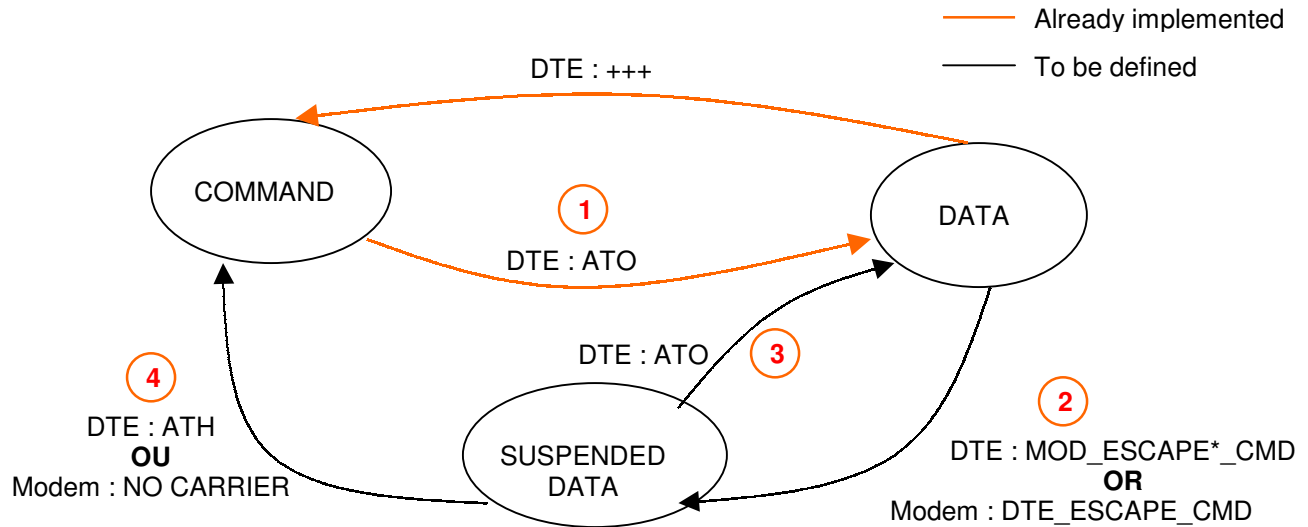
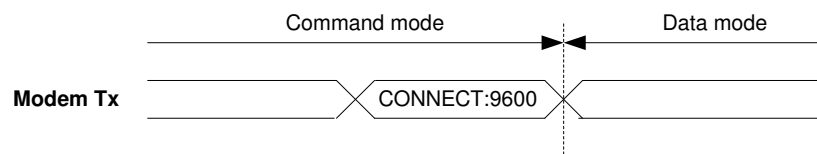


1.2.3. State diagram



1.2.4. Transition (1): Command -> Data

The data connection is established when the PDA receives the "CONNECT: <speed>" message from the SB.



Remark:

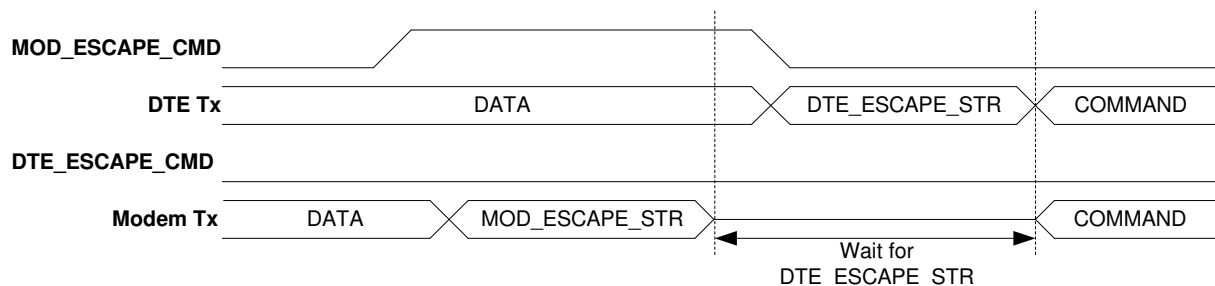
The Connect message is different between voice call, a classical data connection, a GPRS data connection and a fax call, so it is necessary to treat the entire message to separate the data and voice calls.

1.2.5. Transition (2): Data -> Suspended Data

The modem or the DTE can request this transition, so it is necessary to distinguish two cases.

1st case: the DTE orders the modem to go in the suspended data mode

1. The DTE indicates the order by moving **MOD_ESCAPE*_CMD** and then begins to search in the data flow the **MOD_ESCAPE_STR** from the modem.
2. When the modem is ready, it sends the **MOD_ESCAPE_STR** string and it wait for **DTE_ESCAPE_STR**.
3. When receiving this string, the DTE then move back **MOD_ESCAPE*_CMD** and sends the **DTE_ESCAPE_STR**, which indicates to the modem every byte after that must be considered as part as an AT Command

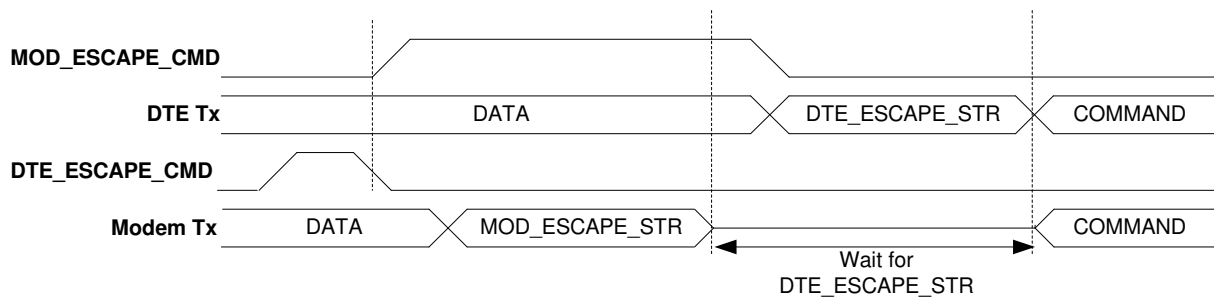


Remarks:

- **DTE_ESCAPE_CMD = MOD_ESCAPE_CMD = {0x18,0x7E,0xDB,0xFF}**, this string could be change by AT command in the future.
- These two strings are the effective separation between the data flow and the command flow

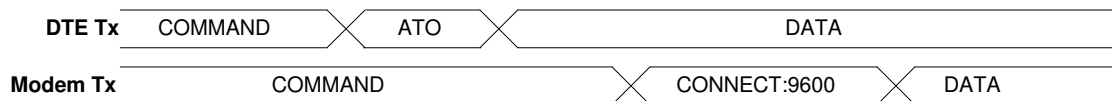
2nd case: the modem requests the DTE to go in the suspended data mode

1. The modem indicates the request by moving **DTE_ESCAPE_CMD**.
2. The DTE indicates the order by moving **MOD_ESCAPE*_CMD** and then begins to search in the data flow the **MOD_ESCAPE_STR** from the modem.
3. When the modem is ready, it sends the **MOD_ESCAPE_STR** string and it wait for **DTE_ESCAPE_STR**.
4. When receiving this string, the DTE then move back **MOD_ESCAPE*_CMD** and sends the **DTE_ESCAPE_STR**, which indicates to the modem every byte after that must be considered as part as an AT Command



1.2.6. Transition (3): Suspended Data -> Data Mode

This transition is always ordered by the PDA via the classical ATO command.
The SB acknowledges with the CONNECT message

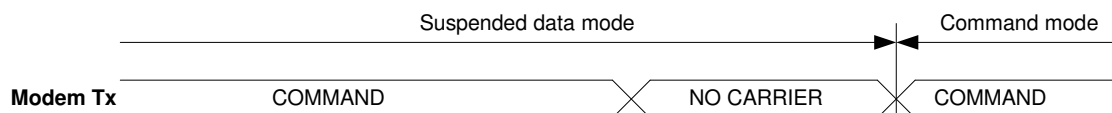


1.2.7. Transition (4): Suspended Data -> Command Mode

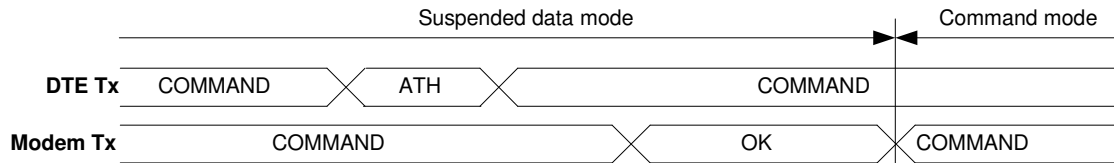
The theoretical transition is Data to Command and happens to end a data connection; the Suspended Data Mode is just a temporary transition between the two.
The real procedure is Data to Suspended Data (already detailed in transition 2) and then Suspended Data to Command Mode.

There are two different cases:

- Or the distant can hang up and then the modem is going to send a "NO CARRIER" message

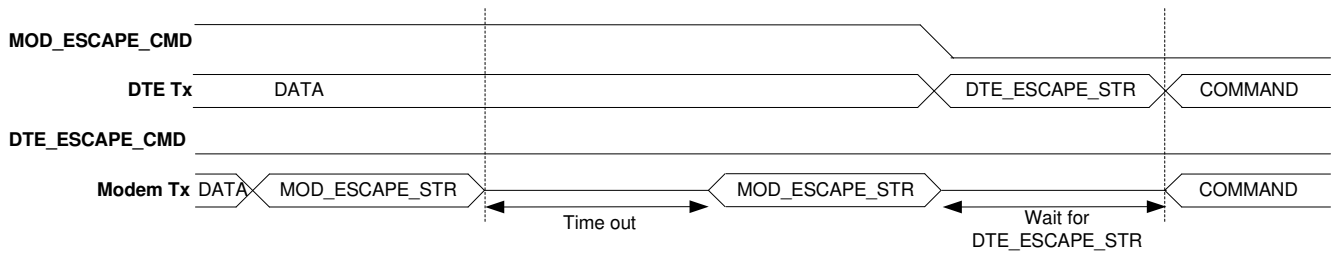


- Or the DTE wants to hang up and then an ATH is sent and the transition has to be made on the answer to this command (OK)



1.2.8. Timeout case

If modem didn't receive the DTE_ESCAPE_STR after a timeout (2s), it send again his MOD_ESCAPE_STR and wait for DTE_ESCAPE_STR as long as the MOD_ESCAPE*_CMD signal is active. After 3 retry, module closes the MUX mechanism.



Remarks:

If MOD_ESCAPE_CMD returns in inactive mode and the escape string hasn't been received by the modem, we have to resume the data connection.

END OF DOCUMENT
