SWITCHING SYSTEMS MANAGEMENT

DATA ADMINISTRATION

BUSY SEASON DETERMINATION—END OFFICE

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1. GENERAL

1.01 This section is written to delineate the general theories and procedures to be used in busy season determination. Practices describing the unique requirements of specific switching machines may be found in the appropriate sections of Division H of the Dial Facilities Management Practices.

1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.

1.03 Effective engineering and administration of switching equipment and trunking facilities are dependent on accurate data. This makes the selection of the busy season most essential.

1.04 Proper selection of the busy season also permits a minimum amount of data processing to satisy the varied data requirements for a given office. For equipment provisioning purposes, the busy season for local offices is defined as the three months (not necessarily consecutive) having the highest average time-consistent busy hour load. This load is normally expressed in CCS per main station (MS).

1.05 In most offices there is a period of the year, varying from three to eight months, when the loads carried are substantially greater than those during the remainder of the year. This period may span two calendar years. Data must be collected for all business days throughout the entire busy period each year because the busy season months may not be the same three months every year.

2. DETERMINATION

2.01 ***Key Register Method:*** Key registers must be read daily (business days) to determine the months when all data should be processed. The items of equipment which are provided on an average busy season basis should be the determining factor in identifying the busy season—for example, in a No. 5 crossbar, the line link frame sample usage measurement may be used as a key register.

2.02 An average of the usage obtained for the month from the key load registers is divided by the working main stations for that month to obtain the CCS/MS. The busy season for that year is the three months with the highest average CCS/MS.

2.03 The busy season determination should be made within one month after completion of the yearly busy period. The necessary data should be summarized into the proper format and distributed to the appropriate users.

3. RECONSTRUCTON

3.01 Ideally, data for all days of a suspected high month should be provided to insure a true representation of actual traffic load conditions. Generally, there are approximately 20 business

days in a month, with a total of 60 business days in the busy season. There are occasions when data is missing, invalid, out of limits, etc. Sometimes, it is possible to use deductive methods (a) to make reliable estimates of what the register readings would have been if they had accurately depicted machine performance and (b) to reconstruct the data. The only acceptable reason for reconstructing data is to obtain information which depicts machine performance as accurately as possible. The more evidence we have pointing to a particular approximation, the more confident we can be that it is reasonably accurate.

3.02 Reconstruction should be well founded on historical trends of holding times, usage, peg count, etc. It should never be sent to a user without being clearly indicated. It is desirable that the user agree to the inclusion. The methodology used to reconstruct data should be clearly outlined, along with facts on the reason it is included.

3.03 Reconstruction of data is ***never*** permissible when the data is used to compute service or an index.

4. CHECK FOR REASONABLENESS

4.01 The network administrator should make checks of the busy hour study data that are pertinent to the switching systems being studied. Basically, these checks fall into the following five general categories:

(a) Compare usage totals of appropriate components against each other.

(b) Compare usage totals of like groups or frames in the office.

(c) Check day-by-day consistency of usage for each group or frame.

(d) Derive and analyze holding times of various components.

(e) Check usage against service.