0	5000
16:00-16:15	5.000	0	5000
16:15-16:30	5.000	0	5000
16:30-16:45	5.000	0	5000
16:45-17:00	5.000	0	5000

Figure 7.2: Import/export

Immediately following receipt of its E-programme, PRP A will receive from TenneT SO confirmation to the effect that its programme is internally consistent with the reference number by which the E-programme is known to TenneT SO, i.e. 70487 (the “track number”).

Shortly after 14:00 , however, PRP A is advised by TenneT SO that its planned import is to be reduced to zero between the PTUs 10.00 and 14:00 . PRP A is requested prior to 16.00 to submit (under application number 314) an amendment to its programme. PRP A duly submits an amended E-programme under reference A2, which looks as follows:

Bericht	E-programma	
Eenheid	kWh	
Ontvanger	EAN-13 code (LNB/SO)	
Bericht van	EAN-13 code (PVA)	
Contactpersoon		
Nummer verzoek	A2	
Datum uitvoering	20-11-00	
Referentienummer	A2	

Hoeveelheid per PV		
15-min	E-prog	Controle
08:30-08:45	-16.000	0
08:45-09:00	-16.000	0
09:00-09:15	-16.000	0
09:15-09:30	-16.000	0
09:30-09:45	-16.000	0
09:45-10:00	-16.000	0
10:00-10:15	-16.000	0
10:15-10:30	-16.000	0
10:30-10:45	-16.000	0
10:45-11:00	-16.000	0
11:00-11:15	-16.000	0
11:15-11:30	-16.000	0
11:30-11:45	-16.000	0
11:45-12:00	-16.000	0
12:00-12:15	-16.000	0
12:15-12:30	-16.000	0
12:30-12:45	-16.000	0
12:45-13:00	-16.000	0
13:00-13:15	-16.000	0
13:15-13:30	-16.000	0
13:30-13:45	-16.000	0
13:45-14:00	-16.000	0
14:00-14:15	-16.000	0
14:15-14:30	-16.000	0
14:30-14:45	-16.000	0
14:45-15:00	-16.000	0

Hoeveelheid per PV		Im	Export
08:30-08:45	5.000	5.000	6.000
08:45-09:00	5.000	5.000	6.000
09:00-09:15	5.000	5.000	6.000
09:15-09:30	5.000	5.000	6.000
09:30-09:45	5.000	5.000	6.000
09:45-10:00	5.000	5.000	6.000
10:00-10:15	0	5.000	11.000
10:15-10:30	0	5.000	11.000
10:30-10:45	0	5.000	11.000
10:45-11:00	0	5.000	11.000
11:00-11:15	0	5.000	11.000
11:15-11:30	0	5.000	11.000
11:30-11:45	0	5.000	11.000
11:45-12:00	0	5.000	11.000
12:00-12:15	0	5.000	11.000
12:15-12:30	0	5.000	11.000
12:30-12:45	0	5.000	11.000
12:45-13:00	0	5.000	11.000
13:00-13:15	0	5.000	11.000
13:15-13:30	0	5.000	11.000
13:30-13:45	0	5.000	11.000
13:45-14:00	0	5.000	11.000
14:00-14:15	5.000	5.000	6.000
14:15-14:30	5.000	5.000	6.000
14:30-14:45	5.000	5.000	6.000
14:45-15:00	5.000	5.000	6.000

N.B. Application number 314 must be filled in

Figure 7.3: Amended E-programme

This will cause the import/export breakdown to end up looking as follows:

Bericht	Import- en exportspecificatie	
IET-contractnummer	<nummer>	
EAN-13 code leverancier/ontvanger	<code>	
Code Land herkomst/bestemming	DE	Denemarken
EAN-128 code (Grensstation)	87168679999888842	België Zandvliet

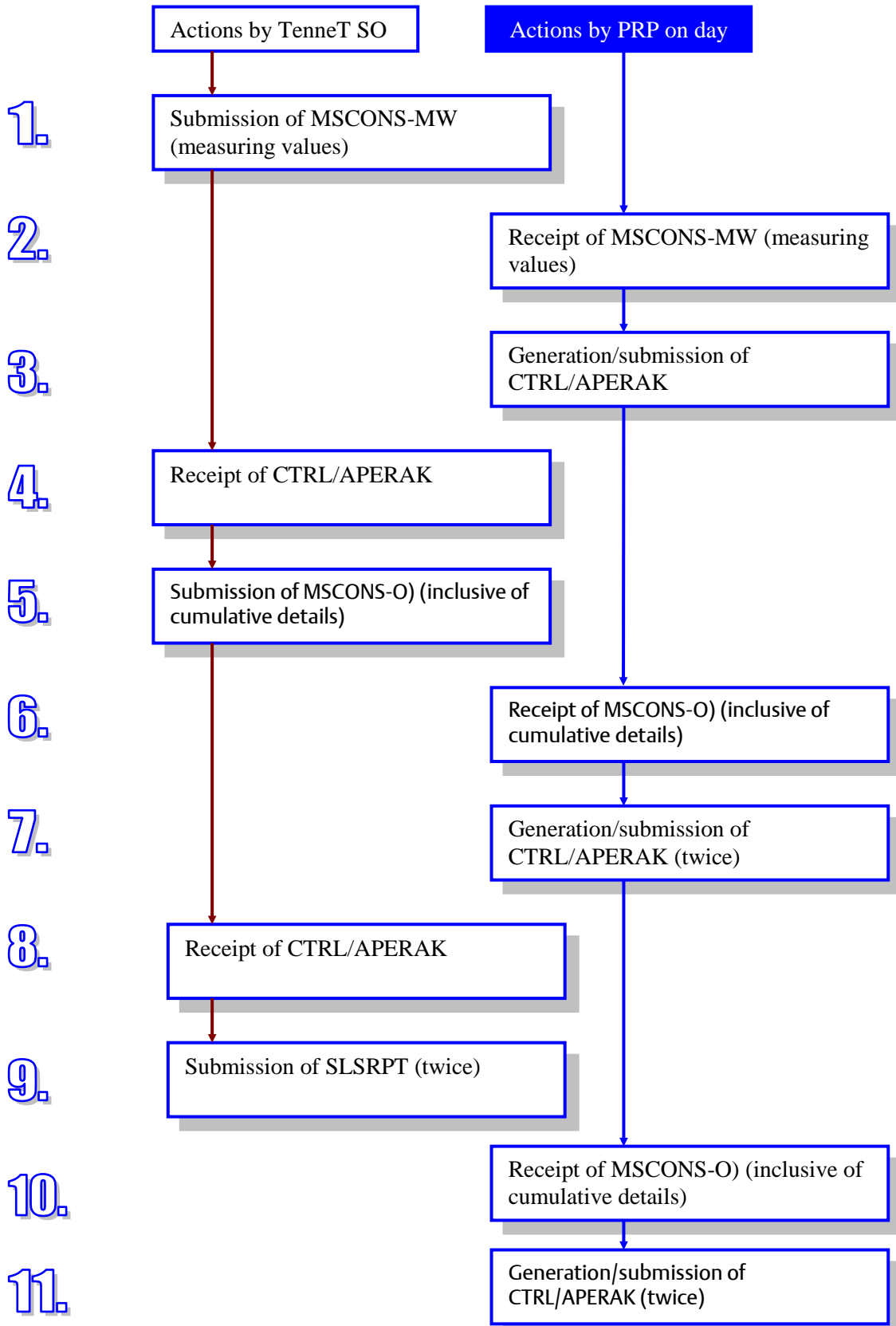
15-min	Saldo	Controle	Hoeveelheid gespecificeerd per contract
08:30-08:45	5.000	0	5000
08:45-09:00	5.000	0	5000
09:00-09:15	5.000	0	5000
09:15-09:30	5.000	0	5000
09:30-09:45	5.000	0	5000
09:45-10:00	5.000	0	5000
10:00-10:15	0	0	0
10:15-10:30	0	0	0
10:30-10:45	0	0	0
10:45-11:00	0	0	0
11:00-11:15	0	0	0
11:15-11:30	0	0	0
11:30-11:45	0	0	0
11:45-12:00	0	0	0
12:00-12:15	0	0	0
12:15-12:30	0	0	0
12:30-12:45	0	0	0
12:45-13:00	0	0	0
13:00-13:15	0	0	0
13:15-13:30	0	0	0
13:30-13:45	0	0	0
13:45-14:00	0	0	0
14:00-14:15	5.000	0	5000
14:15-14:30	5.000	0	5000
14:30-14:45	5.000	0	5000
14:45-15:00	5.000	0	5000
15:00-15:15	5.000	0	5000
15:15-15:30	5.000	0	5000
15:30-15:45	5.000	0	5000
15:45-16:00	5.000	0	5000
16:00-16:15	5.000	0	5000
16:15-16:30	5.000	0	5000
16:30-16:45	5.000	0	5000
16:45-17:00	5.000	0	5000

Figure 7.4: Revised import/export breakdown

TenneT SO received PRP A's programme at 13:30 with PRP A duly receiving confirmation of the internal consistency of its E-programme, which has been given the track number 70527.

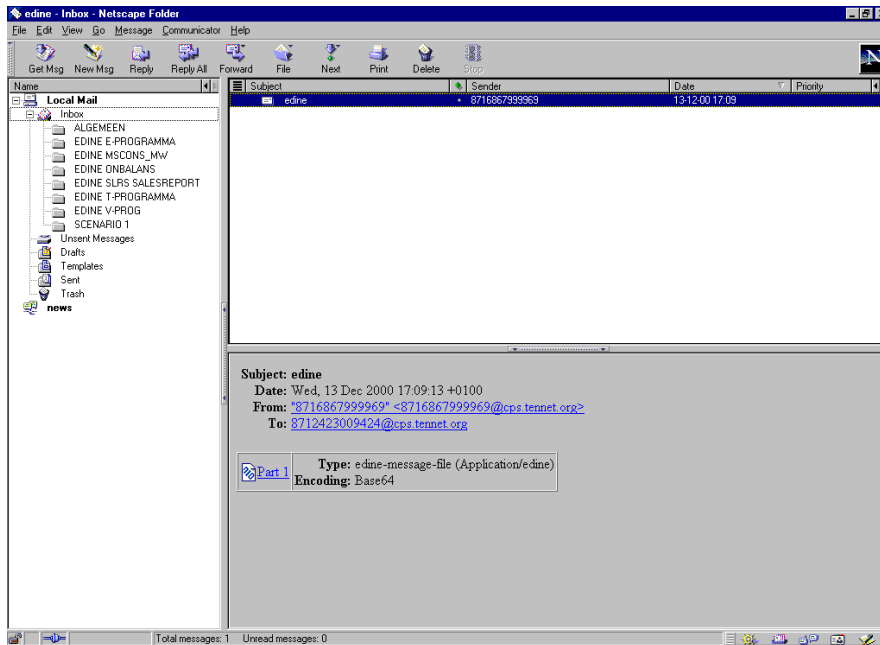
As soon as TenneT SO has established that the E-programmes of all PRPs are mutually consistent for all hours of the day of implementation and following reconciliation with the grid administrators, TenneT SO will issue its overall approval.

## Chapter 8: Process schedule day n+1

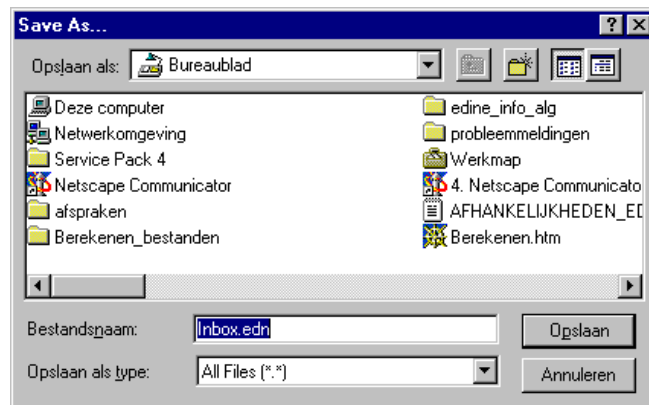
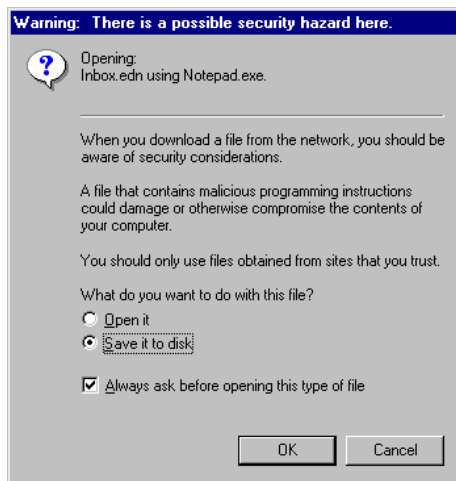


## Chapter 9: Processing of APERAK/EDINE and/pr REQDOC messages having been received

This chapter contains a step-by-step explanation of what to do with an incoming message so as to be able to read it in and reply to it by means of an APERAK.



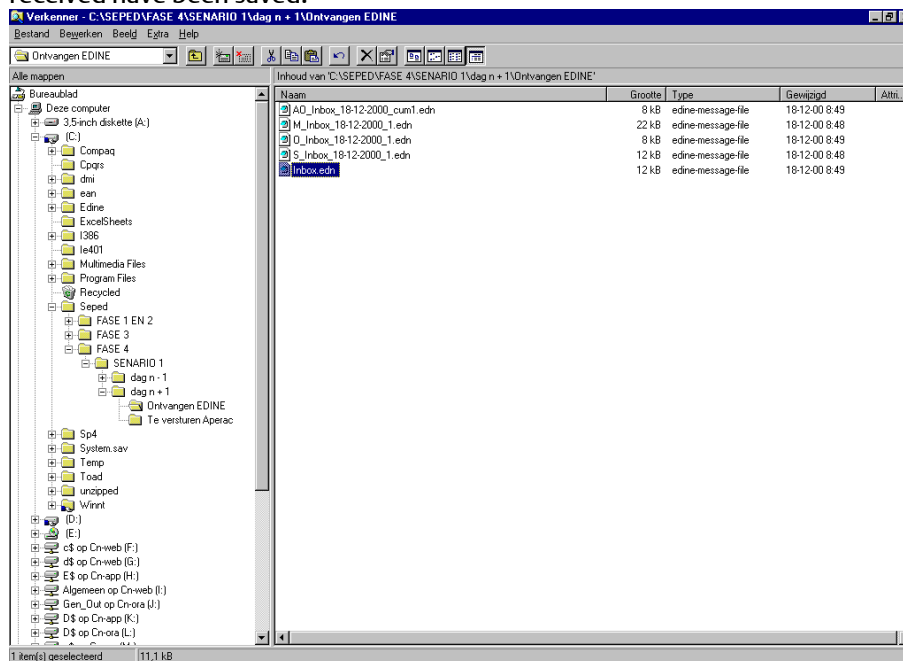
Click the file line in order to save the attached EDINE file.



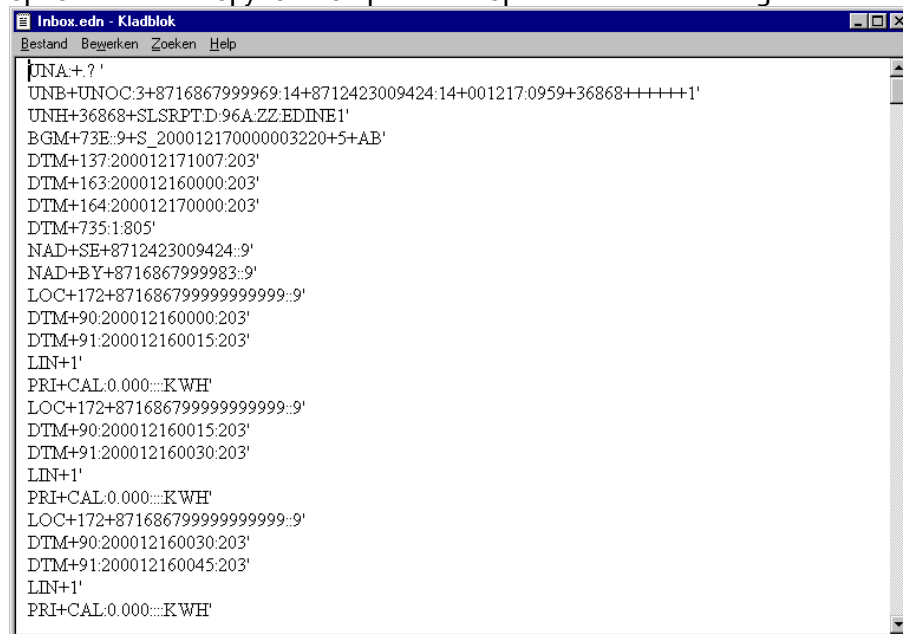
Now click "Save to disk" and browse to the directory in which you wish to save the file.

Conversion of the EDINE file to Excel requires renaming it, which in turn calls for a check of the type of message. This is done as follows: (next page)

1. Open Windows Explorer and open the directory in which the various EDINE messages having been received have been saved.



2. Move to the file in question, then click the right-hand mouse button. Now select from the menu the option entitled "Copy to – notepad". This opens the EDINE message.



(Reference is made to chapter 4, item 8 as regards how the recognise the type of EDINE message.)

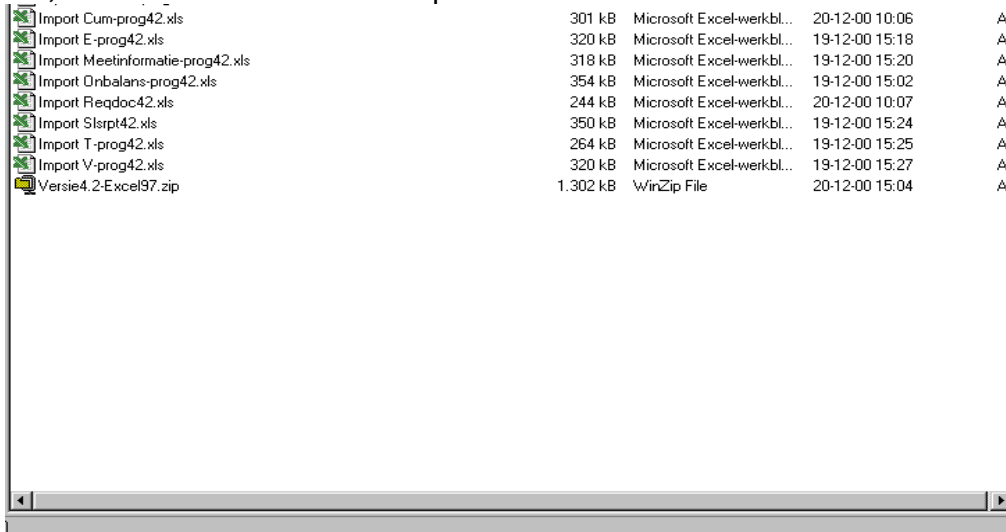
3. Once you have recognised (identified) the file, you may return to Windows Explorer to rename the file. This is done by moving to the file in question, pressing the right-hand mouse button and selecting Rename as your option. Depending on the type of message, its name is required to start with:

- E\_ - DELFOR-E (E-programme)
- T\_ - DELFOR-T (T-Forecast)
- V\_ - DELFOR-V (V Programme)
- M\_ - MSCONS-MW (measuring values)
- AO\_ - MSCONS-MW (cumulative values)
- O\_ - MSCONS-Imbalance
- S\_ - Sales reports.

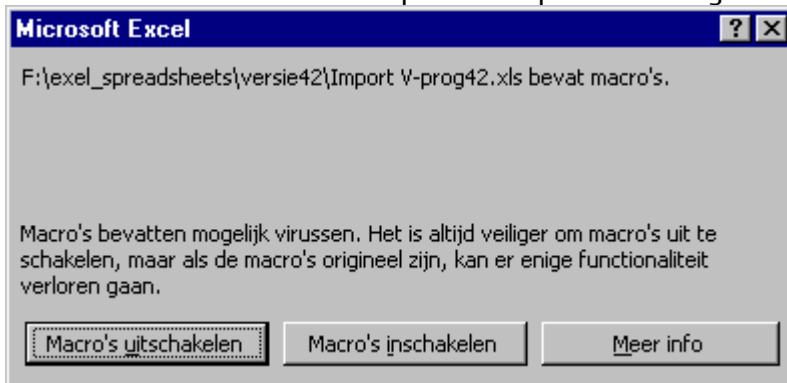
You could for example change the EDINE message's name as follows:

Inbox.edn – S\_Inbox\_13-12-2000\_1.edn

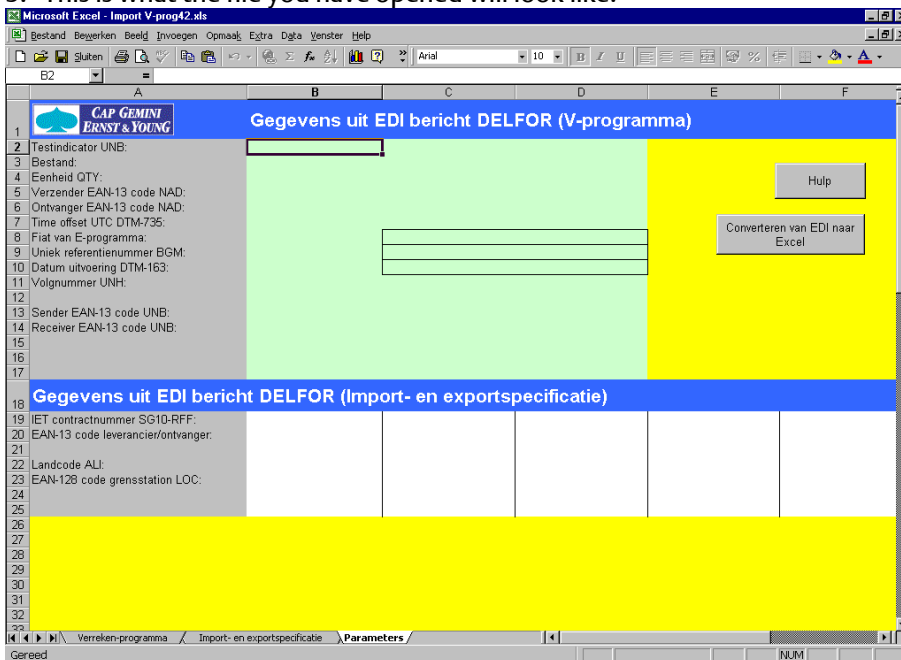
The file is now ready for conversion from EDI to Excel. Several macros have been produced to help you do this, all of whose names start with Import?42.xls.



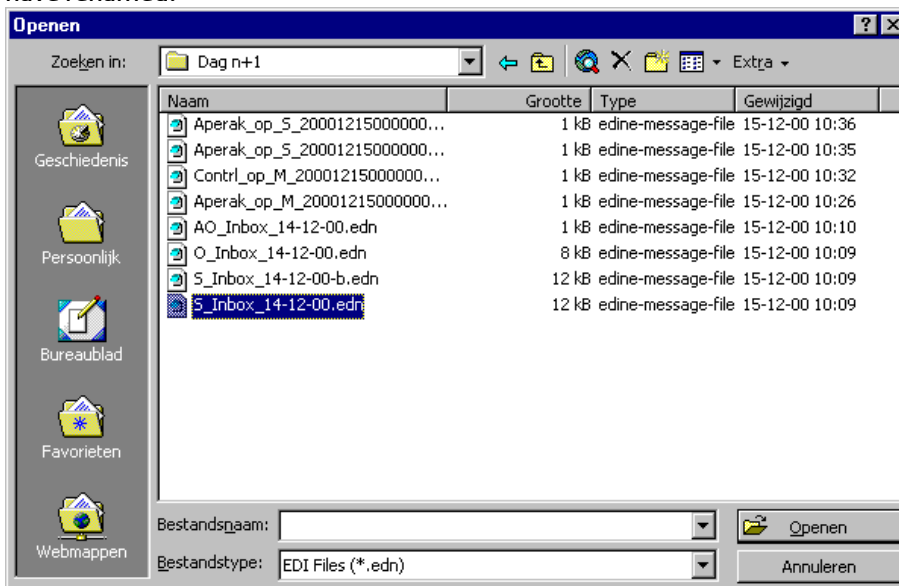
4. Open the file that corresponds to the EDINE message you have renamed and select “Activate macros”.  
N.B.: The cumulative values are required to be processed using the Excel converter entitled AddOnb42.xls



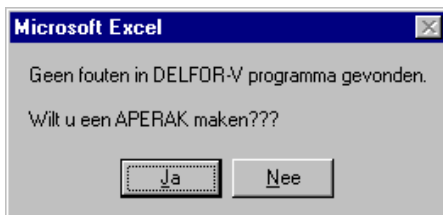
5. This is what the file you have opened will look like:



6. In order to convert the file, select the button marked Convert from EDI to Excel, then open the file you have renamed.



7. As soon as the macro has converted the EDINE file to Excel, it will automatically ask you whether you wish to generate an APERAK for the file you have opened. Select Yes.



8. The macro has now generated confirmation of receipt in the form of an APERAK. The pop-up screen tells you in which directory the file has been saved. You may now send this message using the mail client.

