

Before the
Federal Communications Commission
Washington, D.C. 20554

PUBLIC NOTICE

Released: July 7, 1992

Modifications to Service Quality/Infrastructure Reporting

Report 43-05, Quarterly Service Quality Filing; Report 4306, Semiannual Service Quality Filing; and Report 43-07, Annual Infrastructure Filing

In the Price Cap Proceeding, the Commission charged the Bureau with developing a service quality and infrastructure monitoring program.¹⁵ The Bureau stated that the development would be evolutionary, with efforts made to increase the uniformity and usefulness of the reports, as well as to respond to any derogation in service quality or infrastructure development, and to address the needs of state regulators, users, and other interested parties. The *Service Quality Order* was released May 17, 1991;¹⁶ since then various waiver orders and a Public Notice of March 31, 1992 have somewhat modified the filing requirements.¹⁷ This Public Notice makes further changes, and solicits comments on still other modifications. If there are modifications or additions that are not suggested here but that should be made, please take this opportunity to explain and support your position.

In each case, parties advocating additional reporting requirements should keep in mind the Commission's desire to balance the need for and usefulness of reported data against the burden on carriers of supplying it, and on the Commission of including, reviewing, evaluating, and storing the additional data.

I. General

a. level of geographic disaggregation:

TCA has suggested at earlier stages of the Commission and Bureau proceedings that we consider collecting data on an exception basis at a more disaggregated level, such as wire center. "Exception" reporting would require the establishment of some threshold; if the carrier failed to perform above that threshold, it would report, on a wire center basis, its failure. A carrier that performed at or above the established threshold would continue to report

only at the study area level. The Bureau considered and rejected this reporting level: see *Service Quality Order*, 6 FCC Rcd at 2989-90, 3020-21. While we note the Commission's and the Bureau's opposition to the development of standards,¹⁸ we solicit comment on this proposal. Parties advocating more disaggregated reporting should estimate the volume and the value of data that would result from any requirement they propose.

b. who reports:

1. non-price cap LECs: Since this monitoring program was initiated in the course of the price caps proceeding, it is natural that reporting is required only from price cap LECs. Indeed, some of the reporting (semiannual service quality and annual infrastructure) is required only from the 8 largest LECs for whom price cap regulation is mandatory. The Commission has recently adopted a Notice of Proposed Rulemaking to consider incentive regulation for non-price cap LECs; among other things, that Notice solicits comments on the need for service quality and infrastructure reporting from some LECs. We accordingly defer consideration of the expansion of reporting requirements to nonprice cap LECs to that proceeding.¹⁹

2. interexchange carriers: It has been suggested, particularly in the face of significant outages and increasing amounts of information and concern about them, that AT&T and perhaps other interexchange carriers should be required to file service quality and infrastructure reports.²⁰ We solicit comment on the question whether any interexchange carriers should have such requirements, and if so, which carriers, and what requirements. Again, parties advocating additional reporting requirements should balance the volume and value of the data. In this case, parties advocating reporting by IXCs should also comment on whether this addition should be accompanied by the segregation of LEC data into tandem and end office switch data, for the sake of comparability with IXC (tandem only) data.

II. Report 43-05

a. Table I: Interexchange Access Service, Installation and Repair Intervals

1. installation intervals: At present, LECs have on file with us paper copies of their standard installation intervals for various services. They refile these paper copies any time they change a standard installation interval; decreases can be effective immediately, while increases require 30 days' notice. The 43-05 Table I contains data on the LEC's success rate in meeting its own standard interval commit-

¹⁵ Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, Second Report and Order, 5 FCC Rcd 6786 (1990) and Erratum, 5 FCC Rcd 7664 (1990) (*LEC Price Cap Order*), modified on recon. 6 FCC Rcd 2637 (1991), petitions for further recon. dismissed, 6 FCC Rcd 7482 (1991), further modified on recon. 6 FCC Rcd 4524 (1991) (*ONA Part 69 Order*), petitions for recon. of *ONA Part 69 Order* pending, appeal docketed D.C. PSC v. FCC, No. 91-1279 (D.C. Cir. June 14, 1991).

¹⁶ Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, Memorandum Opinion and Order, 6 FCC Rcd 2974 (Com.Car.Bur. 1991); reconsideration 6 FCC Rcd 7482 (Com.Car.Bur. 1991); application for review pending.

¹⁷ Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, Memorandum Opinion and Order, 6

FCC Rcd 4819 (Com.Car.Bur. 1991) (*Four BOC Waiver*); Memorandum Opinion and Order, 6 FCC Rcd 5051 (Com.Car.Bur. 1991) (*NYNEX Waiver*); Memorandum Opinion and Order, 6 FCC Rcd 6104 (Com.Car.Bur. 1991) (*Ameritech Waiver*); Memorandum Opinion and Order, 6 FCC Rcd 7231 (Com.Car.Bur. 1991) (*Oswayo River Waiver*); Public Notice, 7 FCC Rcd 3590 (Com.Car.Bur. 1992) (*Public Notice No. 1*); Memorandum Opinion and Order, DA 92-668, released June 2, 1992 (*GTE-Conel Waiver*).

¹⁸ *Service Quality Order*, 6 FCC Rcd at 2990-92, 3026-27.

¹⁹ Regulatory Reform for Local Exchange Carriers Subject to Rate of Return Regulation, CC Docket No. 92-135, Notice of Proposed Rulemaking, adopted June 25, 1992.

²⁰ AT&T does presently file call completion rates and fiber implementation data.

ment. It measures "percent commitment met" and "average missed commitment." We solicit comment on a new reporting requirement that eliminates any reference to the LEC's standard interval, and simply reports installation intervals in days. This requirement will create uniformity and comparability among carriers; it will also cover more installations. (The current reports generally do not cover installations individually contracted for). We request comment on whether measurements should be in calendar days, work days, or hours. We also request comment on classifications of types of service to be reported. We plan to have these new reports in place for the December 1992 filing.

2. repair intervals: LECs currently report number of trouble reports and an average interval to restore (in hours, to the nearest tenth). The reports separate switched and special services, and further disaggregate special services to note high-speed data service. No changes are proposed.

b. Table II: Local Service Installation and Repair Intervals

1. installation intervals: same as for Table I.

2. repair intervals: LECs report total trouble reports, repeat trouble reports, and No Trouble Found. Repeat trouble reports are of troubles that recur, or remain unresolved after 30 days. No Trouble Found is recorded by the service representative if he cannot discern what the trouble was. At present these reports do not include any time measurements, but report only the number of trouble reports. We propose that they be modified so that the local service repair reports, like the access repair reports, include a measurement of the repair interval, in hours to the nearest tenth.

c. Table III: Trunk Blockage

Presently the LECs report how many trunk groups they have, how many they measure, how many of those exceeded servicing thresholds for one or three months, and how many exceeded design blocking objectives for 3 months. The current report amounts to exception reporting on trunks from end office to access tandem; we propose to require a more complete report on trunk blockage, which we would base on the blockage reports used within the Bell System prior to divestiture (sample attached). We would collect data on two types of trunk groups: "total trunks, including high usage trunks,"²¹ and "final, full and non-alternate route trunks;"²² we propose that these two types be broken down into subtypes according to the pre-divestiture reports. We would ask for the number of trunk groups, number of trunks, and busy season CCS per trunk. We believe that this changed format will give us

better and more usable information, in a format that is more readily analyzed and is familiar to the LECs, while imposing little or no additional burden. We solicit comments on this proposal, including comments as to the frequency with which carriers should be required to file trunk blockage information, whether such information should be filed on a study area level, and whether this reporting should be in addition to or instead of the existing Table III reporting.

We also propose to add another, related report, call completion ratios. Because call completion ratios measure the percentage of call attempts that go through to the end user, they reflect not only trunk blockage but also other network difficulties. We believe this measure might prove to be a comprehensive indicator of overall reliability of performance. We request comments on this proposed addition.

d. Table IV: Total Switch Downtime

LECs currently report switches broken into groups according to the number of lines served (under 1000; 1000-4999; 5000-9999; 10,000-19,999; and 20,000 and up), and MSA or non-MSA. Incidents of downtime are classified as scheduled or unscheduled, and total and under two minutes. (Incidents over 2 minutes are listed individually in Table IV-A). We propose adding information categories here: one to indicate whether a downtime occurs at a switch that has experienced downtime within the last month (or quarter); another one, or possibly two, to provide information about the type of switch (in very general terms). The latter information might have to be required only for the more detailed listings in Table IV-A.²³

e. Table IV-A: Switch Downtime incidents of two minutes or more

The report individually identifies each switch experiencing a downtime incident of two minutes' duration or more. The switch is identified by CLLI code, number of access lines served, and MSA or non-MSA. The incident is described by cause (one of 14 specified causes, susceptible to further explanation in footnotes) and duration. The Network Reliability Council has requested that this report be expanded to include the date and time of the downtime;²⁴ this is a reasonable addition and will make the reports more useful. The LECs have expressed readiness to make this change, and it is accordingly included in Table IV-A reporting requirements beginning with the reports to be filed September 30, 1992. Thus, column (x1) will be date, and column (x2) time.

²¹ These trunks go from end office to end office; this would be a new data series in this report.

²² These are the trunks on which we currently collect data.

²³ Table IV-A provides individual identification of the switch by giving the common language location identifier (CLLI) code, an 11-digit code which identifies the wire center location and the type of switch (DS0, for example). We propose including here the type of switch as identified in the CLLI code - *i.e.*, in generic terms. We might state, for example, that the switch is analog (or digital), that it is (or is not) equipped with SS7 capability, that it does (or does not) provide equal access. We

solicit comments on the benefits of this addition, as well as of more detailed information, such as switch manufacturer, model number, capacity, age, upgrades.

²⁴ See Report of the Threshold Reporting Group (TRG) of the Network Reliability Council (NRC), submitted on April 20, 1992, at pp. 12-14 and Attachment 2. The TRG also requested the inclusion of switch vendor information on this report; as noted above, we are requesting comment on the inclusion of this and other additional information in the reporting requirements.

f. Table V: State and Federal Service Quality Complaints

No changes are proposed.

g. Additions to Report 43-05

We ask whether additional factors that might be useful in measuring network reliability. The proposals above make a start in that direction, by increasing the detail of downtime reports and repair reports and by creating a call completion report. We believe, for example, that trunk blockage, call completion, switch downtime, and dial tone response provide good network function indicators. We might also consider developing reports that would cover other aspects of the network, such as transmission facilities breakdowns or signalling system breakdowns. We solicit comments on these and other measures; proponents should evaluate the value and volume of each proposed addition to the reporting collection.

III. Report 43-06

The three data collections in Report 43-06 -- customer satisfaction, dial tone response, and transmission -- quality were designed to continue data collections begun just after divestiture. We carried those reporting requirements over into this monitoring program virtually untouched, in an attempt to maintain continuity. It now appears, however, that the need for actual and up-to-date data collections outweighs the need for continuity, and the following changes are proposed:

a. Table I: Customer Satisfaction

These reports are not in ARMIS due to great variations in how customers are categorized and what LECs report on.²⁵ Now, in the desire to include these reports in ARMIS, we request comment on (1) standardized customer categories, (2) overall quality measurements that customers can be asked about, and (3) some measure of satisfaction more rigorous than "percent satisfied."

b. Table II: Dial Tone Response

LECs currently measure percentage of end offices meeting the industry standard of 3 seconds or less. Because dial tone is virtually always provided within less than three seconds, this report is obsolete. We propose to change this report to measure actual dial tone, in seconds to the nearest hundredth, for a number of test calls (based on a percentage of total calls).²⁶ We believe it likely that this data point will provide an opportunity for benchmarking, and we request comment on the percentage and selection of end offices to be tested, and whether the proposed measurement is realistic and adequate.

c. Table II: Transmission Quality

LECs report percentage of end offices, and percent of trunks, meeting their own transmission objectives for loss, C-message, balance, gain slope, and C-notch. The second part of the table, percent of trunks meeting objectives, merely gives the standard adopted by the individual LEC -- what percent of trunks served by a central office must meet the transmission objective, in order for the office to "pass." The actual technical objectives are not listed here. Current reporting does not allow for benchmarking, since it measures the LEC's success at meeting its own objectives. We propose that all measurements represent actual performance, without reference to "percent meeting objectives."

d. Proposed additions

Some user parties have suggested that we include bit error rate and availability measures -- both measures used on lines providing high-speed data access -- in our regular reporting. In the *Service Quality Order* we declined to require these reports; we stated that a requirement to report bit error rate and availability would be intrusive on service and costly and burdensome to LECs, and thus failed to achieve the Commission's desired balance of usefulness with burden.²⁷ We stated that these reporting services are available on a tariffed basis upon request, and that the complaint process is available if needed. We also stated, however, that technology is available and is being deployed that allows for the non-intrusive monitoring of high-speed data transmission, and we expressed our willingness to revisit this issue as such monitoring and reporting become the norm.²⁸ Over a year has passed since the adoption of the *Service Quality Order* and, given the rapid technological development that characterizes the telecommunications field, the issue may be ripe for further consideration. If parties have arguments or suggestions that have not already been made, they are invited to file them here.

IV. Report 43-07**a. Table I - Switching Equipment**

We solicit comment on the possibility of including in Table I data related to the deployment of Switched Multi-Megabit Data Service (SMDS) and Frame Relay service. These are dedicated high-speed data systems developed along the lines of packet switching; several LECs have recently proposed tariffs, and several are preparing to submit tariffs, to provide these services. We believe that LEC deployment of these new services is an important aspect of infrastructure development, and should accordingly be included in the annual infrastructure report. We request comment on the validity of this assertion, and on the form

²⁵ One problem is that the LECs use idiosyncratic customer satisfaction surveys for purposes that have to do with product development, marketing, and so on; the surveys are very different, and the LECs (understandably) do not want to share the results. We do not want to detract from the usefulness of the surveying the LECs do now, nor do we want to add a whole new customer survey that serves no purpose other than to meet our reporting requirement.

²⁶ We believe that the loss of continuity with semiannual reports since divestiture is worth the gain in actual, usable

information. We might, for example, collect the overall average dial tone response time and the average of the slowest 5%.

²⁷ In order to address the concerns raised by user parties, however, we modified our Table I (interexchange access installation and repair intervals) to include separate reporting on repairs to high-speed data lines. We stated that inclusion of this data would allow us to spot any derogation of quality that might occur. 6 FCC Rcd 2980.

²⁸ *Service Quality Order*, 6 FCC Rcd at 2980.

such reporting should take. We believe that such reporting should be included in the 43-07 Reports that will be filed in September 1993.

b. Table II - Transmission Facilities

No changes are proposed.

c. Table III - LEC Call Set-Up Time

Several interested parties have expressed dissatisfaction with this report, which was developed following protracted discussions in the price cap proceeding about post-dial delay (PDD) measurements. While we are not interested in rehearing arguments made at earlier stages regarding post-dial delay, we do request comments on modifications of the LEC call set-up time reporting that would make these reports more informative and more useful, without imposing an unjustified burden on reporting carriers.

d. Table IV - Additions and Book Costs

No changes are proposed.

We have no other specific proposals regarding modifications of the reporting in Report 43-07, but request comments from interested parties. We note that Tables I, II, and IV are continuations of data collections spanning 11 years, and that substantial weight will accordingly be given to maintaining continuity.

Interested parties may file comments no later than **August 11, 1992**. Reply comments may be filed no later than **September 1, 1992**. All pleadings should reference **AAD 92-47**. The original and six copies should be submitted to the Secretary of the Commission; one copy should be submitted to Jacqueline Spindler, Common Carrier Bureau Accounting and Audits Division, 2000 L Street, NW, Suite 812, Washington, D.C. 20554; and one copy should be submitted to the Downtown Copy Center, 1990 M Street, NW, Suite 640, Washington, D.C. 20036. (202) 452-1422. All pleadings are available for public inspection and copying in the Accounting and Audits Division public reference room, 2000 L Street, Room 812, Washington, D.C.; copies are also available from the Downtown Copy Center.

For further information contact Jacqueline Spindler at 202 634-1861.

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