Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:	)	
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	**CC Docket No. 96-98**
	)	
	)	
Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers	)	**CC Docket No. 95-185**

REPLY DECLARATION OF BERNARD KU
on Behalf of MCI WORLDCOM, Inc.

Based on my personal knowledge and on information learned in the course of my business duties, I, Bernard Ku, declare as follows:

1. My name is Bernard Ku. In my current position as a Senior Manager II of MCI WORLDCOM, Inc. (AMCI WorldCom≅), I have responsibility over the Intelligent Network, Signaling, Switching Standards and Patent Engineering Group. I also serve as a delegate to the ITU-T Study Group 11 (IN/IP requirements) and also the U.S. Standards Committee T1S1. I received a Bachelor of Science degree from the University of Hong Kong, a Masters in Business Administration from the University of Texas, a Masters degree in Computer Science from the University of North Texas, and a Ph.D. from Southern Methodist University. Since 1994, I have served as an Adjunct Associate Professor in the Electrical Engineering Department at SMU.

2. I have reviewed the comments in this proceeding related to signaling networks and call-related databases. The purpose of my declaration is to explain why competitive

local exchange carriers= (ACLECs≅) ability to compete effectively in local telecommunications markets would be imparied unless they have unbundled access to the incumbent local exchange carriers= (AILECs≅) signaling networks and call-related databases, including the Advanced Intelligent Network (AAIN≅) architecture and service management systems.

3. The need for unbundled access to an ILEC=s signaling network and databases, including the ILEC=s AIN triggers, is most pressing where a CLEC utilizes the ILEC=s switch. An ILEC=s switching element works in tandem with the ILEC=s signaling network and databases. Thus, as many of the ILECs conceded in their initial comments,[1/] unbundled ILEC switching is simply inoperable without access to the ILEC=s corresponding signaling networks and databases. It is impossible for CLECs to use their own signaling in connection with the ILECs= switching elements because the ILECs= switches cannot inter-operate with multiple signaling networks except through their own signaling networks= mediation.

4. Even where CLECs provide their own switches, it is imperative that ILECs unbundle their SS7 signaling networks and call-related databases. At present, ILECs have the benefit of ubiquitous signaling networks throughout their regions. If a CLEC wishes to offer ubiquitous, high-quality local service, it must, as a practical matter, tap into the ILECs= signaling networks and databases.

1/ See Ameritech Comments at 114; SBC at Comments 43; U S West Comments at 47; BellSouth Comments at 76.

5. Notwithstanding the ILECs= assertions, third party signaling networks are wholly inadequate substitutes for the ILECs= networks. No third party vendor owns a signaling network in every Local Access Transport Area (ALATA≅), nor do they provide direct connectivity with the ILECs= switches. Consequently, if a CLEC is forced to obtain signaling from a third party -- rather than from the ILEC-- the CLEC will suffer diminished performance because the third party will have to reroute the traffic to a distant Signal Transfer Point (ASTP≅), rather than using the ILEC=s nearby STP. This might generate, for example, longer call set-up time for the CLEC=s customers, thereby impairing the CLEC=s ability to compete effectively. Because at this time third party vendors only have geographically dispersed (i.e., not local) STPs typically used by smaller long distance networks, they cannot provide CLECs with signaling comparable to those of the ILECs.

6. Likewise, it is not competitively viable for CLECs to self-provision call-related databases or to obtain them from third party vendors, even where the CLEC uses its own switch. Some of the information contained in the ILEC databases to which CLECs need access simply is not independently replicable by a CLEC or third party vendor. The ILECs= Toll Free Number Database, for example, contains joint and common information about terminating customers in a given local switched environment, although it is the originating customers that dial numbers which must be translated in toll free (800 and 888) calls. The CLECs, therefore, cannot perform the number translations without obtaining the required translation information for the 800/888 customers of every other carrier. Without access to an ILEC=s Toll Free Number Database, then, a CLEC=s or third party=s Toll Free Database will be useless. Similarly, an ILEC=s Line Information Database (ALIDB≅) contains line and billing information for all lines

belonging to a group of LECs, and so a CLEC or third party vendor cannot develop its own LIDB without access to the ILECs= LIDB. Furthermore, if a self-provided or third party database comprises information that is controlled and updated by the ILEC, the database will be more difficult and more costly to maintain. If the updates are not performed in a timely manner, the CLEC=s call-related database will be more prone to error in the completion of certain services (e.g., Caller ID).

7. In addition to signaling and databases, CLEC access to ILECs= Service Management Systems (ASMS≅) is crucial to competitive entry, even for those CLECs that do not use the ILECs= switches. Without access to an ILEC=s SMS, a CLEC could not populate, modify, and update information in call-related databases. Simlarly, CLECs must have access to an ILEC=s Service Creation Environment (ASCE≅), which is necessary to test new and innovative AIN services. Competitive entry by the CLECs will be impossible without unbundled access to the ILECs= AIN platforms and software. The CLECs should have access to all of the ILECs= AIN capabilities, including the AIN databases, SCE, and SMS, to be able to bring competitive new services into the marketplace and to maintain seamless routing and completion of traffic.

8. Contrary to the ILECs= claims, the AIN architecture is not proprietary and has always been meant to open the network interface. In fact, AIN was developed and standardized to give carriers the capability to open and customize new services quickly and to provide seamless interconnectivity between networks. In any event, even if an ILEC=s customized AIN services are deemed to be proprietary, see, e.g., Ameritech Comments at 127; BellSouth Comments at 80, the AIN deployment -- that is, the exchange of trigger and database information required to process an AIN call -- should never be considered proprietary. The AIN

architecture was standardized by the International Telecommunications Union (AITU≅) and modified by the American National Standards Institute (AANSI≅) precisely to facilitate the development and provision of new and innovative telecommunications services. Without access to the ILECs= AIN systems and databases, CLECs would be unable to gain access to crucial information that cannot be duplicated outside the ILECs= AIN architecture.

9. The mere fact that CLECs have not yet sought access to certain ILECs= AIN platform or services has no bearing on the critical importance of those elements. The ILECs have employed numerous tools -- appeals of arbitrations, refusal to combine unbundled elements normally combined within their networks, poor or non-existent interfaces into their OSS, and more -- to make it difficult for CLECs to utilize unbundled switching. As a result, MCI WorldCom is currently using unbundled switch ports as an entry vehicle in one state: New York. Because the CLECs' use of unbundled switching has to date focused on such mundane matters as keeping customers from losing dial tone and assuring that features ordered are provisioned on the customers' lines, CLECs have not yet begun to explore the more advanced capabilities of switching that would be possible, at least theoretically, via the use of SS7 signaling and call-related databases.