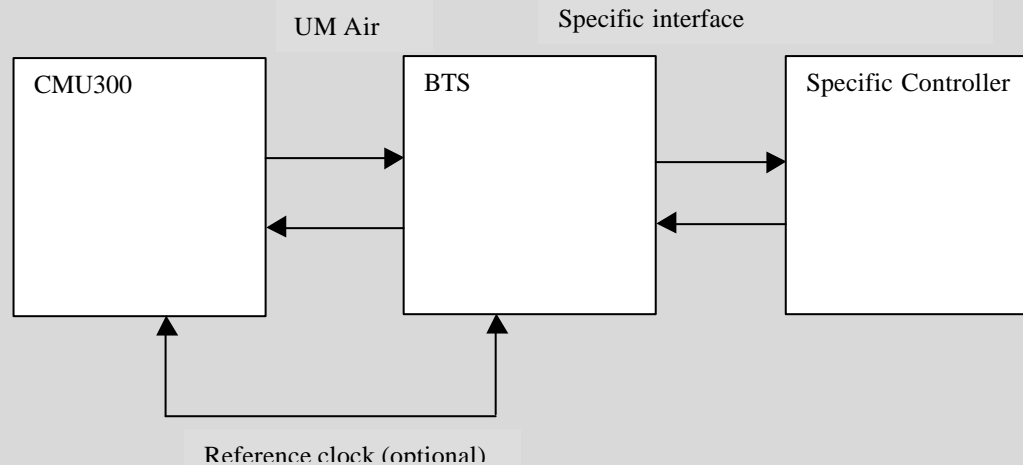## RF test of GSM / EDGE BST's, controlled via proprietary interface

(application: operations, installation, commissioning)

Test Set-up	
Characteristics of test environment	• Set-up of BTS RF channels without call / signalling procedures (MOC / MTC; Attach / Detach) • Configuration of path for BER tests to be arranged by the controller • "Single carrier" RF conditions
Suggested configuration	CMU300; CMU-B12 (optional); CMU-B21; CMU-K31...34; CMU-K41 (optional)

Supported measurements	• synchronisation to TDMA - timing of BTS possible via BCCH or Multi-frame-trigger (CMU = Signalling Mode)
	• TX-Tests (time slot selective measurements possible)
	   • Mean transmitted RF carrier power
	   • Transmitted RF carrier power versus time
	   • Modulation accuracy
	   • Spectrum due to Modulation
	   • Switching Transients Spectrum
	• RX-Tests: BER measurements on TCH's
	   • Continuous BER measurements based on real time channel coding processes
	   • Support of different BER test-path's

Remarks	• BER tests in most cases based on loop-back inside BTS (RX channel decoder to TX channel coder); to be activated by controller • For GPRS / EGPRS measurements special test-mode from BTS required; i.e. one "static" TS with packet switched channel coding must be active on up- and down-link

The Test Set-up diagram shows: CMU300 connected via UM Air interface to BTS, which connects via Specific interface to Specific Controller, with a Reference clock (optional) connecting to both CMU300 and BTS.