

DESCRIPTION AND JUSTIFICATION

1.0 Introduction and Description of Filing

In this tariff filing, scheduled to become effective July 17, 2001, the Bell Operating Companies (BOCs) propose changes to Tariff F.C.C. No. 1, 800 Service Management System (SMS/800) Functions (SMS/800 Tariff) to modify rates and charges based on current cost and demand data.

1.0 Modify Rates and Charges

This tariff filing is being made by the BOCs to reduce certain rates and charges in the SMS/800 Tariff. The proposed reductions, reflecting the BOCs' most current estimates of demand and cost for services provided under the tariff, would reduce revenue over the prospective eleven month period of July 17, 2001 through June 16, 2002 by \$ 5.45 million.

The most significant reduction, in terms of revenue impact, is the proposed decrease in the Customer Record Administration (CRA) charge from \$0.2284 to \$0.2106. Other rates and charges are either reduced or unchanged. A comparison of current and proposed rates, as well as the revenue impact of the rate changes, is displayed in Table 1, (after section 4.6).

The rates covered by this transmittal will expire on June 16, 2002 unless extended or revised by a tariff filing prior to the expiration date.

2.0 Revenue Requirement Development

The prospective revenue requirement for SMS/800 consists of expenditures for ongoing operations from July 17, 2001 through June 16, 2002. Virtually all of the costs are expense items. Specific budget items for SMS/800 ongoing operations are:

1. *SMS/800 Operation and Administration* which consists of: (a) Help Desk operational support to SMS/800 users including telephone assistance related to interfacing with SMS/800 and preparation/maintenance of toll-free number records, and processing of requests for changes in Responsible Organization for toll-free numbers; (b) day-to-day management and administrative oversight provided by the SMT Business Manager (DSMI) including planning, billing and collections, administration of vendor contracts, participation in SMS/800 User Groups, and coordinating the activities of consultants that provide accounting, cost analysis and website support related to SMS/800; and (c) the indirect cost of significant internal resources that the Bell companies expend to support management, operation and administration of the SMS/800. These resources include employees in the companies' tariff, regulatory, legal, technical, financial, taxation, procurement, accounting, network operations, systems provisioning, and operations

support organizations. For example, employees of the four Bell companies are responsible for: 1) the strategic planning for existing SMS/800 services and future enhancements to these services, including the long-term viability of the service; 2) the financial oversight for SMS/800 services, which include the tracking of revenue and annual vendor contractual costs, the establishment of budgets for specific projects, and the approval of major non-recurring expenses; 3) the planning for the evolution of the system, including the definition of major software enhancement releases, planning for growth, technology evolution, and shifts in the user population's usage, the development and evolution of the graphical user interface as well as the evolution of the SMS/800 website; 4) vendor selection and oversight, including the definition of Request for Proposal activities, contract approval and annual performance reviews; 5) regulatory planning and compliance, including implementation of regulatory orders and directives and satisfaction of tariffing requirements; and, 6) the oversight of the DSMI in the performance of its day-to-day management of SMS/800 services. The Bell companies have not conducted a study to determine the amount of time their employees spend in work to support this service, but their conservative estimate is that these activities account for at least 1.5 people per company. At a conservative average loaded labor salary of \$200,000, this would total \$1,200,000. In preparation for future filings, cost studies will be performed which more precisely reflect these indirect costs.

The estimated revenue requirement of this budget item for the eleven-month period of July 17, 2001 through June 16, 2002 is \$7,624,725 distributed as follows: item (a) \$1,375,000; item (b) \$5,149,725; and item (c) \$1,100,000.

2. *Data Center Operation* reflects the cost of the production and test/disaster recovery SMS/800 data centers; upgrading of the data centers to increase processing and data storage capacity related to growth and the introduction of new 8XX codes; and operation of a Service Center (Help Desk) facility to handle security and access problems. The estimated revenue requirement for data center operation is \$41,250,000.

3. *SMS/800 Software Support* includes the provision of software maintenance, computer site and application support, software development for new features, and the introduction of new 8XX codes. The estimated revenue requirement for software support is \$19,433,333.

A comparison of past year (actual) and future (projected) revenue requirements is shown in Table 2.

2.1 Revenue Requirement Distributions

The projected revenue requirement for budget (cost) items was distributed to all rate elements by applying distribution factors based on cost-causation analyses. The methodology used is consistent with the methodology used for all previous SMS/800 tariff filings. The distribution factors actually applied are shown in Table 5. Resulting revenue requirement distributions are shown in Table 4 and include distribution to all SMS/800 services (including those provided to Service Control Point [SCP] Owner/Operators which are offered via contract). Cost-causation analyses were performed and applied to budget elements as follows:

- A Task Oriented Costing (TOC) study was used to distribute SMS/800 Help Desk costs to rate elements. Each person providing Help Desk support was interviewed individually to identify the primary tasks performed, how often the tasks are performed, and the time (minimum, maximum, most likely) spent performing them. Each task was then analyzed and associated with the particular rate element it supports. The resulting distribution factors are shown in Table 5, column (a). All other (indirect) operations and administration costs were distributed to all rate elements proportionally on the basis of the relationship of the magnitude of each element to the total. The calculation method and allocation factors developed are shown in Table 4, columns (f) and (g).
- Data center costs consist primarily of: (a) network equipment and facilities needed to provide communications access for customers' links; (b) storage hardware (tape and disk drives) for toll-free number record data; and (c) central processor used to respond to and execute customer requests for SMS/800 services. *Network costs* are attributable almost entirely to rate elements required to access SMS/800. A unit cost analysis of each type of connection to SMS/800 was used to determine its cost and distribute the network revenue requirement on the basis of the relative, weighted (by demand) cost of each type of access. *Storage costs* are related almost exclusively to number records and were therefore assigned to the Customer Record Administration rate element. *Central Processor costs* are attributable to most rate elements. A two-step analysis was used to determine a reasonable distribution of costs. First, the quantity of lines of computer code used by each SMS/800 software application and platform function were determined and distributed to each rate element supported. Then, usage data reflecting a typical month's internal computer transactions for each software application and platform function was recorded and used to identify the relative usage of processing capacity. Since the relationship between rate elements and software applications/platforms had been established and quantified with the lines of code study, the relationship was extended to processor transactions so that they could be assigned to rate elements. The factors developed with the lines of code and transactions analyses are shown in Table 5, columns (b) and (c), respectively. The composite factors actually used to distribute total data center costs are shown in column (d).
- The cost of software support includes software maintenance, site support and software development for new features. The software maintenance and site support dollars were distributed on the basis of the lines of code analysis described previously since there is a reasonable relationship between the magnitude of software code and the amount of support effort required to maintain it. The cost of new features was distributed by associating each new feature with the rate element it supports. The factors used to distribute software costs are shown in Table 5, column (e).

3.0 Basis of Ratemaking

The rate structure for SMS/800 consists of service elements that are used by Resp Orgs. The proposed rate for each element is based on its projected revenue requirement and demand. This information is shown in Table 6.

4.0 Demand Forecast

The demand forecast displayed in Table 3 is based on the 97 months of historical data from the inception of SMS/800 service in May 1993 through May 2001. Information and/or data considered in developing the demand forecast are discussed in the following sections.

4.1 Customer Record Administration

This rate element represents the quantity of toll-free numbers for which customer records exist in the SMS/800 and is charged on a recurring (monthly) basis for each number record administered. Demand forecasts for June through December 2001, and calendar years 2002 and 2003 were developed with a modeling approach based on time series analysis and curve-fitting of 97 months of historical demand data with Excel's GROWTH and TREND functions.

The GROWTH function returns a mathematical description of the exponential regression curve that best fits a set of known data, while TREND returns the best-fitting linear regression curve. Each function also develops a data set, reflecting its best-fitting curve, which can be compared to the known data to determine how well each curve fits the known data.

Comparison of each curve's data set with the known data disclosed that GROWTH provides a reasonably good fit for the early years (1993-1997), but a poor fit for recent years (1998 through 2001). Results with TREND are the opposite. TREND provides a poor fit for the early years and a good fit for later years. The conflicting results are probably due to the significant variations in monthly demand growth experienced in the early years of SMS/800 service that were caused by rationing and/or allocation of toll-free numbers as available numbers were exhausted, and the temporary surges in demand as new codes were opened. In the later years, monthly growth was relatively stable with no very significant variations. Smoothing of the early years' variations did not improve the fit of GROWTH's exponential regression curve, particularly for the later years. Since TREND provides a good fit for the later (more recent) years that are more critical to the accuracy of near-term predictions, and because its projections for June 2001 through 2003 are reasonable, TREND was used to forecast the CRA demand quantities submitted with this filing based on the full 97 months of historical data.

Although analysis of the historical data revealed demand variations that may be cyclical or seasonal, no adjustments were made due to uncertainty as to their nature and/or the likelihood that they would reoccur in the second half of 2001, or in 2002. Variations caused by rationing and/or allocation of numbers, and the subsequent opening of new codes to make more numbers available could be considered cyclical in nature. However, since the impact of the periods of scarcity were offset by the temporarily high demand growth resulting from the subsequent opening of new codes, and because it currently appears very unlikely that such variations would occur in the 2001-2002 time frame, no adjustments were applied. Actual demand growth for the first five months of 2001 is almost flat. The reduction in growth for this period appears to be related to the softening of the U.S. economy. However, since there is considerable uncertainty as to the duration of the downturn in the economy, and to avoid biasing the demand projections so

that they would be less optimistic, no adjustment was applied. Actual demand for the month of January in five of the eight years examined shows a decline in the rate of growth. The reductions may be caused by the seasonal impact of the holidays in December and January. However, two of the five years with reduced growth in January coincide with periods when number rationing and/or allocation restrictions were in effect casting some doubt on the nature and consistency of the variations. Consequently, a seasonal adjustment was not applied.

Total CRA demand for the eleven-month future period of July 17, 2001 through June 16, 2002 is shown in Table 3. Monthly demand quantities for the historical period of May 1993 through May 2001, and TREND projections for June 2001 through December 2003 are displayed in TABLE 3A.

4.2 Change of Responsible Organization for Toll-Free Number

This element provides for changing the Responsible Organization for a toll-free number and is charged on a non-recurring (per request) basis. Although monthly demand has been volatile, annual demand since 1999 has stabilized at about 100,000 requests per year and is estimated at that level for 2001 and 2002.

4.3 SMS/800 Access

This service element provides for the connection of dedicated and dial-up communications links to the SMS/800 and is charged on a recurring (monthly) basis. Demand for dedicated access has been stable since 1999 and is likely to remain stable in 2001 and 2002. Demand for MGI dedicated access is projected at 40 units per month, and demand for non-MGI access is projected at 65 units per month. Demand for dial-up access has grown at a rate of about 15 units per month since 1997. That rate of growth is reflected in the demand projected for 2001 and 2002.

4.4 Service Establishment

This service element provides for various aspects of establishing service, i.e., first log-on ID, and subsequent (additional) log-on IDs. Charges for these services are applied on a non-recurring (one time) basis. Demand for first log-on IDs has been stable at about 3 requests per month. Demand for subsequent IDs has averaged about 150 requests per month with a growth rate of about 10 requests per month since 1996. Projections for 2001 and 2002 reflect those demand patterns.

4.5 Reports

This service element covers the provision of special reports ordered by users from the SMS/800 Help Desk and is charged on a non-recurring (per report) basis. Annual demand since 1997 has been stable at about 1200 reports per year and is likely to continue at that level in 2001 and 2002.

4.6 MGI Development and Testing

This service element covers the establishment of a mechanized interface to the SMS/800 for a Resp Org's operation system and is charged on a non-recurring (per request) basis. No requests for additional MGI interfaces are anticipated for 2001 and 2002.