

## CABLE TRANSFER ADMINISTRATION

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### 1. GENERAL

**1.01** This section provides management with instructions and procedures for coordinating and managing the various groups involved in cable transfers.

**1.02** This section replaces the Cable Transfer Administration Plan, Parts I and II, December, 1974, AT&T Standard.

**1.03** While titles used in this section may vary in different companies, they shall apply to employees who have supervision over a particular function of the cable transfer effort described in this section or to employees who have been assigned to perform the duties described.

**1.04** This section provides detailed instructions and procedures for administering cable transfers. It prescribes the "Cable Transfer Committee" as the principal vehicle for the management and coordination of cable transfers. It also defines individual responsibilities for all force groups involved in cable transfer work.

**1.05** The use of these procedures will reduce service-affecting troubles, reduce the overall cost of cable transfers, and permit balancing work force and work load for all groups involved. By completing cable transfers promptly, in accordance with the schedule, changes to transfer sheets will be minimized, the need for re-running jumpers will be reduced, testing forces can be properly scheduled, and time spent on field work can be shortened. The errors, frustrations, and probability of cable troubles associated with delays in this kind of work can be virtually eliminated.

### 2. CABLE TRANSFERS

**2.01** The toning, identifying, and subsequent transferring of working cable pairs is complex and time-consuming. The work is further complicated by the many functions required of other work groups. To ensure that these operations are performed free of service interruptions and with maximum efficiency, exact timing and close coordination among all the work groups involved is mandatory.

**2.02** The same coordination is required to complete drop wire reconcentrations (rewires). The Cable Transfer Committee is also responsible for coordinating this work in a timely manner to ensure proper utilization of plant and cut and removal of plant being replaced.

### 3. CABLE TRANSFER COMMITTEE

**3.01** A Cable Transfer Committee must be established in each district to ensure close coordination and proper timing of cable transfers.

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**3.02** Districts that cover a large service area [having more than one assignment office (AO) or Repair Service Bureau (RSB)] may require more than one committee.

### 4. PERMANENT COMMITTEE MEMBERS

**4.01** Cable Transfer Committee members shall consist of management representatives from the RSB, the AO, the central office main distributing frame (MDF), outside plant engineering, and the outside plant construction force groups. When required, the Transmission Design Engineer and Long Lines and telephone company Special Service Test Centers also should be represented.

**4.02** The outside plant Scheduling Engineer or Construction Management Center supervisor shall chair the committee.

**4.03** The appropriate outside plant supervisors shall be included in the meetings to coordinate reconcentration of drops, clearing defective pairs, and redesign of plant to accommodate special services, where necessary, to complete the cable transfer.

**4.04** The chairman shall convene meetings at 2-week intervals, or more frequently if transfer activity dictates.

**4.05** One or more second level managers should supervise the meetings on a rotating basis, with a third level manager monitoring the meetings frequently enough to ensure that all groups are fulfilling their responsibilities.

### 5. CABLE TRANSFER COMMITTEE RESPONSIBILITIES

**5.01** Prior to the meeting, each member will ensure that the status of work for which they are responsible has been reported to the engineering representative. The engineering representative is responsible for updating the Cable Transfer Schedule, Form E-6358 (Fig. 1) and keeping it updated for subsequent meetings. All pending transfer work on approved work orders should be listed. Major reconcentration (recon) work also should be included.

**5.02** The Construction Management Center supervisor or engineering representative will indicate on Form E-6358 that transfer work which must start in the next scheduling period to conform

with the engineering schedule and service requirements. Copies of the updated Form E-6358 should be received by the committee members 2 or 3 days prior to the meeting.

**5.03** The committee will review all cable transfers and recons by priority, based on service requirements, the need for facility relief, splicing sequence, etc. In particular, review deferred scheduled transfer work that is over 30 days old for rescheduling or possible cancellation.

**5.04** The committee will schedule all cable transfers, recons, and supporting work which must be completed in the next 4-week period, giving first priority to work already in progress. The revised and updated Cable Transfer Schedules will be distributed to all committee members and higher levels of management, as required, after each meeting.

**5.05** When scheduling transfers, consideration must be given to work tours and peak load periods of all work groups to optimize the continuity of the cable transfers. Consideration also must be given to time required by construction to complete preliminary work, by assignment to analyze and lay out the transfer, by the circuit provision bureau to check the design of special services, by engineering, construction, and installation to make the resulting changes, and by the RSB to negotiate with special service customers. Transfer sheets should be distributed five (5) days before splicing work is scheduled to start, unless the transfer is of such size that more than five (5) days are required. All work groups must recognize that an agreed-to schedule is a firm commitment. Deviations will cause extra work and expense to other involved forces.

**5.06** Force load requirements shall be determined to meet the cable transfer schedule for an economical, trouble-free, and orderly flow of work.

**5.07** Past transfer performance shall be reviewed at each meeting to identify roadblocks and to initiate corrective action. Actual completions should be compared with scheduled dates to determine trend and to identify any force falling behind in meeting commitments.

**5.08** The committee shall give special consideration to cable transfers in cables that feed airports, centrex customers, power companies, etc, to

determine if release times out of the ordinary may be required. Existing local policies shall be followed carefully to prevent service interruptions.

**5.09** In districts where a mechanical scheduling procedure (such as MS) is in use, the committee should monitor and adjust the resources input for assignment and frame and receive Dispatched Work Reports [(01) Reports] for the forces involved in wire transfers or recons (rewires) and cable transfers.

## **6. ASSIGNMENT OFFICE RESPONSIBILITIES**

**6.01** The AO responsibilities are described in 6.02 through 6.15. Specific details are covered in Sections 680-300-010, -011, -012, -013, and -014.

**6.02** Prior to the preparation of Form E-2573, Cable Transfer sheet or Form E-2573-A, Combination Transfer sheet, the AO shall furnish a copy of the Exchange Customer Cable Record (ECCR) and/or local forms, showing the pairs in the cable transfer that are to be verified and tested to the central office MDF force. For transfers beyond an interface, the verification request shall be sent to the appropriate work force. The date the information is required to meet the transfer schedule also should be shown.

**Note:** It is important that the ECCRs and local forms be clearly marked "From" and "To" to enable the proper tests and verifications to be made.

**6.03** Upon receipt of the verified cable records from the verifying work force, the AO will proceed with preparation of the Cable Transfer sheets to meet the scheduled commitment.

**Note:** Cable Transfer sheets or Combination Transfer sheets involving central office work should not be prepared by the AO before the "To" and "From" counts are verified and all vacant "To" pairs are tested.

**6.04** Defective "To" pairs that must be cleared in order to prepare the cable transfer shall be referred to the outside plant engineer, who then will issue the necessary work orders for clearing. The date the pairs are required shall be indicated. It shall be the responsibility of the cable maintenance force to identify pairs that cannot be cleared by the required date, and to so inform the engineer.

**6.05** Work required to clear defective "To" pairs prior to the cable transfer shall be recorded on the appropriate form (Cable Transfer, Combination Transfer, Line or Station Transfer, or construction work order) and dispatched to the MDF and splicing or other outside plant forces as appropriate. Completion dates to meet the Cable Transfer Schedule shall be indicated.

**6.06** The AO shall identify all special services and mark the transfer sheets as outlined in Section 680-300-012.

**Note:** Existing local practices and policies shall be followed carefully to prevent service interruptions to these circuits.

**6.07** The AO shall identify on the transfer sheets all lines which cannot be half-tapped, such as loaded pairs, lines with excessive bridge tap, special equipment lines such as bridge lifters, secretarial cutoff, etc. Lines that cannot be identified by the AO will be specified by the outside plant engineer on the engineering work order.

**6.08** All verified defective pairs associated with the transfer (both "To" and "From" counts) shall be recorded on Form E-4108, Report of Defective Cable Pairs and/or Spare Pair Verification List. The form should be attached to the transfer sheet for further testing and isolation by the splicing and RSB forces, as outlined in Section 680-300-012 and the Defective Pair Administration Plan.

**6.09** It is important that the continuity of vacant connect-through (CT) or dedicated (DOP) pairs be maintained for future service.

**6.10** ECCRs shall be marked to reflect that a cable transfer is involved. Subsequent activities such as service orders and line or station transfers in the pair count to be transferred shall be routed within the AO to the person responsible for the cable transfer. Any revisions to the transfer sheet shall be referred to the RSB, MDF, and splicing forces.

**6.11** The transfer sheets and defective pair sheets shall be distributed at least 5 working days before splicing work is scheduled to start. The AO shall post their copy of the Cable Transfer Schedule for review at the next Cable Transfer Committee meeting.

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**6.12** After the defective pairs have been isolated by the splicer, the information shall be posted to Form E-4108 and forwarded to the RSB or AO for posting in the cable records, as shown in Section 680-201-010, and in the defective pair file.

**6.13** After completion of the cable transfer, and upon verbal notification of completion to the AO or receipt of the completed Form E-2573, Form E-2573-A, or Form E-2574 by the AO, all appropriate AO records will be posted to reflect the transferred pairs and defective pair information.

**6.14** The engineering representative shall be responsible for reviewing the status of all pending Cable Transfer sheets, Combination Transfer sheets, or Line or Station Transfer sheets. Any transfers not completed within a reasonable time (usually 30 days) will be brought to the attention of the Cable Transfer Committee for action (cancellation, revision, or rescheduling).

**6.15** Copies of Form E-6358 on which all work has been completed shall be retained for **90 days**.

### 7. MAIN DISTRIBUTING FRAME RESPONSIBILITIES

**7.01** Upon receipt of the ECCR or local forms listing pairs to be transferred, the MDF force shall proceed as follows:

- (1) Verify all working pairs in both the "From" and "To" counts by dial-up, tone, or pulling the jumper for each telephone number or special circuit and check for any vacant pairs not listed, with or without a jumper.
- (2) Test all vacant pairs in the "To" count, using the Go-No-Go Test Set or the equivalent.
- (3) Any discrepancy found as determined in (1) or (2) shall be posted and the forms returned to the AO by the date shown on the schedule.

**Note:** Verifications and testing are extremely important in preventing future service interruptions, unresolved discrepancies, and costly delays.

**7.02** The transfer sheets will be distributed by the AO at least 5 days prior to the start of splicing work. Upon receipt of Form E-2573,

Form E-2573-A, or Form E-2574 from the AO, the MDF force shall open the "To" pairs by replacing the heat coils (if any) with dummy coils, run the cross-connections in advance of the cable transfer, and tie down all lines except those identified by the AO, eg, special circuits, party-line reassociations, etc. The cross-connections shall be back-tapped in accordance with Division 069 of the Bell System Practices. After placing the cross-connections, the MDF force must test them, and any discrepancies found shall be corrected and forwarded to the AO for updating of records, if appropriate. After placing and testing the cross-connections, the MDF copy of the Cable Transfer Schedule shall be posted by the frame supervisor for use at the next cable transfer meeting. An alternate method of accomplishing a cable transfer is by using Front Tap Shoes, as described in Section 634-350-505. The test connectors (Front Tap Shoes) are described in Sections 106-315-119, -120, and -121. Using this method, the transfer can be completed **before** the jumpers are placed on the MDF.

**7.03** When notified by the RSB that special circuits are to be transferred, the frameworker shall be available to stay on the 3-way communication circuit (described in 8.03) until released by the RSB.

**7.04** The RSB shall advise the MDF when to engage the heat coils in the new count and when to remove them in the old count.

**7.05** Pair identification to construction may be accomplished by use of an automatic pair identifier or by tone method. Whichever method is used, the MDF force normally shall perform the functions at the frame. However, at times it may be more efficient and economical for construction to perform the pair identification task themselves (for example, certain out-of-hours conditions or an unusually heavy pair identification work load, and unattended central offices). This should be determined in advance by the committee.

**7.06** When notified that the cable transfer is completed, the frame personnel must remove all dead jumpers.

**Note:** Be sure that no other bridges or taps are involved before handling or removing jumpers.

## 8. REPAIR SERVICE BUREAU RESPONSIBILITIES

**8.01** The RSB is responsible for verifying and coordinating the work of construction and the MDF activities associated with cable transfers and should test all of the affected lines in a cable transfer. The RSB will maintain control of all special circuit transfers. The RSB also should remind other work groups involved that special service protection devices such as binding post insulators and distributing frame guard devices should be placed or removed as required.

**8.02** The RSB shall coordinate the release and transfer of special circuits as outlined in Sections 660-101-303 and 660-200-300. The time and date for each circuit release shall be recorded on the RSB Cable Transfer sheet.

**Note:** Time and date of release must be negotiated in advance of the cable transfer. No work shall be permitted on circuits requiring release until a method of procedure, including release date and time, has been established by the RSB and approved by the customer and the company-designated supervisor responsible for those special circuits. When the RSB receives word of specific or out-of-the-ordinary release requirements, the Construction Management Center supervisor and MDF foreman must be notified sufficiently in advance to permit scheduling of their forces.

**8.03** During larger, more complex, or troublesome transfers, 3-way communications should be established between the RSB, the MDF, and the splicer. The RSB need not remain part of the communication circuit during the entire transfer operation, but must be readily accessible. The RSB shall remain on the circuit and maintain control of all transfers of special circuits. Use of the 3-way communications circuit should be decided during the cable transfer meetings.

**8.04** The RSB shall call the AO the day of the cable transfer to check for corrections to the transfer and to cope with any unforeseen problems encountered in the field that would require new pair count assignments.

**8.05** On the day of the transfer, when construction calls for an opening number (Section 620-020-005 or 660-101-302), the RSB shall verify that proper measures have been taken to maintain air pressure.

The RSB also shall query the AO or other force groups if anything has happened that would cause delays or problems during the transfer, such as cable trouble, changes, corrections, out-of-hours release times, etc.

**8.06** The RSB will post the opening and closing number of the transfer on the Cable Transfer sheets.

**8.07** The RSB shall compare Cable Transfer sheets, defective pair lists, special circuit markings, etc, with construction to determine that both are in agreement.

**8.08** The RSB shall arrange with construction and the MDF to transfer special circuits and other circuits that require release or special handling.

**8.09** After discussing special arrangements with the MDF and construction, the RSB will notify the splicer to start the cable transfer.

**8.10** The splicer will transfer the first five lines and request a test of the transferred circuits.

**8.11** The RSB will make the tests and, if satisfactory, instruct the splicer to proceed.

**8.12** The RSB will test all affected circuits completed by the splicer as the transfer progresses in order to minimize customer outage or delay in completing the transfer and closing the splice (see Section 660-101-303). The splicer need not wait for verification of the subsequent tests unless problems are encountered. The splicer, however, will inform the RSB of progress, as described in 9.03(10).

**Note:** Automatic test equipment such as the Line Status Verifier (LSV) or Mechanized Loop Testing (MLT) should be used to accomplish large volume testing.

**8.13** After all work is complete and upon request from construction, the RSB shall make every effort to determine that no trouble exists, and assign a closing number. The RSB will notify the AO of completion of the transfer, along with any changes. The RSB also shall notify the MDF that the transfer is complete and the dead jumpers are to be removed (see note following 7.06).

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8.14 The RSB will post the transfer sheets as completed. The RSB records will be updated promptly, after which the RSB will forward the completed transfer sheets to the AO.

### 9. SPlicing FORCE RESPONSIBILITIES

9.01 The splicing supervisor or the Management Center supervisor shall contact the RSB and MDF the day before the scheduled cable transfer date to verify that all preparatory work is complete.

**Note:** The transfer should be in accordance with the splicing sequence indicated by engineering.

9.02 If Front Tap Shoes are to be used for pair identification, the splicing supervisor or the Management Center supervisor must contact the MDF supervisor at least one (1) day before the scheduled transfer and request that they be placed.

9.03 On the day of the cable transfer, the splicing force shall:

- (1) Make pressure readings and record same on the work prints.
- (2) Place auxiliary air sources or tap air pipes to maintain air pressure as required (see Section 637-305-303).
- (3) Call the RSB and obtain a cable opening number (Sections 620-020-005 and 660-101-302); also, relay pressure readings and auxiliary air source locations, as determined in (1) and (2), to the RSB.
- (4) Verify with the RSB that both copies of the transfer sheets are in agreement for all listed information.
- (5) Request the RSB to establish the 3-way communication circuit with the RSB, MDF, and splicer if this circuit will be required.
- (6) Request the MDF to attach the pair identifier to the Front Tap Shoes or, if the tone method of pair identification is used, request the MDF to commence sending tone on the pairs to be transferred (both "From" and "To" counts) to the splicer.

(7) Request the RSB to have the MDF place the heat coils in the new count (normally 50 pairs at a time) after pair identification.

**Note: Special circuits will require individual attention.**

(8) Proceed with the transfer of the first five lines.

(9) Request the RSB to test the first five circuits transferred and, if satisfactory, proceed with the transfer, normally in 25- or 50-pair groups.

(10) The splicer will inform the RSB of progress with the transfer (normally 25- or 50-pair groups). It is not necessary to wait for verification of the tests to continue the transfer if no problems have been encountered.

**Note:** This requires close coordination between the splicer, MDF, and RSB.

(11) Complete the cable transfer by throwing the half-tapped pairs, using the AT-8241 L1A test set (cut-closed set). See Section 634-350-515.

**Note:** For uninterrupted service, the transfer must be made with the AT-8241 L1A test set or equivalent.

(12) Test defective pairs in both "To" and "From" counts as shown on Form E-4108, Report of Defective Cable Pairs and/or Spare Pair Verification List for verification to determine direction of trouble. Previously unknown defective pairs that are detected during the transfer will be added to Form E-4108 by construction. This information is to be forwarded to the RSB, the AO, and the force responsible for maintaining the Defective Pair File.

(13) Make sure all transfers have been made as indicated and then request a closing number (Sections 620-020-005 and 660-101-302) from the RSB. After a closing number has been obtained, the splice may be closed.

9.04 The construction or engineering representative on the Cable Transfer Committee should prepare a proposed transfer schedule before the transfer meeting which shows a firm schedule for the following 2 weeks and a tentative schedule for the subsequent 2 weeks, using Form E-6358,

Cable Transfer Schedule. This proposed schedule is prepared based on priorities of transfers, ie, service dates requested by engineering, pending held orders, splicing sequence, age of job, etc, and will be used by the committee to develop the final version of the Cable Transfer Schedule (see 5.02).

#### **10. OUTSIDE PLANT ENGINEERING RESPONSIBILITIES**

**10.01** In addition to the duties described in this section, the representative for outside plant engineering on the Cable Transfer Committee shall function as a technical advisor relating to the various cable transfers proposed.

**10.02** The representative must coordinate closely with the assignment supervisor and other committee members in establishing priorities and scheduling dates for the transfers.

**10.03** Some outside plant rearrangement or transfer work orders will require a splicing sequence. When a work order is issued which requires a splicing sequence, the outside plant engineering

representative will verify its existence. If none exists, one shall be obtained from the design engineer.

**10.04** To assist in scheduling, the number of working circuits and special circuits involved in each transfer should be noted on the work order.

**10.05** The outside plant engineering representative is the member of the committee primarily responsible for reviewing old work orders involving cable transfers and establishing the continuing need for the cable transfer. After the review, the outside plant engineer shall:

- (1) Reschedule the transfer as originally prepared, or
- (2) Initiate revision of the transfer so that it will be compatible with the existing conditions of the transfer, or
- (3) Issue a cancellation of the particular transfer in question.

CABLE TRANSFER SCHEDULE INSTRUCTIONS

- COL. ENTRY
- Identify the wire center involved in the job.
  - Routine order or estimate number and print. Place splice number in triangle to identify location of transfer or splice controlling rewire.
  - Number assigned by assignment.
  - Number of pairs being transferred in this splice. Blank for rewires.
  - Number of working circuits being rearranged by the transfer or rewire.
  - Number of special circuits included in the working pairs in 5.
  - 7-16. Schedule dates to be entered by forces involved, working from required "Field Work Complete" date (provided by engineering or construction); actual dates to be posted by assignment.

NOTES

No other request forms should be required to accomplish the work.

This schedule should govern the work of the forces involved.

If any comments or references are necessary, use separate line.

If jobs are rescheduled, place asterisk by new scheduled date.

If a force has no work on a given job, put "NA" in SCHED block and a dash in ACTUAL block.

9-24-76 DATE

- CABLE TRANSFERS  
 REWIRES

CABLE TRANSFER SCHEDULE

WIRE CENTER 1	ORDER, PRINT AND SPLICE NO. 2	TRANSFER OR REWIRE NUMBER 3	TOTAL PAIRS 4	WORKING PAIRS INVOLVED 5	SPECIAL CIRCUITS INCLUDED 6	~	CHECK ECCR		CLEAR TROUBLES		ASSN COMPL. 11	C.O. COMPL. 12	FIELD WORK		E4108 POSTED 15	BT REM. 16	
							TO C.O. 7	RET. TO ASSN 8	START 9	COMPL. 10			START 13	COMPL. 14			
327	44-1236 <sup>4</sup> △	T-36	150	67	0		SCHED	10-7	10-10	10-13	10-17	10-22	10-29	10-30	10-31		
							ACTUAL										
327	E-4820 P18 <sup>6</sup> △	T-37	50	12	2		SCHED	9-22	9-26	9-29	10-3	10-7	NA	10-9	10-10		
							ACTUAL	9-21									
327	" <sup>8</sup> △	T-38	200	89	0		SCHED	9-10	9-17	9-22	9-25	10-17*	10-24*	10-28*	10-31*		
							ACTUAL	9-10	9-17	9-22	9-24						
Ram	44-1128 P.1 <sup>2</sup> △	T-28	100	23	5		SCHED	9-9	9-11	9-15	9-19	9-22	9-25	10-1	10-3		
							ACTUAL	9-9	9-10	9-14	9-19	9-19					
Rwd	E-4503 P6 <sup>2</sup> △	T-16	900	267	12		SCHED							12-8	12-15		
							ACTUAL										
Wyc	44-1076 <sup>3</sup> △	T-08	100	18	0		SCHED	9-2	9-5	9-8	9-10	9-15	9-18	9-22	9-23	9-30*	10-3
							ACTUAL	8-29	9-3	NA	NA	9-15	9-18	9-22	9-22		
							SCHED										
							ACTUAL										
							SCHED										
							ACTUAL										

\*RESCHEDULED

Fig. 1—Typical Entries on Cable Transfer Schedule