SUPPORT GUIDE FOR

THE NOKIA PHONES AND AT COMMANDS

NOKIA

Contents

1. INTRODUCTION

How to read/write SMS, start a modem, HSCSD or GPRS connection with Nokia phones by using AT-commands.

2. BASIC AT-COMMANDS

Before making a dial-up connection it is recommended to reset the modem in phone and also set the flow control. If you have PIN-code request on it can be typed in also with AT-command (I e Nokia Card Phone may need this when used in non Windows environment).

Below some useful AT-commands:

Check that the connection between the phone and device works	AT

- should give OK for response

Reset the modem and set the factory defaults	ATZ&F
No flow control	AT&K[0]
Hardware flow control (CTS/RTS)	AT&K3
Software flow control (XON/XOFF)	AT&K4
Type in PIN-code in terminal	AT+CPIN="pppp"

- where pppp is your pin code. Yes, the double quotes are needed

Check signal strength	AT+CSQ

- value close to 0 means no field. Value 31.99 is maximum.

Start a data call	ATDT nnnnnnn

- where nnnnnnn is the phone number.

Start a voice call	ATDT nnnnnnn;

- where nnnnnnn is the phone number. Note the semicolon (;) is needed!

Hang up the call	ATH
Answer incoming call	ATA

During a call you can return to AT command interpreter with command +++ (three times plus). Then you can give AT commands during a call. This is useful when calling to I e banking service which requires you to enter information with keypad (especially when using Nokia Card Phone).

3. SENDING AND RECEIVING AN SMS

SENDING AN SMS

1. Define the message format by typing AT+CMGF=1 (Text mode).

2. Set the Message centre number by typing AT+CSCA="XXX".

3. XXX is your network provider's message centre number (See Picture 1.).

4. Enter the recipient's phone number using the AT+CMGS="YYY" command (See Picture 1.).

4. Write the message and press Ctrl-Z.
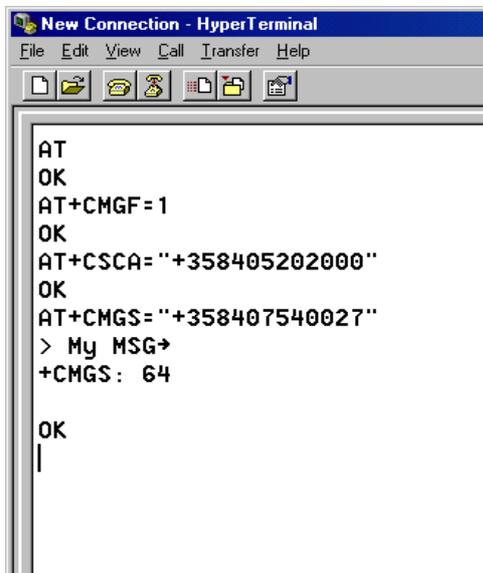
Picture 1. Sending an SMS

RECEIVING AN SMS

1. Define the message format by typing AT+CMGF=1 (See Picture 1.).

2. Type AT+CNMI=1,2,0,0,0 in order to see all the received messages (See Picture 2.).
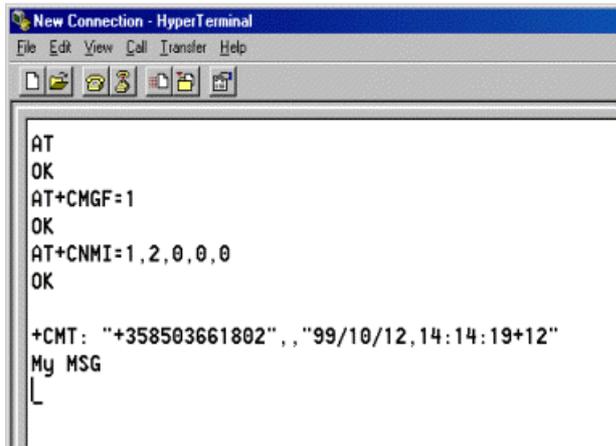

```
AT
OK
AT+CMGF=1
OK
AT+CNMI=1,2,0,0,0
OK

+CMT: "+358503661802",,"99/10/12,14:14:19+12"
My MSG
L
```

Picture 2. Receiving an SMS.

4. HIGHSPEED AT-COMMANDS

On the table below it is described AT-commands for Modem, ISDN v.110 and ISDN v.120 connections with different channel coding (speed of each slot) and timeslots (number of receiving/transmitting slots). For example 3+1, 28800, 9600 means that the maximum speed that you can receive data is 3x9600=28800 and maximum speed for sending data is 1x9600=9600, the maximum connection speed that is shown in the task tray is the same as the maximum sending speed (28800).

Modem

at+cbst=7,0,1;+chsn=1,1,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
1+1	9600	9600	V.32

at+cbst=12,0,1;+chsn=1,1,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
1+1	9600	9600	V.34

at+cbst=14,0,1;+chsn=2,1,0,8

Timeslots	Max Connection Speed	Ch. Coding	Protocol
1+1	14400	14400	V.34

at+cbst=15,0,1;+chsn=3,2,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
2+2	19200	9600	V.34

at+cbst=16,0,1;+chsn=4,3,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
3+1	28800	9600	V.34

at+cbst=16,0,1;+chsn=4,2,0,8

Timeslots	Max Connection Speed	Ch. Coding	Protocol
2+2	28800	14400	V.34

V.110

at+cbst=71,0,1;+chsn=1,1,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
1+1	9600	9600	V.110

at+cbst=75,0,1;+chsn=2,1,0,8

Timeslots	Max Connection Speed	Ch. Coding	Protocol
1+1	14400	14400	V.110

at+cbst=79,0,1;+chsn=3,2,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
2+2	19200	9600	V.110

at+cbst=80,0,1;+chsn=4,3,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
3+1	28800	9600	V.110

at+cbst=80,0,1;+chsn=4,2,0,8

Timeslots	Max Connection Speed	Ch. Coding	Protocol
2+2	28800	14400	V.110

at+cbst=81,0,1;+chsn=6,3,0,8

Timeslots	Max Connection Speed	Ch. Coding	Protocol
3+1	38400	14.4	V.110

V.120

at+cbst=39,0,1;+chsn=1,1,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
1+1	9600	9600	V.120

at+cbst=43,0,1;+chsn=2,1,0,8

Timeslots	Max Connection Speed	Ch. Coding	Protocol
1+1	14400	14400	V.120

at+cbst=47,0,1;+chsn=3,2,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
2+2	19200	9600	V.120

at+cbst=48,0,1;+chsn=4,3,0,4

Timeslots	Max Connection Speed	Ch. Coding	Protocol
3+1	28800	9600	V.120

at+cbst=48,0,1;+chsn=4,2,0,8

Timeslots	Max Connection Speed	Ch. Coding	Protocol
2+2	28800	14400	V.120

at+cbst=49,0,1;+chsn=6,3,0,8

Timeslots	Max Connection Speed	Ch. Coding	Protocol
3+1	38400	14.4	V.120

at+cbst=50,0,1;+chsn=6,3,0,8

Timeslots	Max Connection Speed	Ch. Coding	Protocol
3+1	48000	14.4	V.120

5. GPRS AT-COMMANDS

For GPRS there are only a few AT-commands because user can't define the speed or timeslots.

Set Access Point Name   AT+CGDCONT=,,"xxx";

> *- Where xxx is your APN, also note that in some devices that semicolon (;) is needed and in some not*

Start GPRS connection   ATDT *99#

> *- Please verify the phone number from your GSM operator!*

Other settings like DNS, IP address, username and password should be set in the device to appropriate places. Usually only DNS needs to be set but others are either device or operator depending (I e Palm Pilots need username to be defined (can be whatever), some Psion models needs to have IP address set to 0.0.0.0 etc.). For further information on the GPRS related issues, please contact your GPRS service provider.