

MCA GLOSSARY OF TERMS

NXX code – (also called an office code, exchange code, or central office code) The first three digits of a local 7-digit telephone number, where N can be any number from 2 to 9 and X can be any number. NXX codes are part of the North American Numbering Plan (NANP). As originally designed, it was not permissible to have a 1 or a 0 as the second digit in an NXX and it was called an NNX. This system was changed in January 1995 from NNX to NXX. In conjunction with changes to area code numbering (NPA), which also changed to an NXX format, it is now possible to have more than 6 billion telephone numbers and 792 area code combinations in North America, thus helping to alleviate numbering shortages.

At one time NANP assigned area codes and set rules for calls to be routed across North America. NANP was administered by Bellcore since its formation in 1986. Responsibility was shifted to NANC (North American Numbering Counsel) in 1995; was shifted again in 1997 to Lockheed Martin, and, by approval of the Federal Communications Commission, was shifted again on November 17, 1999 to NeuStar, Inc., who is the current administrator.

MCA NXX code – Unique central office codes used by telephone companies to identify subscribers to MCA service. In each optional MCA exchange, there are subscribers to MCA service as well as customers who do not subscribe to MCA service (non-subscribers). The telephone equipment uses these unique central office codes to route and bill for telephone calls as a local call, rather than a long distance (toll) call.

For example, Orchard Farm Telephone Company is located in tier 3 of the St. Louis MCA. Orchard Farm is a single exchange company that serves approximately 785 access lines. Normally a single block of NXX codes (10,000 telephone numbers) would more than suffice to serve these 785 access lines. However, because some of these customers subscribe to the optional MCA service and some customers do not, Orchard Farm requires 2 NXX codes (20,000 telephone numbers) so that other telephone companies within the MCA may distinguish between Orchard Farm's MCA subscribers and non-subscribers. In this regard Orchard Farm is *not* unique as there are 97 telephone exchanges in Missouri's MCAs; similar examples of all other telephone companies can be found throughout the 3 MCA areas, regardless of the overall size of the individual telephone company.

MCA tier (sometimes also called MCA zones) – geographic areas composed of telephone exchanges roughly concentric to the core telephone exchanges of Springfield, Kansas City, and Saint Louis, as officially shown in local exchange tariffs on file with and approved by the PSC. (MCA tiers are also shown on the Commission's Web site and in Appendix 2 of this Report).

The St. Louis and Kansas City telephone exchanges are composed of the principal zone, and tiers 1 and 2. The Springfield telephone exchange is composed of the principal zone and tier 1. In all three metropolitan areas, the principal zone represents the "downtown"

area. As distances increase from the principal zone, tier numbering increases. Hence, in St. Louis and Kansas City, tier 3 is closest to the principal zone and tier 5 is, on average, the furthest distance from the principal zone.

In the principal zone and tiers 1 and 2 of Kansas City and St. Louis, MCA service is included as part of the rate paid for basic local telephone service and in this regard MCA service is said to be mandatory. Similarly, in Springfield, MCA service is included as part of basic local telephone service in the principal zone and tier 1.

In St. Louis and Kansas City, MCA service is optional to basic local telephone service in tiers 3, 4, and 5 and in Springfield, MCA service is optional in tier 2. Optional MCA service is shown as an optional item on local exchange telephone company bills.

MCA (Metropolitan Calling Area service) – MCA service was established by the Commission in Case No. TO-92-306. Essentially, today's MCA service represents a modification and expansion of the previous WASP service offered by SWBT. Establishment of the MCA in 1993 eliminated numerous other calling plans in existence at the time including: WASP, Optional Measured Metropolitan Service (OMMES), Metropolitan Optional Service Plan (MOSP) and Community Optional Service within the MCAs as well as six Extended Area Service (EAS) routes to the Springfield exchange.

The MCA plan uses a system of telephone exchanges arranged in tiers or "zones" which expand outward from the core metropolitan area known as the central zone. The concept of dividing the metropolitan areas into zones is said to have originated in 1938 when Southwestern Bell Telephone Company consolidated the entire service area of Kansas City, Kansas, Kansas City, Missouri, and nearby suburban and other exchanges in the Kansas City District Exchange Area. The Area was divided into zones, with flat rate calling within a zone and message rates for interzone calling. This system replaced a system of toll charges in the Kansas City area and supplanted SWBT's tariffs filed at the FCC. See *Southwestern Bell Telephone Company vs. United States*, 45 F. Supp 403 (W.D. Mo. 1942).

MTA (Major Trading Area) – A geographic region defined by the FCC for the purposes of issuing licenses to certain wireless telecommunications providers. There are 51 MTAs in the United States. Missouri has two MTAs, commonly known as the St. Louis and Kansas City MTAs.

Return Call Feature – An aspect of MCA service which allows subscribers in optional tiers to *receive* calls from callers in the mandatory tiers and from other subscribers in the optional tiers. The return call feature accounts for MCA being characterized as a two-way calling plan as MCA entails not only the ability to make outgoing calls but also the ability to receive incoming calls from others subscribing to MCA. The return call feature is the reason segregated MCA NXX codes are used for MCA subscribers in optional tier areas. The return call feature was implemented because of the need of callers in the core metropolitan areas to call back out to suburban areas.

Two-way Calling Plan – The ability for a subscriber to have both outgoing calling and the ability to receive incoming calling which is toll-free to others, but without the necessity for the others to modify their service or purchase an additional calling scope.

WASP – Wide Area Service Plan. The WASP plan preceded the MCA plan in St. Louis and was chosen from among six plans proposed to the Commission in Case No. 15,933 decided November 11, 1966 (13 Mo. P.S.C. (N.S.) 1, 39-40). Later, in March of 1967, Kansas City was approved for a WASP after survey results there indicated wide-spread (83.7%) citizen approval of a WASP. Generally, the WASP covered a metropolitan geographic area from downtown and stretching out to include part of what later became today's MCA 3. The WASP eliminated unpopular interzone charges, which became increasingly unpopular as suburban areas became more populous. Based on projections for the year 1967, implementation of the WASP was to have eliminated all but 4.3 million of the anticipated 29.4 million interzone calls in Kansas City and St. Louis. Reduction of these interzone calls represented revenue of approximately \$4.5 million annually to SWBT. The need to increase plant to handle the expected increase in calling if toll-free calling were available resulted in additional costs which were projected by SWBT to be approximately \$1.9 million.

Cross elastic impact – The change in quantity demanded of a good when the price of another good changes. The effect of customers switching to another substitutable product due to a change in the price of the first product.

One zone / One rate plan – A concept that all subscribers in a metropolitan area share commonalities and thus should be included in a single zone and pay the same rate.

Community of interest – A rate design concept that forms the basis of establishing Extended Area Service throughout a community or between two or more political subdivisions. The existence of a community of interest can be determined in several ways. One way is through the testimony of witnesses in the affected areas. Another is a consideration of the geography of the area and the location of housing, schools, government institutions, hospitals, clinics, shopping centers, industries, offices, roads and bridges. Yet another way is to measure the calling volume between communities. Generally, the greater the number of calls made between particular points then the greater the community of interests between such points, and the greater the need for Extended Area Service.

Tier pricing plan – A pricing plan whereby tiers are priced differently with each tier paying on a higher incremental level as distances increase outward from the target tier (or zone).

Mileage additives – Historically, a basic fact of telephone service was that calls over a great distance are more valuable to the caller and generally cost more for the telephone company to provide than calls over shorter distances. Thus, mileage additives, often called a rate differential, were permitted when providing service over great distances,

such as extended area service (EAS) or foreign exchange (FX) service to a distant telephone exchange.

Essential or discretionary services – An aspect of basic rate design principles which holds that for utility services in general, it is generally considered sound public policy to provide essential services at rates which are generally affordable, but that discretionary services can be priced at higher levels, as customers have the option to not purchase the service.

Value of service concept – A concept of basic rate design principles which holds that certain services may be priced above their costs in order to provide a contribution to overall costs. Similarly, services such as business services may be priced above other technically comparable services (i.e. residential service) based on a perception that they are of greater value to the subscriber, who should therefore pay more for the service. At the same time, two services which are perceived as providing about the same value to customers could be priced comparably, based on the perception that such pricing would be “fair.” Value of service pricing is often used to justify higher rates for larger calling scopes. For example, the more subscribers that may be dialed as a local call within a local calling scope, the greater the value of service being received; hence, the higher the rate that should be paid.

Distribution of rate changes among classes of customers – An aspect of basic rate design principles which measures the degree of fairness of a rate design between different classes of customers: For example, business and residential, urban and rural, and between large and small users.

Practicality – A basic rate design concept that attempts to reflect “real world” limitations by setting rates that are simple enough to be understood by customers and implemented by companies. For example, customer confusion and company implementation costs could outweigh any theoretical economic efficiency benefits of providing a large number of expanded calling options. Rate practicality also holds that some amount of reasonable aggregation is necessary. At one extreme, a company could generate customer-specific disaggregated rates for each component of a service (installation, usage, billing, etc.); at the other extreme a single rate could be charged to all customers to recover all costs of providing a given service. The costs to companies and regulators to determine cost-based rates, the costs to consumers to understand a complex rate structure, and implementation costs weigh against too much disaggregation. To be practical, it is often conceded that a rate design must have some reasonable degree of aggregation: bundling of service components, geographic averaging, time-of-day categories, mileage bands, etc.