

## 2 EXTERNAL SPECIFICATIONS

### 2.1. Line signalling used with MFC-LME

#### 2.1.1. Introduction

The table below shows the signalling codes available in outgoing and DDI in the Q421 signalling.

In both direction, the bits c and d are not used and shall be set as follows : c = 0, d = 1.

#### 2.1.2. States of line signalling

Call phase	State of the circuit	Signalling codes				
		Outgoing end		direct. of signal	Incoming end	
		forward	back ward		forward	back ward
		a <sub>f</sub> b <sub>f</sub>	a <sub>b</sub> b <sub>b</sub>		a <sub>f</sub> b <sub>f</sub>	a <sub>b</sub> b <sub>b</sub>
Available	Idle	1 0	1 0	←	1 0	1 0
Trunk seizure	Seizure	0 0	1 0	→	0 0	1 0
	Seizure acknowledgement	0 0	1 1	←	0 0	1 1
	Double seizure	0 0	0 0	←		
Call in progress	Register signalling	0 0	1 1		0 0	1 1
	Operator signal [1]			→	1 1 1 0	1 1
Conversation	False answer [1]	0 0	0 0 0 1	←	0 0	0 0 0 1
	Answer / Re-answer	0 0	0 1	←	0 0	0 1
	Metering pulse [2]	0 0	0 1 1 1	←		
Forced release	Forced release	0 0	0 0	←		
	Clear-forward	1 0	0 0	→	1 0	X X
	Release guard	1 0	1 0	←	1 0	1 0
Called party goes on hook first	Clear-back	0 0	1 1	←	0 0	1 1
	Clear-forward	1 0	1 1	→	1 0	1 1
	Release guard	1 0	1 0	←	1 0	1 0
Calling party goes on hook first	Clear-forward	1 0	0 1	→	1 0	0 1
	Release guard	1 0	1 0	←	1 0	1 0

Unavailable	Blocking	1 0	1 1	←	1 0	1 1
	Unblocking	1 0	1 0	←	1 0	1 0

2.1.3. Limits

- ① The Operator signal and False answer signal are represented by pulses of 150 ms, they are not implemented in Alcatel 4400.
- ② The metering pulses have the following characteristics :  
Transmission. 150 ± 30 ms      Detection . From 80 ± 20 to 375 ± 75 ms