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P03

③ P02

6.1 LINE SIGNALLING TABLE: K (+ DP/MFC)

LINE SIGNALLING: K (+ DP/MFC)

PART 1

SIGNAL	Digital Code		Note	Application Options				
	Bw	Fw		H	M	DP	MFC	
	←	→		DP	MFC	DP	MFC	
Blocking	←	10CD	11CD	2) 13)	X	X	X	X
Rest	←	10CD	10CD		X	X	X	X
Seizure	→	00CD	10CD		X	X	X	X
Seizure acknowledgment	←	00CD	11CD	3)	X	X	X	X
MFC	↔	00CD	11CD	4)	-	X	-	X
Decade selection	→	0+CD	11CD	5) 14)	X	(X)	X	(X)
Answering	←	00CD	01CD	6) 15) 16) 17) 21)	X	X	X	X
Clearing	←	00CD	11CD	7)	X	X	-	-
Repeated answering	←	00CD	01CD		X	X	-	-
Metering pulse	←	00CD	0-CD	8) 15) 16) 17)	-	-	X	X
Pulse spacing	←	00CD	01CD	15) 17)	-	-	X	X
Backward release	←	00CD	00CD	9)	X	X	X	X
Release	→	10CD	xxCD	10)	X	X	X	X
Tracing	←	00CD	10CD	11) 13) 18)	X	X	-	-
Breaking-in	→	01CD	11CD	12) 18)	X	X	-	-

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LINE SIGNALLING: K (+ DP/MFC)

PART 2

SIGNAL	Fw Bw	Digital Code		Note	Application Options					
		Fw ABCD	Bw ABCD		U1/DP loc tell		U1/MFC loc tell		U2/MFC M H	
Blocking	←	10CD	11CD	2) 13)	X	X	X	X	X	X
Rest	←	10CD	10CD		X	X	X	X	X	X
Seizure	→	00CD	10CD		X	X	X	X	X	X
Seizure acknowledgment	←	00CD	11CD	3)	X	X	X	X	X	X
MFC	↔	00CD	11CD	4)	-	-	X	X	X	X
Decade selection	→	0+CD	11CD	5) 14)	X	X	(X)	(X)	(X)	(X)
Answering	←	00CD	01CD	6) 15) 16) 17) 21)	X	-	X	-	X	X
Clearing	←	00CD	11CD	7)	X	-	X	-	-	X
Repeated answering	←	00CD	01CD		X	-	X	-	-	X
Metering pulse	←	00CD	0-CD	8) 18) 16) 17)	-	X	-	X	X	-
Pulse spacing	←	00CD	01CD	15) 17)	-	X	-	X	X	-
Backward release	←	00CD	00CD	9)	-	X	-	X	X	X
Release	→	10CD	xxCD	10)	X	X	X	X	X	X
Tracing	←	00CD	10CD	11) 13) 18)	X	-	X	-	-	X
Breaking-in	→	01CD	11CD	12) 18)	-	-	-	-	-	X

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7.1 LINE SIGNALLING TABLE: T (+ MFC)

LINE SIGNALLING: T (+ MFC)

SIGNAL	Fw	Digital Code		Note	Application Options			
		Bw	Fw ABCD		Bw ABCD	H	M	M
Blocking	←	1BCD	OBCD		X	X	X	X
Rest	←	1BCD	1BCD		X	X	X	X
Seizure	→	OBCD	1BCD	2) 3)	X	X	X	X
MFC	↔	OBCD	1BCD	4)	X	X	X	X
Breaking-in input	→	OBCD	1BCD	5) 6)	X	-	-	X
Breaking-in output	→	OBCD	1BCD	5) 7)	X	-	-	X
Answering	←	OBCD	OBCD	8) 20)	X	X	X	X
Clearing	←	OBCD	1BCD	9)	X	-	-	X
Repeated answering	←	OBCD	OBCD	8)	X	-	-	X
Metering pulse	←	OBCD	+BCD	10)	-	X	X	-
Backward release	←	OBCD	1BCD	11)	-	X	X	-
		OBCD	-BCD	12)	-	X	X	-
Release	→	1BCD	xBCD	13) 16)	X	X	X	X
Release acknowledgment	←	1BCD	OBCD	14)	X	X	X	X
		1BCD	-BCD	15)	X	X	X	X

Abbreviations:

- Fw forward direction
- Bw backward direction
- H supervisory option
- M metering option
- U universal option
- A,B,C,D bits in 16th channel
- MFC MFC signalling
- + 0/1/0 change, time parameters see Note 10)
- 1/0/1 change, time parameters see Note 12)

## Abbreviations:

+	0/1/0 change, time parameters see Note 5)
-	1/0/1 change, time parameters see Note 5)
x	arbitrary (state 0 or state 1)
H	supervisory option
M	metering option
loc	local traffic
toll	toll service
DP	decade selection
Fw	forward direction
Bw	backward direction
A,B,C,D	bits in 15th channel
MFC	MFC signalling
U1	universal option for lower network levels
U2	universal option for higher network level

Notes:

- 1) Signal change evaluation, time, if not otherwise stated 20 to 30 ms
- 2) Minimum transmission time 180 ms
- 3) Maximum time to elapse between the transmission of seizure signal and the receipt of seizure acknowledgment signal 200 ms
- 4) MFC signalling: refer to the chapter titled "MFC Signalling" of Supplement 1.
- 5) The time parameters of decade selection: refer to the chapter titled "Decade Selection", of Supplement 1
- 6) Minimum time of transmission 600 ms
- 7) Minimum time of transmission 600 ms
- 8) Transmission Evaluation  $95 \pm 5$  ms 30 to 400 ms
- 9) Minimum time of transmission Evaluation 600 ms 400 ms
- 10) Minimum time of transmission Evaluation 180 ms 100 ms
- 11) Minimum time of transmission 600 ms
- 12) Minimum time of transmission Evaluation 600 ms 500 ms
- 13) On receiving a release into the state of tracking, the change into rest state is made always through the state of blocking.

- 14) After "A9" MFC signal is received, MFC signalling will be changed into decade selection transmission.
- 15) With toll service, using U1 universal option, the metering pulse (OO) indicates also the state of answering. The following signal (O1) is a spacing between the metering pulses.
- 16) With the metering option, or with the metering substitution of U2 universal option, the metering pulse (OO) will be transmitted ... 1 ... as often the answering signal (O1).
- 17) The answering signal (O1) or metering pulses (OO) or the metering pulse spacing shall not be transmitted to an incoming line with decade selection, if the accounting point has to prevent accounting. The same applies after "B7" MFC signal has been received.
- 18) The tracing signal must be ignored, if received after the signal of breaking-in has been transmitted.
- 19) Bits C,D are permanently in the following states:  
 $C_F = C_B = 0$   
 $D_F = D_B = 0$
- 20) A disconnected signal wire, in the analog alternative of K signalling (2 x E + M) means "1" status of the bit concerned, i.e.  $A_F$ ,  $A_B$ ,  $B_F$  or  $B_B$ .
- 21) When a breaking-in signal has been received, the answering signal has to be transmitted only after the breaking-in signal termination.