ORIGINAL

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 000649-TP

PREFILED DIRECT TESTIMONY

OF MARSHA EMCH

ON BEHALF OF WORLDCOM, INC.

August 17, 2000

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.

A. My name is Marsha Emch. My business address is 8521 Leesburg Pike, Vienna, Virginia 22182. I am employed by WorldCom, Inc. as a Senior Staff Specialist II, ILEC Performance Reporting and Advocacy, National Carrier Policy and Planning.

Q. PLEASE PROVIDE INFORMATION ON YOUR BACKGROUND AND EXPERIENCE.

A. I have worked at WorldCom and MCI since December 1994 and have been in my current role since January 1999. As a Senior Staff Specialist II, my work includes assisting with the development of WorldCom's performance measurement plan and analysis of performance measurement plans developed by other companies. I received a Bachelor of Arts from Eastern College in 1992.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to explain why the language proposed by MCImetro Access Transmission Services, LLC ("MCIm") and MCI WORLDCOM Communications, Inc. ("MWC"), both subsidiaries of WorldCom (and which I will refer to collectively as "WorldCom") concerning performance measurements should be adopted by the Florida Public Service Commission. My testimony focuses on the following areas relating to Issue 105: (A) the measures that should be included in the performance measurement plan; (B) the level of disaggregation that should be applied to those measures; (C) appropriate analogs and benchmarks; (D) the statistical methodology that

should be used; (E) remedies that should apply for failure to meet performance standards; and (F) audit requirements that should be included.

A. **Performance Measures**

Q. WHAT MEASURES SHOULD BE INCLUDED IN THE PERFORMANCE MEASUREMENT PLAN?

A. The measures that should be used are summarized in the Table of Contents of the MCI WorldCom Measurements and Performance Standards, Version 1.3 ("MPS"), which is attached to WorldCom's version of Attachment 10 to the Interconnection Agreement (Exhibit C to the Arbitration Petition). Many of these measures correspond to measures BellSouth proposes, but several do not. Measures are missing from BellSouth's SQM in each of the measurement categories -- ordering and provisioning, maintenance and repair, general measures, billing, operator services, directory assistance and listings, network performance, collocations and databases.

Q. IN GENERAL, WHY IS IT IMPORTANT THAT THESE MEASURES BE INCLUDED IN THE PERFORMANCE MEASUREMENT PLAN?

A. If these measures are not included, it will be difficult to assess whether BellSouth's performance in these areas complies with the requirements of the Telecommunications Act of 1996 (Act) that BellSouth provide parity of service or a meaningful opportunity to compete. For service areas in which a BellSouth retail analog exists, without performance reporting WorldCom will not know whether it is receiving parity service because it will not know the level of

service BellSouth is providing to its own customers. When no retail analog exists, a benchmark will have to be established to determine what is required for BellSouth to provide a meaningful opportunity to compete. Without performance measures, the only way for WorldCom to enforce its rights under the Act without voluntary disclosure and cooperation from BellSouth will be to initiate enforcement proceedings. Consumers can be better protected, and the parties' and the Commission's resources conserved, by the adoption of these performance measures.

Q. WHAT ARE SOME OF THE KEY MEASURES THAT ARE MISSING FROM THE ORDERING AND PROVISIONING CATEGORY?

A. Such measures include the following:

Percent Design Layout Records Received in X Days.

This metric measures the percent of time BellSouth provides WorldCom with information needed for provisioning an interconnection trunk. Often WorldCom only receives this data the day before or the same day a trunk is due. This late receipt does not allow WorldCom to finish the work on its end in order to meet the scheduled BellSouth due date. The design layout record should be received just a few days after the receipt of the FOC if not on the same day as the FOC. This measure has been adopted in New York, Pennsylvania and New Jersey for Bell Atlantic.

Percent On-Time Loss Notification. This metric measures the percent of time BellSouth timely informs WorldCom that it will lose a customer to either BellSouth or another ALEC. This is important so that WorldCom knows to stop

billing the customer for WorldCom service it no longer is receiving. This measure is particularly critical for UNE-P and resale service delivery methods where WorldCom does not have visibility into whether the customer has switched local carriers.

Average Offered Interval. This measure shows the average number of days between the order application date and the committed due date. It is important to determine if WorldCom orders are being scheduled for completion in the same timeframe as BellSouth orders. WorldCom needs the same opportunity to schedule due dates as BellSouth has for its customers. This measurement has been adopted in New York, Pennsylvania and New Jersey for Bell Atlantic.

Percent Order Accuracy. This measure gauges the percentage of orders that BellSouth completes accurately. On-time order completion is of little value if the orders are not completed correctly. For example, a customer that orders a DS1 line and receives an ISDN line instead, or who orders ten POTS lines and receives three instead, will not be satisfied because the installation occurred on time. I note that this concern could be addressed by providing that for measures with a stop time based on order completion the order would not be considered complete until correctly provisioned. This measurement has been adopted in Pennsylvania, New Jersey, New York and Massachusetts for Bell Atlantic; in Texas for SBC; and in Colorado for U S West.

Provisioning Troubles Prior to Loop Acceptance A customer suddenly experiencing degraded service or other problems during but before completion of the transition of service to WorldCom may blame the rough transition on

WorldCom, even if WorldCom has not yet obtained the customer. Monitoring troubles during this initial phase of establishing a customer relationship are critical. These troubles are not captured in the trouble report metric because WorldCom cannot enter a trouble ticket until BellSouth systems recognize this customer as WorldCom's customer. California has adopted this measure for Pacific Bell.

Percent Service Loss From Early Cuts and Percent Service Loss from Late Cuts. This metric measures the percent of WorldCom customer conversions that are completed too early or too late, causing the customer to be without service or with degraded service. ALEC customers often suffer from degraded or lost service caused by BellSouth mistakes or failure to adhere to established cutover procedures. A late cut translation often means the customer cannot receive all or certain incoming calls. This metric should be reported separately for loop orders, loop with LNP orders and stand alone LNP orders. This measure has been adopted in New York for Bell Atlantic, Texas for SBC and is currently a part of the OSS Test plan for Arizona and the Regional Oversite Committee ("ROC"), which involves the other U S West states. California has adopted a similar measure showing on-time performance, rather than early or late, and Connecticut recently approved this measure for SBC-SNET and Bell Atlantic.

Percent of Time 10-Digit Trigger Is Applied "X" Hours Prior to the LNP Order Due Date. This measure shows the percent of time that BellSouth applies the 10-digit trigger, a precautionary device, to the LNP conversion to

ensure that the service is likely not to be disrupted. This measure has been adopted in Texas for SBC.

Q. WHAT ARE SOME OF THE KEY MEASURES THAT ARE MISSING FROM THE GENERAL CATEGORY?

A. Such measures include the following:

Average Notification of Interface/OSS Outage. This metric measures how promptly BellSouth informs WorldCom that an interface is unavailable. WorldCom needs to be notified when BellSouth systems are down so that WorldCom can make alternative work plans. Failure to timely inform WorldCom of outages can cause WorldCom to waste time troubleshooting its own interfaces. Timely notification also prevents the BellSouth's ALEC help centers from being inundated with calls about an already known outage. This measure has been adopted in Pennsylvania, New Jersey, New York and Massachusetts for Bell Atlantic; in California for Pacific Bell; and in Connecticut for SBC-SNET and Bell Atlantic.

Percent of Change Management Notices and Documentation Sent On-Time. This measure shows the times that BellSouth provides advance notice and associated documentation on any change to its OSS according to standards and timeframes already agreed to as part of the parties' change management agreement. Advance notice and documentation are necessary so WorldCom can keep its own systems up and running and make the appropriate modifications so it can continue to interact with BellSouth's newly modified systems. Often ILEC failures to adhere to change management notice requirements have caused

delays in building interfaces or have stopped the operations of functioning ALEC OSS interfaces. ILECs must measure their adherence to their change management notice commitments and definitions of emergency notices. This measure has been adopted in Pennsylvania, New Jersey, New York and Massachusetts for Bell Atlantic.

Percent Software Certification Failures and Software Problem Resolution Timeliness. These measures show whether software validation procedures, test deck scenarios and error corrections standards already agreed to by the WorldCom and BellSouth are being adhered to. This measurement provides some assurance that BellSouth will sufficiently test its OSS before a system is rolled out. WorldCom needs to be sure that when BellSouth introduces software upgrades, WorldCom's existing systems still will be able to function with them. This measure has been adopted in New York and Massachusetts for Bell Atlantic.

Q. WHAT MEASURES ARE SOME OF THE KEY MEASURES THAT ARE MISSING FROM THE NETWORK PERFORMANCE CATEGORY?

A. Such measures include the following:

Percent of ILEC Responses to Reciprocal Trunk Requests in X Days This metric measures the percent of time BellSouth adds inbound trunks at WorldCom's request, which is important so WorldCom may avoid trunk blocking situations when it adds new customers. This measure discloses what has been a hidden interval: the time from which WorldCom notifies BellSouth that BellSouth needs to augment its inbound trunk to WorldCom until BellSouth

sends its ASR to WorldCom. WorldCom holds up its own customer orders waiting for these augments to avoid degraded service for its new or existing customers. If BellSouth delays in sending its Access Service Requests for inbound trunks to WorldCom, this will cause harm to WorldCom. This measure has been adopted in Pennsylvania and New York for Bell Atlantic.

Mean Time to Notify ALEC of Network Disruptions and Restorations. This metric measures the timeliness with which BellSouth notifies WorldCom of major network disruptions that impact WorldCom's network and customers as well as the timeliness for notice of the restoration of service. WorldCom should be informed of outages as soon as BellSouth broadcasts this information to its own technicians so WorldCom can inform its own customers and make alternative arrangements for customers, if necessary. A similar measure has been adopted in Pennsylvania for Bell Atlantic, California for Pacific Bell and Connecticut for SBC-SNET and Bell Atlantic. As an alternative, as long as the appropriate WorldCom contacts are a part of the same distribution list as BellSouth's contacts, this measurement could be deleted because the process would be parity by design.

Q. WHAT KEY MEASURE IS MISSING FROM THE COLLOCATION CATEGORY?

A. The following measure is missing:

Average Collocation Delay Days for Missed Due Dates. This measurement shows the average delay days caused by BellSouth to complete collocation facilities. When BellSouth has missed a collocation due date, it is important that

BellSouth act as quickly as possible to rectify this situation. WorldCom's entire business plans may depend on this single collocation being completed promptly. It is critical that collocation due dates are not missed at all and it is important to know how often collocation due dates are missed. It also is imperative that once BellSouth misses a due date, it complete the installation soon as possible. Resources cannot be diverted to complete other collocations in a timely manner once a due date is missed. This measure will help ensure that any missed due date is completed quickly. This measure has been adopted in Pennsylvania, New Jersey, New York and Massachusetts for Bell Atlantic and in Texas for SBC.

Q. WHAT MEASURE IS MISSING FROM THE DATABASES CATEGORY?

A. The following measure is missing:

Percent NXXs Loaded and Tested Prior to the LERG Effective Date. This measurement shows the percent of time BellSouth ensures that an NXX is properly functioning in the Local Exchange Routing Guide database so that a customer can continue to receive calls after switching to WorldCom. NXXs not loaded properly in BellSouth central offices, tandems and 911 selective routers can cause calls to be misconnected and in the case of 911, pose a serious public safety concern. Not loading the NXXs at all can inhibit a market launch or expansion of service because WorldCom may not as a practical matter enter a market where its customers may not be able to receive their phone calls. This measure has been adopted in Pennsylvania for Bell Atlantic, in Texas for SBC,

in California for Pacific Bell, and in Arizona and the ROC for U S West's OSS Test

Q. WHICH OF THE ADDITIONAL MEASURES THAT WORLDCOM PROPOSES ARE ITS HIGHEST PRIORITIES?

A. Although WorldCom believes that all of these measures are important, the most critical are Percent of Change Management Notices and Documentation Sent On Time, Percent Software Certification Failures and Software Problem Resolution Timeliness, Percent Order Accuracy, Provisioning Troubles Prior to Loop Acceptance, and Percent Service Loss from Early and Late Cuts.

B. <u>Disaggregation</u>

Q. IN GENERAL, WHAT TYPES OF DISAGGREGATION SHOULD BE REQUIRED IN A PERFORMANCE MEASUREMENT PLAN?

A. Disaggregation should be required by ALEC, by product, by ordering activity, by geographic scope, by volume category, by interface type and (in some cases) by reason for held order.

Q. PLEASE EXPLAIN WHY IT IS IMPORTANT TO DISAGGREGATE BY INDIVIDUAL ALEC.

A. Without ALEC specific performance data, WorldCom will never be able to know if the level of performance it receives from BellSouth is at parity or meets the specified benchmark. Any poor performance WorldCom does receive from BellSouth could be masked by BellSouth giving better than normal performance to other ALECs. WorldCom's marketing strategy will be different than other

ALECs' strategies -- and WorldCom's orders, queries and system needs will accordingly be different. In New York and Texas, for example, WorldCom's results for some measures have been much better than the aggregate of all ALECs and results for other measures that have been much worse. If BellSouth does not report measures at an individual ALEC level, neither the Commission nor WorldCom will know the exact level of service provided.

Q. FOR WHAT KEY MEASURE DOES BELLSOUTH FAIL TO PROVIDE ALEC SPECIFIC DATA?

A. BellSouth fails to report OSS Query Response Time for ordering and maintenance and repair on an individual ALEC basis.

Q. PLEASE EXPLAIN WHY PRODUCT DISAGGREGATION IS IMPORTANT.

A. Product disaggregation is key because different performance can be expected based on the type of product being ordered. Lumping together one type of order that has a two day interval with another type of order that has a ten day interval and producing a report showing that on average the orders are provisioned in seven days tells one nothing about whether either type of order was provided at parity or met the benchmark. Such aggregate treatment masks disparities in service and should not be permitted. The basic principle of product disaggregation is that each product should be tracked separately.

Q. WHAT PRODUCT DISAGGREGATION DOES THE MPS CALL FOR?

A. Levels of disaggregation for each measurement category are provided in Appendices A-H of the MPS. Examples of important product disaggregation

include Resale, UNEs and Trunks, broken down by residential and business customer, where appropriate. Further disaggregations for resale and UNEs include DS1 and DS3. These two products have differing provisioning and repair intervals and complexities that require separate reporting. Separating BRI ISDN from PRI ISDN is important for the same reason. UNE-Platform needs to be reported separately because this product combines the DS0 (or higher) loop with switching and transport and is different from just ordering a DS0 without the switching and transport. Although INP is being phased out by LNP, if there are still INP orders, these should be separated out from LNP orders so that an apples to apples comparison can be made. WorldCom simply wants products disaggregated to the level where relatively few expected dissimilarities exist.

Q. PLEASE EXPLAIN WHY IT IS IMPORTANT TO DISAGGREGATE BY ORDERING ACTIVITY.

A. Examples of ordering activities include new service installations and service migrations without changes. Because these different order activities involve different processes, they should be reported separately. A customer who changes from BellSouth to WorldCom but doesn't add or delete any features should be a relatively easy and quick order for BellSouth to complete. However, a customer who chooses to remove features it is not using with BellSouth or to add new features like call waiting, voicemail, or a second or third line, will make that customer's order more complex and may be more time-consuming. The orders that are most similar can be grouped together with like orders for reporting purposes. The orders that are dissimilar should not be

grouped together for reporting purposes because the aggregate data will not be meaningful.

Q. WHAT ORDERING ACTIVITY DISAGGREGATION ARE PARTICULARLY IMPORTANT?

A. New installation, migrations of service with and without changes and local number porting are especially important to report separately.

Q. SHOULD BELLSOUTH BE REQUIRED TO REPORT ON ITS PERFORMANCE IN FLORIDA FOR EACH MEASUREMENT?

A. Yes, unless all BellSouth activity comes from a centralized location and the data cannot be separated and is not different in process, Florida data should be reported. Otherwise, WorldCom cannot evaluate BellSouth's performance relating specifically to Florida customers unless BellSouth reports its performance for Florida. The same ALECs do not operate in all the same states, let alone at the same volumes in each state or with the same type of product mixes. Products ordered in Florida may be more advanced than in Alabama causing intervals to vary and bill invoices and usage feeds to be more complex. To report a particular service for an entire nine state region would not allow ALECs or state commissions to understand the level of performance for their state.

Q. FOR WHAT MEASURES DOES BELLSOUTH ONLY PROVIDE REGIONAL DATA?

A. BellSouth reports the following ten measures on a regional basis only: OSS Availability, OSS Query Response Time (Ordering and M&R), Flow-Through

of Orders, Speed of Answer (Ordering and M&R), Invoice Accuracy, Mean Time to Deliver Invoices, Usage Accuracy, Usage Completeness, Usage Timeliness, and Mean Time to Deliver Usage Records. These measures should be disaggregated on a state-by-state basis where the systems and processes are unique to a particular state. At a minimum, BellSouth should be required to prove that its systems and processes for these measures are centralized and truly identical for each state. This proof should come from a validated OSS test by a Third Party for Florida or from another state such as Georgia or North Carolina. Until such time as BellSouth systems and processes can be proven to be identical in Florida for the measures above as for the rest of the states in BellSouth's region, BellSouth should be required to report its performance at the state level.

Q. PLEASE EXPLAIN WHY GEOGRAPHIC DISAGGREGATION AT THE LOCAL LEVEL (SUCH AS BY MSA) ALSO IS IMPORTANT.

A. If only statewide reporting is provided, ALECs that operate only in discrete areas of the state cannot compare the performance they receive to what BellSouth provides itself in those areas. Because service levels may vary from area to area, such ALECs cannot determine whether they are receiving parity of service.

Q. WHAT OTHER TYPES OF DISAGGREGATION SHOULD BE REQUIRED?

A. Several other types of disaggregation should be are required. Volume category disaggregation captures differences that may arise based on, for example, the

number of lines being ordered. For instance, WorldCom learned through experience using BellSouth's EDI 7.0 interface that the number of lines that could be requested on one purchase order was limited to 325. By capturing data based on the volume involved, such problems can be detected. Disaggregation also should be provided by interface type. The only way to determine, for example, whether BellSouth's TAG interface meets the applicable standards is to provide data specifically for that interface. If TAG data is lumped together with LENS data, the performance of the TAG interface will be obscured. Finally, in cases involving held orders, the reason for the order being held should be captured and reported. For instance, it is important to know whether the order was held because of a lack of facilities, a problem with workload, or a system error of some kind. That information is critical to resolving problems that arise in this area.

Q. DOES THE MPS PROVIDE FOR DISAGGREGATION BASED ON VOLUME CATEGORY, INTERFACE TYPE AND REASON FOR HELD ORDER?

A. Yes.

C. <u>Retail Analogs and Benchmarks</u>

Q. IN GENERAL, WHAT APPROACH SHOULD THE COMMISSION TAKE WITH RESPECT TO RETAIL ANALOGS AND BENCHMARKS?

A. OSS functions provided to ALECs must be compared to BellSouth retail analogs if they exist. If no analog exists, BellSouth's performance must be gauged by a

performance standard. *Application of Ameritech Michigan to Provide In-Region, InterLATA Services in Michigan,* CC Docket 97-137, Memorandum Opinion and Order, FCC 97-137 at ¶¶ 139-41 (rel. Aug. 19, 1997).

Q. WHAT IS WORLDCOM'S PREFERRED APPROACH TO ANALOGS AND BENCHMARKS?

A. WorldCom's preferred approach is for all measures to have a benchmark as the applicable standard, which benefits WorldCom, the Commission and BellSouth. A numerical benchmark is easy to administer and review as statistical analysis is not required; allows WorldCom representatives to inform customers of interval targets while on the phone with the new or potential customer; and allows WorldCom to establish service level agreements with its customers and to plan its business and marketing based on standards that do not fluctuate. Benchmarks also provide BellSouth with a known target of performance it needs to provide to ALECs. BellSouth and WorldCom executives also can manage employees and business processes to fixed performance levels. However, if BellSouth demonstrates that an appropriate retail analog exists, then parity may become the applicable standard.

Q. WHAT PERFORMANCE STANDARDS SHOULD APPLY?

A. The benchmarks proposed by WorldCom should apply, except when BellSouth establishes an appropriate retail analog. WorldCom's proposed benchmarks have been derived from input received from WorldCom personnel knowledgeable concerning the business processes in question and through discussions in various state performance measurement collaboratives.

WorldCom's benchmarks are based on the level of performance that can be expected of an efficient ILEC to perform a service for its wholesale customers. An exception to these requirements arises in the event of WorldCom delays, customer delays and force majeure events.

D. Statistical Methodology

Q. WHY IS IT NECESSARY TO APPLY A STATISTICAL METHODOLOGY WHEN ASSESSING PERFORMANCE MEASUREMENT DATA?

A. A statistical methodology should be applied when a parity standard is used. Application of a statistical methodology ensures that conclusions of parity or disparity can be drawn with a reasonable level of confidence based on the performance data provided for ALECs and BellSouth. Use of statistical techniques ensures that factors such as sample size and distribution of data are taken into account when assessing parity.

Q. WHAT STATISTICAL METHODOLOGY DOES WORLDCOM PROPOSE FOR MEASURES THAT HAVE A PARITY STANDARD?

A. WorldCom has proposed the modified z test using a 95% confidence level. This approach has been endorsed by the FCC in the Bell Atlantic-New York 271 case, as well as by public service commissions in Texas and California. I also note that in the Louisiana performance measurement workshops, the parties have discussed extensively an alternative statistical method. If agreement on

that statistical method can be reached in Louisiana, WorldCom would be willing to adopt that method in Florida as well.

Q. SHOULD A STATISTICAL METHODOLOGY BE APPLIED TO MEASURES THAT HAVE BENCHMARKS?

A. No. As the FCC has acknowledged, "[s]tatistical testing . . . is not necessary for a metric using benchmarks." Bell Atlantic 271 Order, Appendix B, footnote 1. Any fluctuations in random variation are picked up through the actual benchmark being set less than 100% and for longer than the actual time necessary to complete the task. For example, a hot cut can be accomplished in 5 minutes, yet WorldCom is not asking for a hot cut performance standard of 100% in 5 minutes. Instead WorldCom's benchmark varies from one hour to 8 hours depending on the number of lines converted via a coordinated process.

E. Remedies

Q. WHAT BASIC COMPONENTS SHOULD A REMEDY MODEL INCLUDE?

A. Among other things, a valid remedy plan should have remedies that are substantial enough to drive compliance with the Act; have remedies that escalate based on both the magnitude and duration of the poor performance; provide that remedies are self-executing; and apply remedies at the submetric level.

Q. DOES WORLDCOM'S PROPOSED ATTACHMENT 10 INCLUDE THESE COMPONENTS?

A. Yes. I should note further that the WorldCom remedy plan is being reviewed internally and may be revised in the near future. In the event a revised plan is developed prior to the arbitration, WorldCom will file the revised plan with the Commission.

F. Audit Requirements

Q. HOW SHOULD AN AUDIT BE REQUESTED?

A. When WorldCom has a dispute with BellSouth over the accuracy or integrity of BellSouth's reporting processes or performance results, WorldCom and BellSouth should cooperate to resolve the matter within thirty days. If the matter cannot be resolved in thirty days, then WorldCom should have the right to ask for an audit of BellSouth's systems, processes and data for particular processes or measures, provided that WorldCom does not ask for an audit more than two times in a twelve month period for the same process or measure. Whenever any ALEC requests an audit, the reason for the audit needs to be communicated to all ALECs as well as the audit results.

Q. WHO SHOULD PAY FOR AN AUDIT?

A. BellSouth should pay for the first two audits for a similar process. BellSouth has the responsibility to prove that its systems and processes are accurate and has sole control over those systems and processes. If BellSouth does not properly manage its performance measurements reporting and this causes WorldCom to question BellSouth's reporting, which in turn requires an audit, WorldCom should not have to pay for the audit.

Q. DOES THAT CONCLUDE YOUR TESTIMONY?

A. Yes it does.