APPLICANT: Alcatel-Lucent Exhibit 7 FCC ID: ASSONEBTS-17

EXHIBIT 7: BLOCK DIAGRAM

Response:

Alcatel-Lucent's wireless UMTS Distributed Base Station Transceiver System (850 MHz), is the subject of this application for authorization by the Federal Communications Commission under the new FCC ID: AS5ONEBTS-17. Alcatel-Lucent's Universal Mobile Telecommunications System (UMTS) Distributed Base Station System (850 MHz) is designed to operate in the North America Region (NAR) Cellular Frequency Spectrum 869-890 MHz, with bandwidth of 21 MHz over the A", A and B Bands. The Distributed Base Station (DBS) can be configured for both single carrier (1S1C) operation at 40 Watts (+46 dBm) and for two carrier (1S2C) operation at 20 Watts (+43 dBm) per carrier with a total composite power of 40 Watts. The RF power rating is based the 3-second average, employing the Aggregate Overload Control (AOC) algorithm. Enhanced Digital Pre-Distortion (EDPD) and Closed Loop Gain Control (CLGC) are features are enabled for each carrier. The carrier power level and frequency are remotely controlled by software.

The Distributed Base Station transceiver system, subject of this certification, is comprised of two separate modules interconnected by fiber optic cable: 1) the digital Base Band Unit (BBU), and 2) the Remote Radio Head (RRH). They have the flexibility of being installed either in close proximity to or remotely located from each other. The BBU has the capability of controlling up to 3 remotely located RRH units, via fiber optic cable, and incorporates the digital channel cards, reference oscillator module, T1/E1 and alarm interface, and the RF-to-Optical and Optical-to-RF conversion circuitry. The 850 MHz RRH incorporates the Future Technology Radio (FTR), power amplifier (PA) and passive filter with single transmit (Tx) and diversity receive functionality (Rx0, Rx1). This system complies both with the Federal Communication Commission (FCC) Rules and Regulations (47 CFR Part 22), and with the European Telecommunications Standards Institute (ETSI) 3rd Generation Partnership Project (3GPP) Technical Specifications TS 25.104 and TS 25.141.

This exhibit provides a block diagram showing how the system is interconnected. Block diagrams of the individual components are Alcatel-Lucent Confidential and are contained within documents and exhibits that are requested to be held confidential.

The UMTS Distributed Base Station Transceiver System (850 MHz): Block Diagram

The interconnection between the BBU and RRH is fiber optic cable

