TRUNK TRANSMISSION MAINTENANCE INDEX
MECHANIZED SUMMARY PROCEDURE
GENERAL DESCRIPTION

1. GENERAL

1.01 This section provides a general description of the mechanized procedure used to compute the Trunk Transmission Maintenance Index (TTMI). A general description of the index is provided in Section 301-120-100.

1.02 The TTMI Mechanized Summary Procedure consists of a series of computer programs designed to duplicate the manual operations performed in accordance with Sections 301-120-500, 301-121-500, 301-122-500, and 301-123-500. Index tables used in the mechanized procedure are the same as those used in the manual procedure. These tables are located in Sections 301-121-300, 301-122-300, and 301-123-300. The mechanized procedure yields the same results as the manual procedures.

1.03 The TTMI Mechanized Summary Procedure has many valuable advantages over the manual procedures: it saves many hours of clerical labor each quarter, thus allowing more time for corrective action in the field; it provides accurate results and orderly records; and it enables more efficient and flexible use of data.

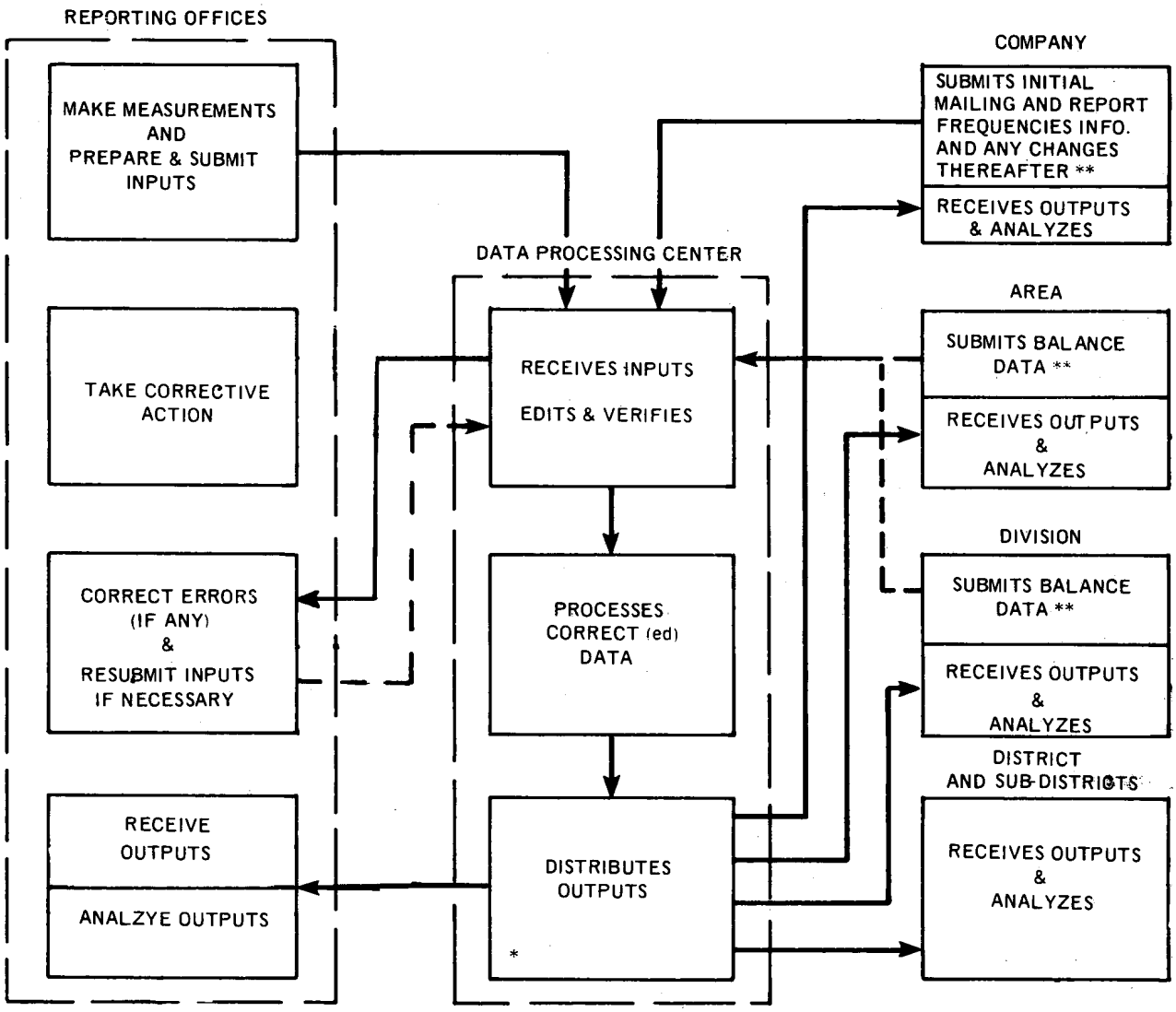
2. OPERATING PROCEDURE

2.01 A procedural flow diagram of the use of the TTMI Mechanized Summary Procedure is shown in Fig. 1. The basic operation is a flow of data (Inputs) from reporting offices to a locally assigned Data Processing Center (DPC). This in turn results in the distribution of processed data (Outputs) from the DPC to appropriate levels of organization in the Plant Department.

2.02 The TTMI Mechanized Summary Procedure starts with a group of inputs which are submitted to the DPC by field personnel. Some inputs such as report frequency and mailing information are submitted to the DPC when the mechanized procedure is initiated and are reissued only when there is a change in the data. The majority of the inputs are prepared by reporting offices and are submitted throughout the quarter. However, the report frequency and mailing information data are submitted by Company Headquarters and the balance data input is prepared at division or area level from results supplied by the Engineering Department. A complete summary of the inputs required by the TTMI Mechanized Summary Procedure and details on their preparation are given in Section 660-403-011. This section should be carefully studied before any attempt is made to begin the mechanized procedure.

2.03 When the input data from the field is received by the local DPC, the information is keypunched onto computer cards. These data cards are then inserted into a series of computer programs and processed mechanically. The initial program is an edit program designed to check the validity of all input data received. An output is generated by this edit program which lists the input number, the date the input data was recorded, the number of lines of data received, and any errors found. The DPC mails this output to appropriate locations, and the reporting offices use it to assure that all submitted data was received by the DPC, and to correct any errors necessary. Errors are listed in coded form, and the error codes are defined in Section 660-403-011, Part 8. The corrected (or correct) data is then processed by the DPC using the remaining computer program sequence, and the resulting computed outputs are appropriately distributed.

2.04 The outputs are distributed by the DPC to the various levels of organization in the company's plant department in accordance with mailing information provided by the company's headquarters. These outputs consist of quarterly loss and noise component results and the quarterly TTMI fully computed for each division or higher level entity. In addition, the outputs to the offices and subdistricts may also include weekly or monthly



* One output is sent to A.T.& T. Co. for preparation of System summaries.

** These inputs are also edited and corrected if necessary.

Fig. 1—Flow Diagram of the TTMI Mechanized Summary Procedure

progress reports on loss and/or noise as requested. Progress reports are requested as directed in Section 660-403-001, Paragraph 2.04. The outputs of the TTMI Mechanized Summary Procedure are described in Section 301-124-110.

3. OTHER ASPECTS OF THE TTMI MECHANIZED SUMMARY PROCEDURE

3.01 The TTMI Mechanized Summary Procedure is flexible and enables companies to make more efficient use of their trunk transmission maintenance data. The flexibility of the results that are obtainable through the use of the mechanized procedure is made possible by the provision for a flexible level of summarization—the subdistrict level. Subdistricts are assigned by a company as directed in Section 660-403-011. They enable grouping offices or trunks within a district for data summarization. For example, subdistrict codes may be assigned to separate local and toll results within a district as shown in Figure 2.

Likewise, where districts are divided into subdistricts by second level supervisors, office groupings may be made as shown in Figure 3.

Subdistrict results are especially valuable to second level and district level supervisors in providing them with information concerning the maintenance performance of the offices that are under their supervision.

3.02 It is possible for one or more operating areas within a company that is mechanized to choose not to use the mechanized procedure. Such areas must submit data to the proper DPC in a specific format as explained in Section 660-403-011. For preparation of System summaries AT&TCo will require quarterly data from all Operating Companies. Companies using the mechanized procedure will be able to use one of their program outputs, the AT&T System Report (Fig. 16, Section 301-124-110), for this purpose. Companies using the manual procedures must submit data on a form designed to duplicate the format of the AT&T System Report output (Fig. 3, Section 301-120-500).

3.03 For the purpose of changing any data entered as a part of the loss or noise reports, the mechanized process includes Noise Correction and Loss Correction auxiliary programs. These programs are used to correct any data which is entered erroneously so that it won't be carried over to subsequent quarters.

3.04 It is the goal of the TTMI Mechanized Summary procedure to aid companies in developing a more effective trunk transmission maintenance program, which in turn will lead to better transmission performance. The mechanized procedure is designed to require less clerical work and thus allow more time for maintenance forces to detect weak spots and apply corrective action.

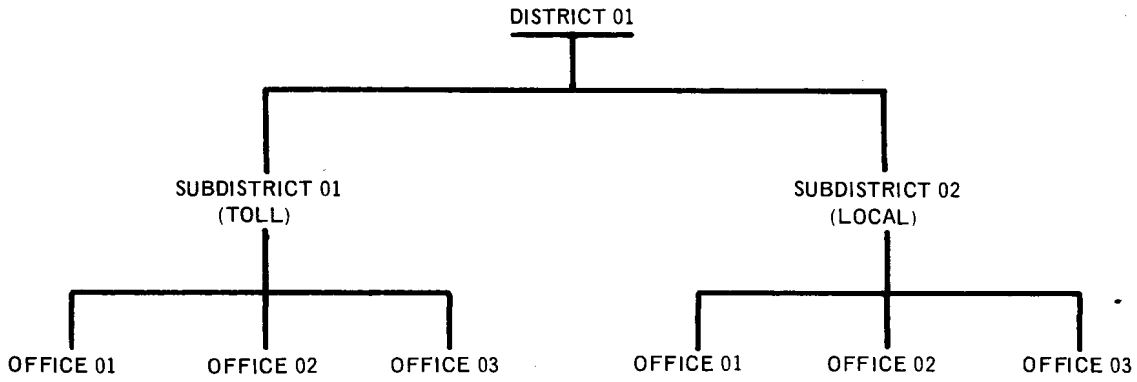


Fig. 2—Subdistrict Codes

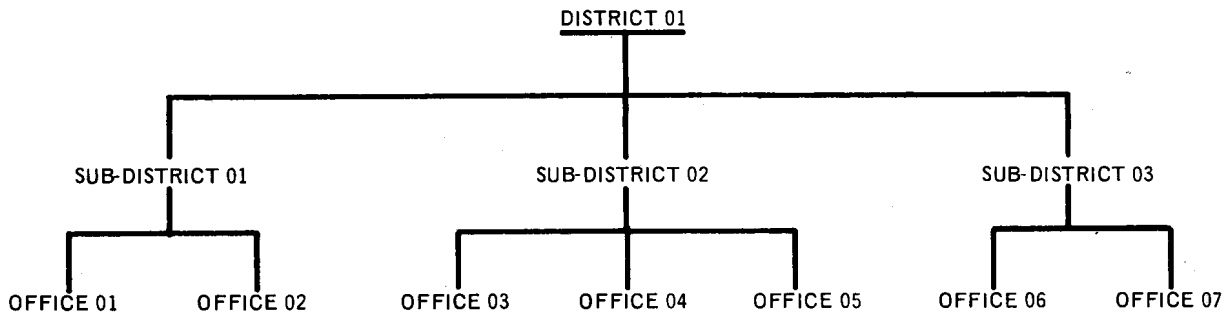


Fig. 3—Office Groupings