

BALANCE SHORT SURVEY METHODS

GENERAL DESCRIPTION

1. GENERAL	1
2. SAMPLE SELECTION	1
3. RECORD INVESTIGATION	1
4. MEASUREMENTS	3
5. RESULTS	3

1. GENERAL

1.01 This section describes the methods used to complete a short survey to determine that balance has been maintained in a toll switching or operator service entity. The procedures are applicable to those having echo return loss (ERL) and singing return loss (SRL) requirements. All class 4 or higher class toll entities and all operator service entities are to be included.

1.02 This section is reissued to include operator service entities in the balance component of the Trunk Transmission Maintenance Index (TTMI) and to make reference to the Expanded Balance Survey. Also, changes are made to emphasize the record investigation part of the balance survey. Since there are extensive changes in the section, change arrows have been omitted.

1.03 These procedures are applied at regular intervals as specified in Section 301-123-500. They are applied to entities that have met all balance requirements in the past, and are used to determine whether the entities have remained balanced or whether any entities require corrective action. The results are also used to compute the balance component of the TTMI.

1.04 Each survey is based on an investigation of records and ERL and SRL measurements obtained on a sample of all trunks in an office requiring balance. The methods provide for the

minimum number of measurements necessary to decide that the balance is satisfactory. If a decision cannot be reached after 20 sets of measurements, an additional 20 trunks are measured. If it is not clear that an entity is balanced or unbalanced at this point, specific action must be initiated as described in paragraph 4.02.

2. SAMPLE SELECTION

2.01 Sample selection involves three steps. The first step is to obtain and record the necessary data about the universe of trunks to be sampled. The second step involves a stratification of the universe of trunks into the categories in Table A. As a part of this second step, a determination must be made of the number of trunks of each class to be included in each 20 trunk sample. Details of this process are discussed in Section 301-133-500. The third step involves the actual selection of trunks to be measured. The selections are recorded on Form E-5588, which is then used to record and analyze the measurements.

2.02 The sample selections are made with the use of random number tables. The process results in the selection of 60 trunks of which as many as 40 may actually be measured, as described in Part 3 and in Section 301-133-500.

3. RECORD INVESTIGATION

3.01 The short survey will include an investigation of the balance records of the trunks selected, Forms E600X or equivalent. Balance measurements made in connection with a circuit order will be transferred to the office balance record per Section 600-450-010. **Any trunk selected for sample measurements for which current records are not available or accurate will be considered to be below minimum balance for survey purposes.**

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

TABLE A

CLASS	TOLL SWITCHING ENTITIES	TSPS	RTA	ACD	AIS	TRUNK CONCENTRATOR
I	Primary Intertoll	Base -- Remote CAMA Transfer Operator Service	Base Remote	Tandem, Trunk Concentrator, ACD, Toll Entity, TSPS Base, To: ACD	Remote AIC to Home AIC Trunk Concentrator To AIC	Concentrator To: ACD AIC ESS TSPS
II	Secondary Intertoll Conference Bridge Trunk (At Switchboards)	Inward Delay Call Service Observing Coin Detection And Announcement Busy Line Verification	Inward	Switchboard To ACD ACD To Switch- board	Switchboard To AIC AIC To Switch- board	Switchboard To Concentrator
III	Intrabuilding Toll Connecting	Position Circuit		Position Circuit	Position Circuit	
IV	Interbuilding Toll Connecting	Incoming Toll Connecting	Incoming Toll Connecting	Class 5 To ACD	Class 5 Office To AIC	Class 5 Office To Concentrator

4. MEASUREMENTS

4.01 ERL and SRL measurements are obtained on the first 20 trunks selected. The measurements are obtained, as specified, in the appropriate instructions for the type of office involved.

4.02 The results of the measurements are summarized and tables are used to determine the probability that the office is balanced. If there is an 0.80 probability or higher that it is balanced, no further measurements are required. If the probability is less than 0.80, an additional 20 measurements are obtained using the second set of 20 trunks selected for the sample. The results of the 40 measurements are then summarized and the data compared with the tables again to determine if there is now an 0.80 probability or higher of balance.

5. RESULTS

5.01 When the probability is 0.80 or higher that the entity is balanced, no further work is required. The entity will continue to be considered

balanced until the next scheduled date for sampling (two years or less from current survey).

5.02 When the short survey indicates a probability of 0.80 or better that the office is not balanced, or the probability is less than 0.80 that the office is either balanced or unbalanced, the transmission engineer must make an Expanded Balance Survey per Section 852-500-110 (see Fig. 1) in toll switching entities. In operator service entities the transmission engineer must take action according to Section 852-400-010.

5.03 If the Expanded Balance Survey indicates that the office still meets the certification requirements, then the office will be scheduled for its next short survey at the normal interval. If the Expanded Balance Survey results indicate poor or questionable balance, the entity will be decertified immediately and will lose the index points attributed to it. Entities that have been decertified must meet the requirements in Sections 852-400-010 and 853-500-110 to be recertified. (Refer to Section 301-123-100, Part 6, for information on the impact to the TTMI balance component.)

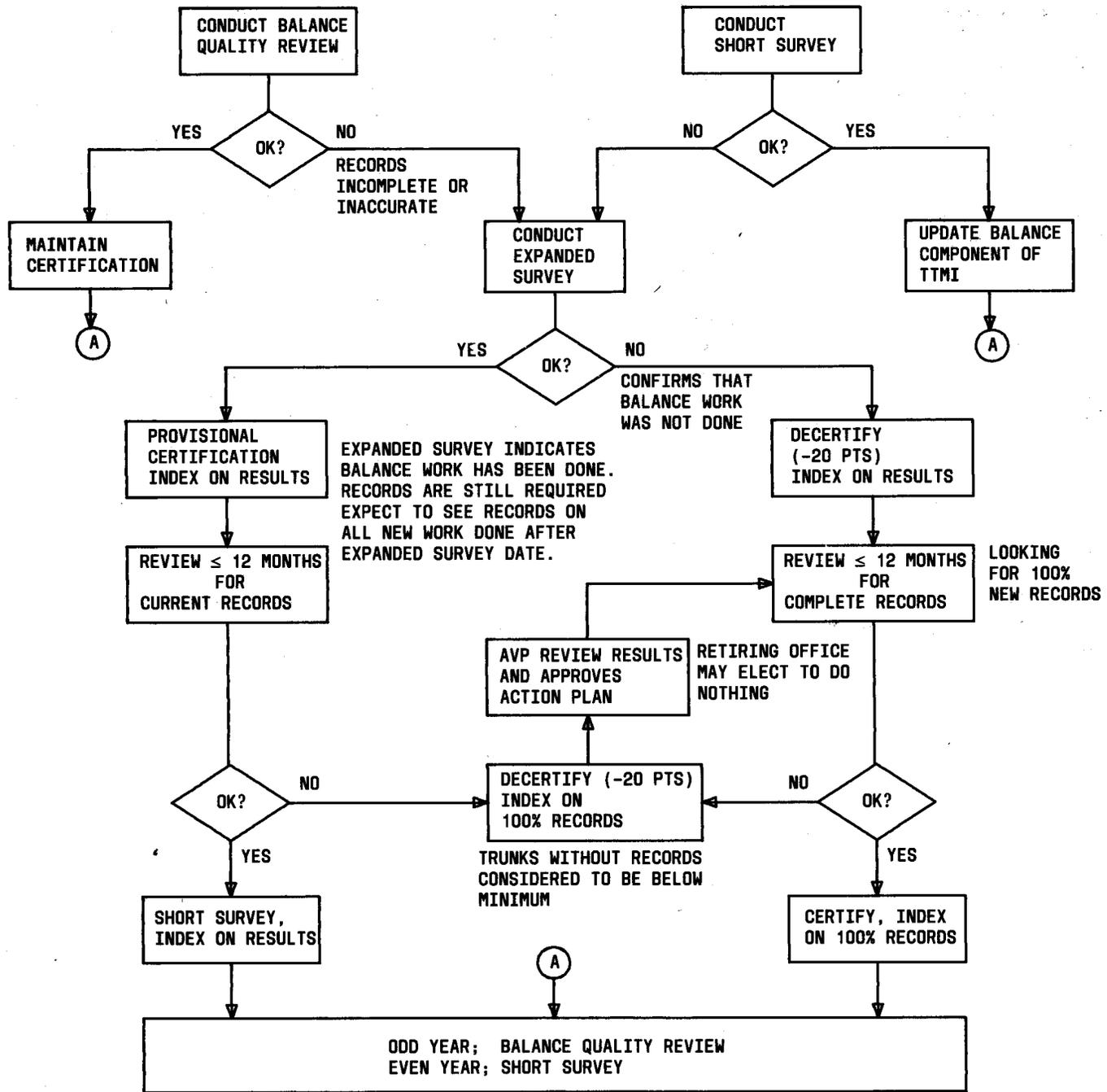


Fig. 1—Flowchart For Balance Survey and Review