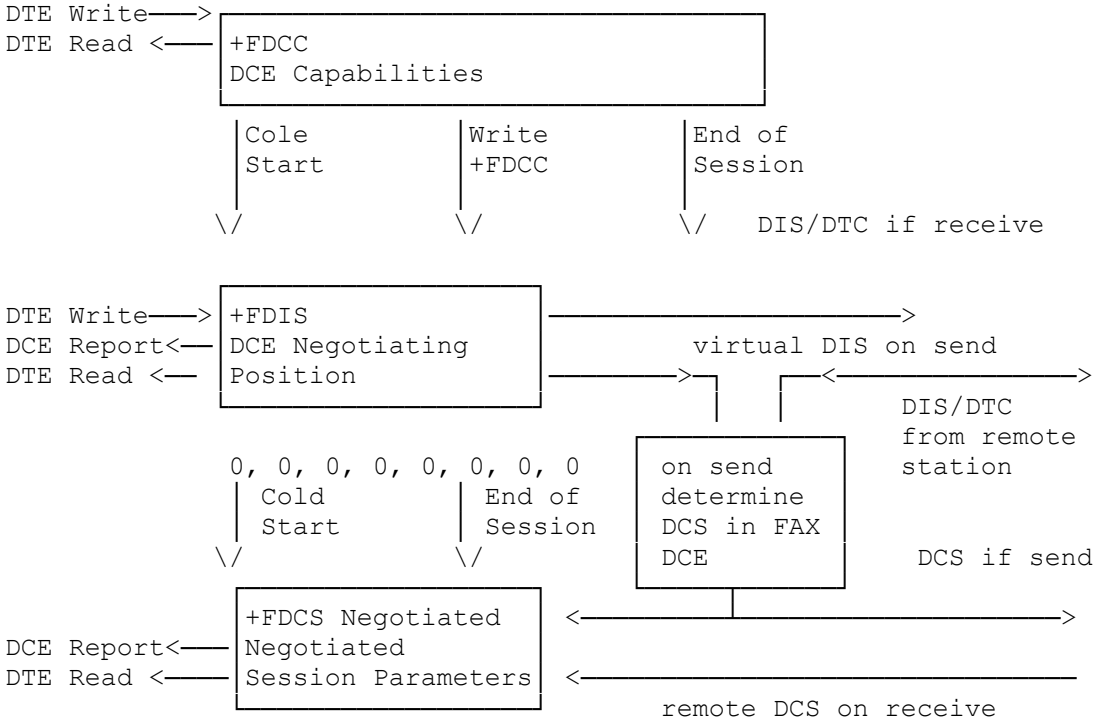
Continued from Faxback Document # 5885

FIGURE 5-1 T.30 SESSION PARAMETER RELATIONSHIPS



5.5.4 +FLID=, LOCAL ID STRING

```
 Write Syntax:  +FLID=?, "local ID string>"
  Valid Value:  20 characters ASCII string.
Default Value:  Empty
```

If FLID is not a null string, it generates a TSI or CSI frame. Table 3/T.30 includes digits 0-9, "+" and space.

If the DCE supports use of Table 3/T.30 only, the response to a +FLID=? command is "(20) (32,43,48,57)" if the DCE supports printable ASCII<, the response is "(20) (32-127)<CRLF>. "The first "(20)" represents string length; the second (character value) field reports supported string values.

NOTES:

1. The string is saved in RAM.

2. Non-numeric characters are not filtered out.

5.5.5 +FCR, CAPABILITY TO RECEIVE

```
 Write Syntax:  +FCR=<value>
  Valid value:  1,0
Default Value:  0
```

+FCR=0 indicates the DCE will not receive message data. This can be used when the DTE has insufficient storage. The DCE can send and can be polled for a file.

+FCR is sampled in CCITT T.30 Phase A and Phase D.

5.5.6 +FPTS=, PAGE TRANSFER STATUS

```
 Write Syntax:  +FPTS=<ppr>
  Valid Value:  1,2,3,4,5
Default Value:  0
```

The +FPTS parameter contains a value representing the post page response, including copy quality and related end-of page status. These values correspond to post page response messages defined in T.30. The receiving DCE sets this parameter after it receives a page of Phase C data. The transmitting DCE sets this parameter with the status reported by the receiving station. The DTE may inspect or modify this parameter.

The set of <ppr> value is defined in Table 5-4. These values are also reported in the +FPTS response to the +FDR command.

5.5.7 +FCQ, COPY QUALITY CHECKING

```
 Write Syntax:  +FCQ=<value>
  Valid Value:  0
Default Value:  0
```

This parameter controls Copy Quality checking by a receiving facsimile DCE.

The DCE returns +FCQ=0 which indicates the DCE does no quality checking. The DCE will generate Copy Quality OK (MFC) responses to complete pages, and set +FPTS=1.

5.5.8 +FPHCTO, DTE PHASE C RESPONSE TIME-OUT

```
 Write Syntax:  +FPHCTO=<value>
  Valid Value:  0-255,100 millisecond units
Default Value:  30
```

The +FPHTO command determines how long the DCE will wait for a command after reaching the end of data when transmitting in Phase C. When this time-out is reached, the DCE assumes there are no more pages and no documents to send. It then sends the T.30 response to the remote device.

5.5.9 +FAXERR, T.30 SESSION ERROR REPORT

```
Read Syntax:  +FAXERR=<table value>, read only
Valid Value:  255, see Table 5-5 for meaning
```

This read-only parameter indicates the cause of the hangup. Table 5-5 shows the valid values for this parameter as well as the meaning of the each value.

+FAXERR is set by the DCe at the conclusion of a fax session. The DCE

resets this to 0 at the beginning of Phase A off-hook time.

5.5.10 +FBOR, DATA BIT ORDER

```
 Write Syntax:  +FBOR=<value>
  Valid Value:  0,1
Default Value:  0
```

The parameter controls the mapping between PSTN facsimile data and the DTE-DCE link. There are two choices.

Direct: The first bit transferred to each byte on the DTE-DCE links is the first bit transferred on the PSTN data carrier.

Reserved: The last bit transferred of each byte on the DTE-DCE links is the first bit transferred on the PSTN data carrier.

There are two data types to control:

This command controls Phase C data (T.4 encoded data) transferred during execution of +FDT or +FDR commands. The following two codes are supported:

+FBOR= 0 Selects direct bit order for both Phase C data.

+FBOR= 1 Selects direct bit order for both Phase C data.

NOTE: This parameter does not affect the bit order of control characters generated by the DCE.

5.5.11 +FAA, ANSWER PARAMETER

```
 Write Syntax:  +FAA=<value>
  Valid Value:  0,1
Default Value:  0
```

+FAA= 0 Contains the DCE to answer as set by +FCLASS.

+FAA= 1 Indicates the DCE can answer and automatically determine whether to answer as a Class 2 facsimile DCE or as a data FAX Modem, if the DCE automatically switches, it modifies FCLASS appropriately.

Class 2 adaptive answer is implemented as follows: First, a data mode hand-shake is attempted. If the DCE has been configured for automode detection (using the ATN1 command), the DCE may try several protocols before terminating attempts to make a data mode connection. This can take as long as 6-8 seconds.

If the data mode connection attempt fails, a facsimile Class 2 connection is assumed. When a connection is made as a result of the adaptive answer, the DCE issues the DATA or FAX result code before the CONNECT or +FCON message to inform the DTE of the connection type. After making a Class 2 connection, the DCE stays on-line rather than going into the command mode as with a Class 1 connection.

5.5.12 +FBUF?, BUFFER SIZE

Read Syntax: +FBUF?
DCE response syntax: <bs>, <xoft>, <xont>, <bc>
Where:

<bs> : Total buffer size
<xoft> : XOFF threshold
<xont> : XON threshold
<bc> :   Current buffer byte count

The +FBUF parameter allows the DTE to determine the characteristics of the DCE's data buffer. Data buffers are used for flow control. Use of the reported values allow the DTE to transfer data without provoking XOFF.

5.6 EXAMPLE SESSIONS

Tables 5-6 and 5-7 show the typical command and response for sending and receiving two pages, respectively.

TABLE 5-6 SEND TWO PAGES, 1-D DATA, NO ERRORS

DTE COMMAND	DCE RESPONSE	LOCAL DTE ACTION	REMOTE STATION ACTION
AT+CLASS=2	OK	SET CLASS 2	
AT+FLID="local ID"	OK	SET LOCAL ID	
AT<dial string>	+FCON [+FDIS:"<csi>"] +FDIS:<discodes> OK	off hook, dial send CNG detect flags [get CSI] get DIS	answer send [CED], V.21 flags, [CSI], DIS
AT+FDT <1st page data> <DLE><ETX>	+FDCS:<DCS codes> CONNECT <XON> OK	[send TSI] send DCS send TCF get CFR send carrier send page data	[get TSI] get DCS get TCF send CFR receive carrier receive page data
AT+FET=0	+FPTS:1 OK	send RTC get MPS get MCF	get RTC get MPS send MCF
AT+FDT <2nd page data> <DLE><ETX>	CONNECT <XON> OK	send carrier send page data	receive carrier receive page data
AT+FET=2	+FPTS:1	send RTC send EOP get MCF	get RTC get OEP send MCF

	+FHNG:0 OK	send DCN hangup	get DCN hangup

TABLE 5-7 RECEIVE TWO PAGES, 1-D, NO ERRORS

DTE COMMAND	DCE RESPONSE	LOCAL DCT ACTION	REMOTE STATION ACTION
AT+FCR=1	OK	ENABLE RECEPTION	
AT+FLID= "<local ID>"	OK	SET LOCAL ID	
	RING	DETECT RING	DIALS [send CNG]

TABLE 5-7. RECEIVE TWO PAGES, 1-D, NO ERRORS

DTE Command	DCE Response	Local DTE Action	Remote Station Action
AT+FCR=1	OK	Enable reception	
AT+FLID= <local ID>"	OK	Set local ID	
	RING	Detect Ring	Dials [send CNG]
ATA	 +FCON [+FTSI:"<tsi>"] +FDCS:<discodes> OK	off hook, send CED, send CSI, send DIS, detec flags, [get TSI] get DCS begin TCF receive	 get CED, get CSI, get DIS send V.21 flags, [send TSI], send DCS start TCF
AT+FDR <DC2>	 +FCFR [+FDCS:"<dcs codes>] CONNECT <page data stream> <DLE><ETX> +FPTS:1,<lc> +FET:2 OK	accept TCF send CFR get page carrier get page data deleted RTC get MPS	finish TCF get CFR send page carrier send page data send RTC, drop carrier, send MPS
AT+FDR <DC2>	 CONNECT <page data stream> <DLE><ETX> +FPTS:1,<lc>	send MCF get page carrier get page data detect RTC	get MCF send page carrier send page data send RTC, drop carrier,

	+FET:2 OK	get EOP	send EOP
AT+FDR	 +FHNG:0 OK	send MCF get DCN	get MCF, send DCN

(SMC/all-07/05/94)