OFFICE DATA ADMINISTRATION PROGRAM

DESCRIPTION

NO. 2 ELECTRONIC SWITCHING SYSTEM

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1. GENERAL

1.01 This section describes the office data administration (ODA) system of computer programs used in the No. 2 Electronic Switching System (ESS).

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

1.03 The term ***office data*** includes both translation and office parameter data. Parameter data (furnished by the line engineering organization) defines the physical office to the program such as size (quantity), type of equipment installed, etc. Translation data (furnished by local plant service and line engineering organizations) defines a particular line, trunk, or service circuit to the program as well as routing and charging information. This includes such information as the major class of a line and its billing data, the size of a trunk group, etc.

1.04 Data in the translation and parameter area of the No. 2 ESS program store is structured in tables and data blocks. Provision is made for some types of changes to be made via recent change procedures. Periodic office growth and particular types of changes require a partial or a full restructuring of the translation store. To minimize the No. 2 ESS machine real time and the amount of program restructuring, the ODA system of computer programs is provided.

1.05 The ODA system is run by Western Electric Company (WECo) at the Product Engineering Control Center (PECC) or at a regional computation center. Data is supplied by the local telephone company and WECo organizations. An ODA run for the No. 2 ESS produces one or more of the following:

- The initial loading of the translation and parameter data for a new office—called office data
- An updated loading of the existing translations and parameter data for an in-service office
- A set of computer printed office records for use by the operating company.

1.06 The No. 2 ESS administrative programs permit a continual memory updating capability by the local office. When office growth makes an ODA run desirable, one of two ODA update modes may be chosen: the partial ODA or full ODA run.

1.07 Refer to Section 232-124-301 for procedures to update an office using the ODA system.

2. ODA RUNS

A. Initial ODA

2.01 An initial ODA run (Fig. 1) is defined as an ODA run in which the ODA program contructs the complete translation memory loading solely from new inputs. The initial ODA loading

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is run only once or twice in the life of a No. 2 ESS office—when the translation memory is first specified in a precutover office.

- No old program store image is used.
- A complete set of office records is automatically produced.

B. Update ODA

Partial Update ODA

2.02 A partial update ODA (Fig. 2) is defined as an ODA run in which the ODA program is constrained to change the present location of translation tables only if required. The relocation of tables is minimized to reduce the number of permanent magnet twister (PMT) cards that have to be remagnetized. In a partial update ODA, update PMT cards are provided, not complete modules. The major characteristics of a partial update ODA are listed as follows:

- Both new data and the present program store are merged into a new loading.
- Minimal table movement.
- A recent change update must be performed before the ODA run is made.
- Only essential recent change messages should be inserted during the ODA interval (see 2.08).
- No recent change update may be made during the ODA interval (see 2.08).

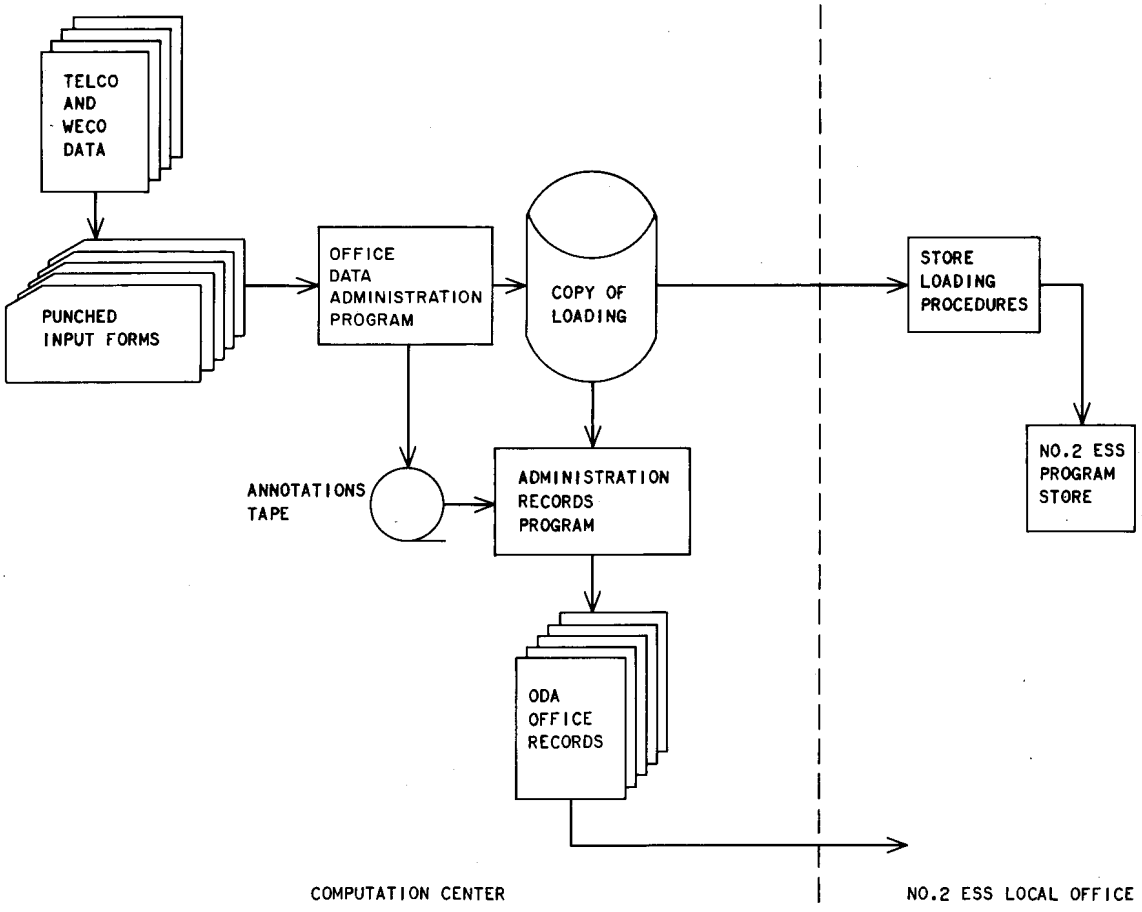

Fig. 1—Initial ODA Run

- Changed cards will be returned via the Administrative Data Link.

- The recent change buffers must be cleared to bring the new translations on-line (recent change initialization).

- Any recent change messages inserted during the ODA interval (including punched tapes of customer-dialed speed-calling list changes) must be reinserted after the new translations are brought on-line.

- New office records are generated per TELCO request.

Full Update ODA

2.03 A full update ODA run is defined as an ODA run in which the ODA program is free to completely repack the translations memory in merging the old translations and the new inputs. In a full update ODA, full modules containing updated PMT cards for all translation modules will be provided. The major characteristics of a full update ODA are listed as follows:

- Both new data and the present program store are merged into a new loading.

- A recent change update must be performed before the ODA run is made.

- Only essential recent change messages should be inserted during the ODA interval (see 2.08).

- Recent change updates may be made during the ODA interval but are strongly discouraged unless essential (see 2.08).

- A complete set of translations modules will be received by the office either transmitted via the administrative data link or shipped from WECO manufacturing.

- The recent change buffers must be cleared to bring the new translations on-line.

- Any recent change messages inserted during the ODA interval (including punched tapes of customer-dialed speed-calling list changes) must be reinserted after the new translations are brought on-line. If a recent change update has been made during the interval, another recent change update will need to be made to reinsert all the changes into the new translations.

- New office records are generated per TELCO request.

C. ODA Office Records

2.04 The ODA will print, via the computer, the office records of all information contained in the program store translation and parameter data areas (Fig. 3). For all other information, existing types of office records will be used by the local operating company. The office records are produced by a process similar to the process that generates the updated PMT cards. The records will reflect accurately the contents of the program store. Also, they will have the legibility of a typewritten copy and may be easily changed by erasure. Unlike the hand-produced record, the ODA office records can be generated again with little trouble whenever desired.

2.05 Remarks and notations, normally found on the office records when made by hand, will be placed on the records by the ODA run. The ODA will read comments from the keypunched input forms and save them on an annotation tape for possible future use when the records are regenerated or updated again. Such remarks may include trunk group names and the old directory number in office changes, etc.

D. Initiation of ODA Run

2.06 Details of changes that require an ODA run are given in the translation guide (TG-2H). In addition, an ODA run may be used in some cases in place of the recent change procedure when large amounts of data are to be recent changed. Examples of changes that may initiate an ODA run are:

- Major equipment growth (that is, network, CPD, storage, trunk frames, etc)

- Adding or changing screening treatments

- Adding new foreign area translators

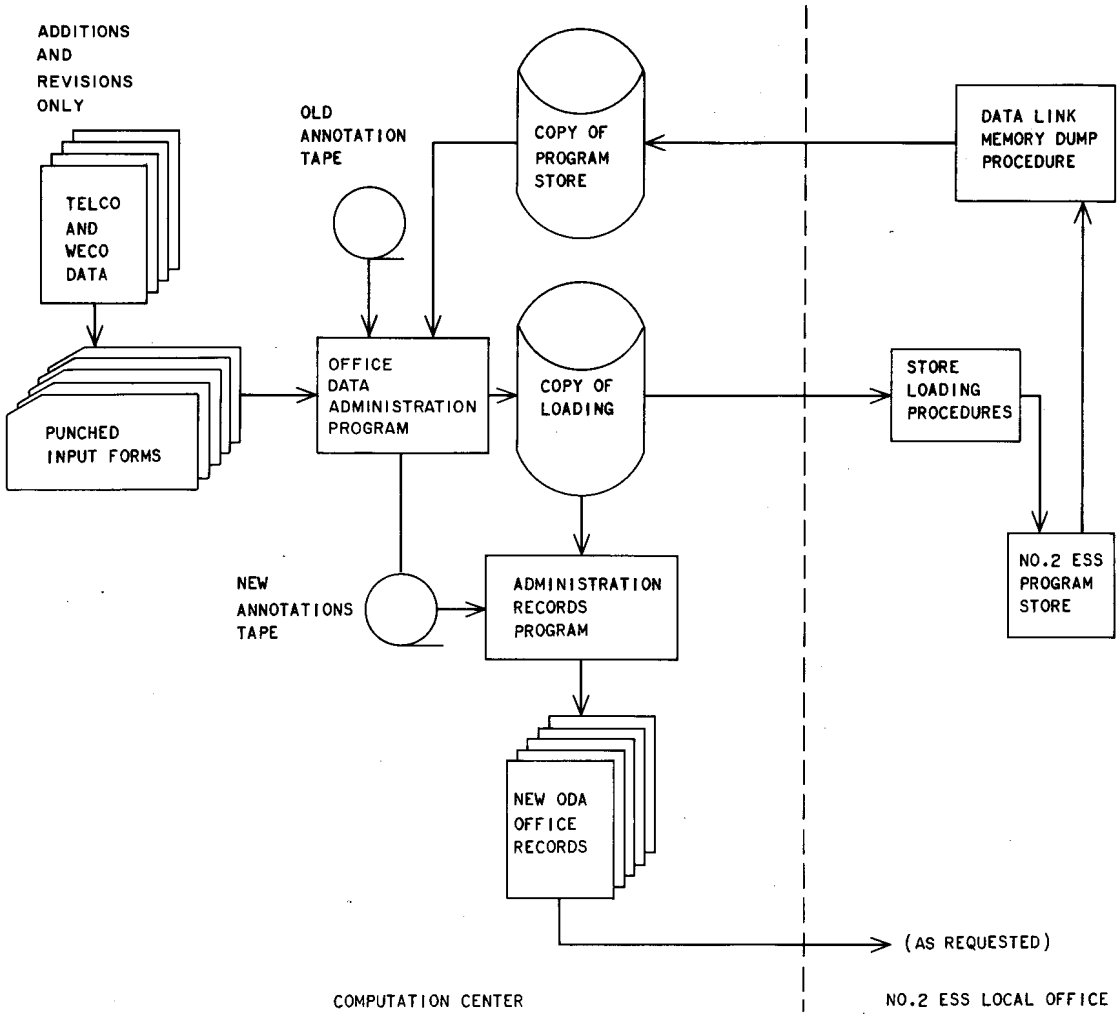

Fig. 2—Update ODA Run

- Adding new charge situations (WATS, extended area service, change in base rate)
- Area cutovers
- New or updated generic program
- Restructuring of data layouts
- Junctor reassignment.

2.07 When the need for an ODA run has been determined, a letter of intent stating the schedule of events should be received by each concerned local organization (office personnel, service orders, traffic, etc). The assigned computation center will schedule the data link time for an ODA run or new office records. In the case of an ODA run to allow for office growth, all additions and revisions on input forms are forwarded to the computation center (see Fig. 2) by the line and traffic engineering organizations.

2.08 An ODA update normally involves two data link dumps of office translations from the No. 2 ESS office to the regional computation center. The first dump is used for trial processing to eliminate errors in the store and/or the input data. An RC update freeze is not required for the first dump because the results of the trial processing are not data linked back to the ESS office. After the trial processing is completed and error free, a

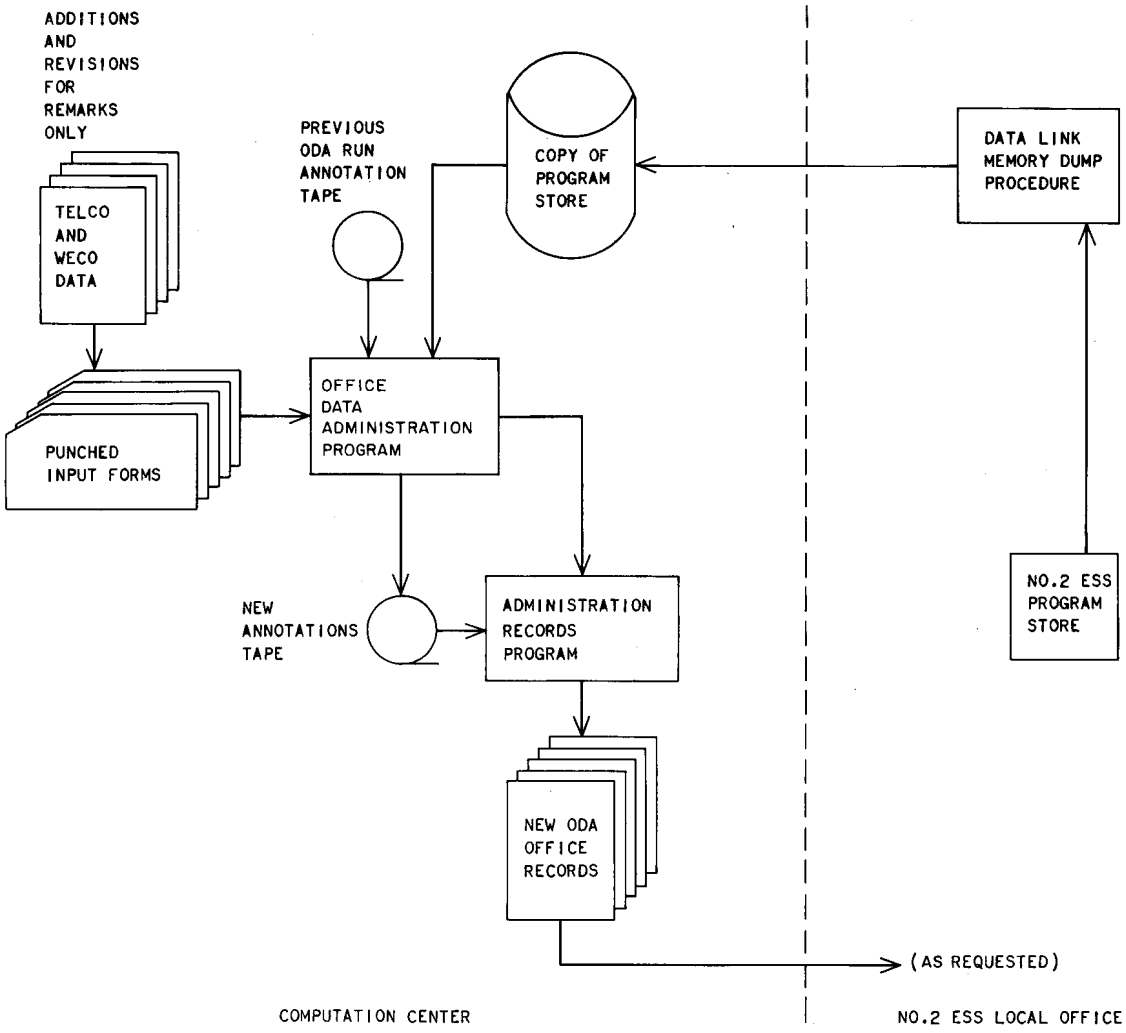

Fig. 3—Office Records Run

period of time called an ***ODA interval*** begins. This is the time between the last RC update just before the transmission of the old data to the regional computation center and the insertion of the new ODA magnetized PMT cards into the program store. During the ODA interval recent change activity (service orders, etc) should be kept to an absolute minimum. ***No updating (remagnetization) on a local office PMT card is allowed when less than full mods of translation cards are to be inserted. Updating is allowed, if needed, when a full set of translation cards is to be inserted, regardless of source.*** Punched paper tapes of customer-dialed recent changes, as well as all service orders, should be maintained during the ODA interval for reinsertion in the exact original order.