

**Task Oriented Practice
(TOP)**

**4ESS™ SWITCH
TRAFFIC AND PLANT MEASUREMENTS**

4E18/4E19 GENERIC PROGRAM

MACHINE ADMINISTRATION CENTER

Developed by
Customer Information Development and Business Translations Organization

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FIND YOUR JOB IN THE LIST BELOW THEN GO TO

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Allow/Inhibit Measurement Of Time Slot Interchange (TSI) Usage	NTP-008
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Acceptance tests do not apply to the procedures contained in this volume.

ACCEPTANCE

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GENERAL

Measurement report zero (0) is the Traffic Data Administration System (TDAS) report.

CHARACTERISTICS

Report 0 has some characteristics that are not common to those in reports 1 through 23. The following are significant differences:

- There are 17 TDAS measurement classes (TDASMC) 0-9 for report 0.
- TDASMCs 3, 4, and 8 can be administered to contain specified measurement subclasses (MSCs). The other TDASMCs are generic controlled.
- The report accumulation interval (ACCINT) is fixed at 1 hour.
- Each hour, TDAS measurements are moved to the Attached Processor System (APS) disk. Some measurements can also be optionally moved to a TRF tape.
- TDAS report data is available to the TDAS center at any time by way of dial-up port.

TDASMC 3, 4, AND 8 ASSIGNMENTS

Although there are 17 TDASMCs available, only 3, 4, and 8 can be administered by the Machine Administration Center (MAC). To change TDASMC 3, 4, or 8, the MSC must first be deleted and the new MSC added.

The following tasks are required for establishing TDASMC 3, 4, or 8:

- Delete MSC from TDAS measurement class (TDASMC) 3, 4, or 8 NTP-007
- Add MSC to TDAS measurement class (TDASMC) 3, 4, or 8 NTP-005

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GENERAL

Measurement reports 1 through 23 can be used to identify and schedule traffic and plant measurements defined in the 4ESS Switch reporting system. This allows a user to obtain reports containing only the measurements required.

REPORT DATA ACCUMULATION

TSI USAGE MEASUREMENTS

To be included in the 4ESS Switch traffic and plant measurement reporting routine, Time Slot Interchange (TSI) frames must be designated for usage measurements. The Switching and Permuting Circuit (SPC) 0 or 1, within the frame must also be designated to define the usage measurement report.

MSCOMS PAIRS

Within the 4ESS Switch traffic and plant measurement reporting system, numerical counts are accumulated in groups of data known as Measurement Classes (MCs), Measurement Subclasses (MSCs), and Output Measurement Sets (OMSs). Simply stated: MCs contain MSCs, MSCs contain OMSs, and OMSs contain individual measurements. In more detail, there are approximately 30 MCs containing a total of 56 MSCs. Each MSC contains a number of OMSs ranging in value from 0 to 2047. Within each OMS are individual measurements, all of which take place when the OMS is specified. Desired measurements are obtained by entering a six-digit number representing the Measurement Subclass Output Measurement Set (MSCOMS) pair. It is not necessary to identify the measurement class (MC) or the measurements within an output measurement set (OMS) when establishing a report.

TGs and TSGs

All measurements related to Trunk Subgroup (TSG) Circuit Identification Number(s) (CINs) are accumulated in one MSC. Instead of entering MSCOMS pairs to identify the

desired measurements, the TSG or Trunk Group (TG) CIN is entered. The reporting system assigns the function to MSC 13. Up to 64 TSG CINs can be listed in one report. If the TSGs listed are entered as a group under a TG CIN, the number of TSG CINs within the group cannot exceed 64.

ADMINISTRATION CHARACTERISTICS

Some significant administrative characteristics common to reports 1 through 23 are:

- Once established, a report remains active until deleted.
- Reports are printed out at assigned terminals. Up to five terminals can output a report simultaneously.
- Reports scheduled for output at the same time are printed out in ascending numerical order.
- A period of 15 minutes, beginning at the output time, is allocated for all reports scheduled to print out at that time. Any report data not printed out within the allotted time is lost.
- PRIM and MAXM are keywords which must be entered to establish the primary channel and maximum count for a measurement report. To change either or both keywords, the report must be deleted and reestablished.
- TSGCAP is a keyword used as a preface for the number of TSGs allowed in a report. To add TSGCAP to an existing report or to change the numbers within a TSGCAP, the report must be deleted and reestablished.
- ENGMEM is a keyword used to indicate that extended memory is required for a report because the accumulation interval (ACCINT) assigned is more than 1 hour. A report must be deleted and reestablished if ENGMEM is added to or deleted from the report.

REPORT 1 THROUGH 23 PHILOSOPHY

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- It is reasonable to consider future expansion of a report and to schedule more MAXM counts and TSGCAP than are actually required for the original establishment. To do so, allow additional MSCOMS pairs and/or TSG CINs when establishing the original report. This eliminates the need to delete and reestablish the report when expansion is required. However, caution must be exercised because the total capacity of MAXM and ENGMEM is limited and must be distributed within the entire reporting system.
- The Error Report Analysis Program (ERAP) is administered by the Maintenance Operations Center (MOC). The feature can be assigned to any active measurement report (1 through 23) and cannot be accessed by the MAC. When an ERAP monitored report is deleted, the ERAP function must be inhibited by the MOC or the function will be carried over when the report number is reassigned.

ADMINISTRATION

Administration of reports 1 through 23 employs the following tasks:

- Allow/Inhibit Measurement of TSI Usage NTP-008
- Establish Measurement Report NTP-009
- Change Primary Channel (PRIM) NTP-010
- Change Output Channel (CHAN) NTP-011
- Change Accumulation Interval (ACCINT) NTP-012
- Change Output Time(s) NTP-006
- Change MSCOMS Pairs NTP-013
- Change TGs or TSGs NTP-014
- Discontinue Measurement Report NTP-015

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DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Add MSC to TDASMC 3, 4, or 8, (SCHED:TDASMC a;ADD:MSC b!) (a = TDASMC 3, 4, or 8; b = MSC 0-57 excluding 8, 10, 13, 14, and 55)	DLP-501

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Print Out And Retain Verify Measurement Report (VER:MEASREPT a!)	DLP-520
2	Using Output Time Change Information Given, Determine Extent Of Change And Perform One Or Both of Following:	-
	A. Delete Existing Output Time(s) (SCHED:MEASREPT a;DLT:bbb cccc!)	DLP-540
	B. Add New Output Time(s) (SCHED:MEASREPT a;ADD:bbb cccc!)	DLP-541
3	Verify Change In Output Timetable (OP:MEASREPT:OTT!)	DLP-543

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Delete MSC From TDASMC 3, 4, Or 8 (SCHED:TDASMC a;DLT:MSC b)! (a = TDASMC 3, 4, or 8; b = MSC 0-57 Excluding 8, 10, 13, 14, and 55)	DLP-502

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Perform One Or Both Of The Following:	-
	A. Allow Measurement Of TSI Usage (ALW:USGMEAS:TSI a,SPC b!)	DLP-500
	B. Inhibit Measurement Of TSI Usage (INH:USGMEAS:TSI a,SPC b!)	DLP-544
2	Verify Measurement of TSI Usage (OP:MEASTSI!)	DLP-545

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	When Preparing to Establish Measurement Report, Ensure That Report Request Worksheet Contains Following Information:	-
	1. Measurement Report Number (MEASREPT) (Part 3)	-
	2. Designated Primary Channel (PRIM) (Part 3)	-
	NOTE: In MAC, PRIM Can Be RCREC, RCDT1, RCDT2, TRF1, and TRF2	-
	3. Output Channel(s) Assigned (Up to Five) (Part 3)	-
	4. At Least One Of Following Measurement Subjects:	-
	A. Measurement Subclass Output Measurement Sets (MSCOMS) (Part 4)	-
	B. Trunk Group (TG) Circuit Identification Names (CINs) (Part 5)	-
	C. Trunk Subgroup (TSG) Circuit Identification Names (CINs) (Part 5)	-
	5. Accumulation Interval (ACCINT) (Part 6)	-
6. Report Output Times (Part 7)	-	
2	Refer To Measurement Subjects Requested On Report Request Worksheet (Part 4/5) And Complete One Of Following (A, B, C, D, or E):	-
	A. If MSCOMSs Only Are To Be Measured:	-
	1. Add PRIM, MAXM, And ENGMEM – MSCOMSs Only	DLP-504
	2. Verify PRIM, MAXM, And ENGMEM (VER:MEASREPT a!)	DLP-505
	B. If TGs Only Are To Be Measured:	-
	1. Add PRIM, MAXM, TSGCAP, And ENGMEM – TGs Only	DLP-506
	2. Verify PRIM, MAXM, TSGCAP, And ENGMEM (VER:MEASREPT a!)	DLP-507
	C. If TSGs Only Are To Be Measured:	-
	1. Add PRIM, MAXM, TSGCAP, And ENGMEM – TSGs Only	DLP-508
	2. Verify PRIM, MAXM, TSGCAP, And ENGMEM (VER:MEASREPT a!)	DLP-507

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

2 (Contd)	D. If MSCOMSs And TGs Are To Be Measured:	—
	1. Add PRIM, MAXM, TSGCAP And ENGMEM – MSCOMSs And TGs	DLP-509
	2. Verify PRIM, MAXM, TSGCAP And ENGMEM (VER:MEASREPT a!)	DLP-507
	E. If MSCOMSs And TSGs Are To Be Measured:	—
	1. Add PRIM, MAXM, TSGCAP And ENGMEM – MSCOMSs and TSGs	DLP-510
	2. Verify PRIM, MAXM, TSGCAP And ENGMEM (VER:MEASREPT a!)	DLP-507
3	Refer To Measurement Subjects Requested On Report Request Worksheet (Part 4/5) And Complete One or More Of Following (A, B, and/or C):	—
	A. If Measuring MSCOMSs:	—
	1. Add MSCOMSs (SCHED:MEASREPT a;ADD:MSCOMS bbcccc!)	DLP-511
	2. Verify Added MSCOMSs (OP:MEASREPT a:MSCOMS!)	DLP-512
	B. If Measuring TGs:	—
	1. Add TGs (SCHED:MEASREPT a;ADD:TG b!)	DLP-513
	2. Verify Added TGs (OP:MEASREPT a:TSG!)	DLP-515
	C. If Measuring TSGs:	—
	1. Add TSGs (SCHED:MEASREPT a;ADD:TSG b!)	DLP-514
2. Verify Added TSGs (OP:MEASREPT a:TSG!)	DLP-515	
4	Add Output Channel(s) (CHAN) (SCHED:MEASREPT a;ADD:CHAN b!)	DLP-516
5	Verify Output Channel (CHAN) (VER:MEASREPT a!)	DLP-517
6	Read ACCINT And OT Philosophy of Usage And Interaction	DLP-552
7	Add ACCINT And Output Time(s)	DLP-518
8	If Required, Delay Output Time(s)	DLP-542
9	Verify ACCINT And Output Times(s) (VER:MEASREPT a!)	DLP-519

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Print Out And Retain Verify Measurement Report (VER:MEASREPT a!)	DLP-520
2	Print Out And Retain Measurement Subclass Output Measurement Set (MSCOMS) List (OP:MEASREPT a:MSCOMS!)	DLP-521
3	Print Out And Retain Trunk Subgroup (TSG) List (OP:MEASREPT a:TSG!)	DLP-522
4	Print Out And Retain Output Timetable (OTT) (OP:MEASREPT:OTT!)	DLP-503
	NOTE: When Keyword PRIM Is Changed, Report Must Be Deleted And Reestablished	—
5	Delete Measurement Report (SCHED:MEASREPT a;DLT!)	DLP-525
6	Verify Measurement Report Deletion (VER:MEASREPT a!)	DLP-524
7	Add New Primary (PRIM) Channel	DLP-536
8	Verify Primary Channel (VER:MEASREPT a!)	DLP-554
9	Using Retained Verify Measurement Report, Add Output Channel (CHAN) (SCHED:MEASREPT a;ADD:CHAN b!)	DLP-516
10	Verify Output Channel (VER:MEASREPT a!)	DLP-517
11	Using Retained MSCOMS List, Add MSCOMSs	DLP-511
12	Verify Added MSCOMSs (OP:MEASREPT a:MSCOMS!)	DLP-512
13	Using Retained Verify Measurement Report And OTT, Add ACCINT And Output Time	DLP-518
14	Verify ACCINT And Output Time(s) (VER:MEASREPT a!)	DLP-519
15	Using Retained TSG List, Add TSGs	DLP-514
16	Verify Added TSGs (OP:MEASREPT a:TSG!)	DLP-515

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Print Out And Retain Verify Measurement Report (VER:MEASREPT a!)	DLP-520
2	Using Retained Printout And CHAN, Change Data From Report Request Worksheet; Determine Purpose of Change And Complete <i>One</i> of Following:	-
	A. Delete Output Channel(s)	DLP-526
	B. Add Output Channel(s)	DLP-516
	C. Delete Existing And Add New Output Channel(s)	DLP-527
3	Verify Output Channel (CHAN) (VER:MEASREPT a!)	DLP-517

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

	NOTE: If New ACCINT Is More Than 1 Hour And Old ACCINT Was Not, Engineered Memory (ENGMEM) Must Be Added to Report. To Accomplish This, the Report Must Be Deleted and Reestablished	-
1	If ENGMEM Is To Be Added To Report, Perform Following:	-
	1. Print Out And Retain Verify Measurement Report (VER:MEASREPT a!)	DLP-520
	2. Print Out And Retain MSCOMS List For Report To Be Changed (OP:MEASREPT a:MSCOMS!)	DLP-521
	3. Print Out And Retain TSG List For Report To Be Changed (OP:MEASREPT a:TSG!)	DLP-522
	4. Print Out And Retain Output Timetable (OP:MEASREPT:OTT!)	DLP-503
	5. Delete Measurement Report (SCHED:MEASREPT a;DLT!)	DLP-525
	6. Using Retained Verify Measurement Report, Add PRIM, MAXM, TSGCAP, And ENGMEM	DLP-546
	7. Using Retained TSG List, Add TSGs	DLP-514
	8. Using Retained MSCOMS List, Add MSCOMs	DLP-511
	9. Using Retained Verify Measurement Report, Add Output Channel(s) (CHAN)	DLP-516
	10. Using New ACCINT And Retained OTT, Add ACCINT And Output Time(s) (SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd eeff!)	DLP-547
2	If ENGMEM Is Not To Be Added To Report, Perform Following:	-
	1. If Old ACCINT Is More Than 1 Hour, Delete Old ACCINT From Accumulation Timetable (ATT) (SCHED:MEASREPT a;DLT:ATT!)	DLP-548
	2. Delete ACCINT From Report (SCHED:MEASREPT a;DLT:ACCINT b!)	DLP-549
	3. Add New ACCINT To Report (SCHED:MEASREPT a;ADD:ACCINT b!)	DLP-550
3	Verify Changed ACCINT (VER:MEASREPT a!)	DLP-551

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

	NOTE: When MSCOMSs Are Added, Existing Report MAXM Count May Be Exceeded And Will Have To Be Increased. If This Is Necessary, the Report Must Be Deleted And Reestablished	—
1	If MSCOMSs Are To Be Removed, Perform Following:	—
	1. Delete MSCOMSs	DLP-528
	2. If All MSCOMSs Have Been Deleted And No TGs Or TSGs Remain To Be Reported, Delete Measurement Report (SCHED:MEASREPT a;DLT!)	DLP-525
	3. If Measurement Report Was Deleted, Verify Report Deletion (VER:MEASREPT a!)	DLP-524
2	If MSCOMSs Are To Be Added, Perform Following:	—
	1. Print Out And Retain Verify Measurement Report (VER:MEASREPT a!)	DLP-520
	2. Print Out And Retain MSCOMS List For Report To Be Changed (OP:MEASREPT a:MSCOMS!)	DLP-521
	3. Print Out And Retain Output Timetable (OP:MEASREPT:OTT!)	DLP-503
	4. Print Out And Retain TSG List For Report To Be Changed (OP:MEASREPT a:TSG!)	DLP-522
	5. From Retained Verify Measurement Report, Determine ACCINT And Complete One of Following (A or B):	—
	A. Add MSCOMSs — ACCINT More Than 1 Hour	DLP-530
	B. Add MSCOMSs — ACCINT Less Than 1 Hour	DLP-529
3	Verify Added MSCOMSs (OP:MEASREPT a:MSCOMS!)	DLP-512

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

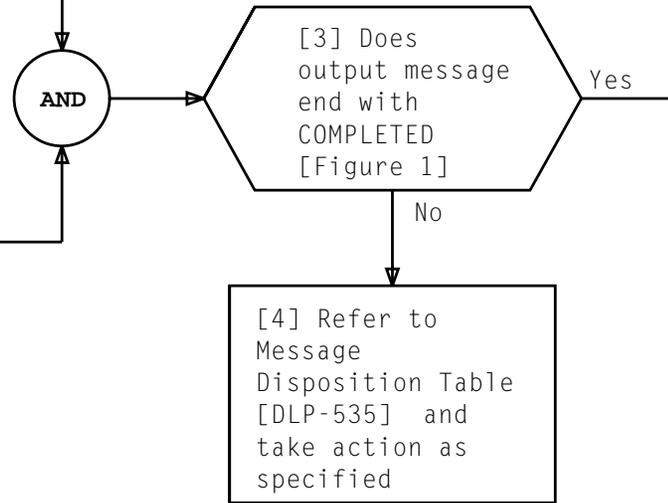
	NOTE: When TGs Or TSGs Are Added, Existing Report MAXM And TSGCAP Counts May Be Exceeded And Will Have To Be Increased. If This Is Necessary, Report Must Be Deleted And Reestablished	—
1	If TGs Or TSGs Are To Be Removed, Perform Following:	—
	1. Perform One Of Following (A or B) To Remove TG Or TSG CINs:	—
	A. Delete TGs (SCHED:MEASREPT a;DLT:TG b!)	DLP-531
	B. Delete TSGs (SCHED:MEASREPT a;DLT:TSG b!)	DLP-537
	2. If All TGs/TSGs Have Been Deleted And No MSCOMSs Remain To Be Reported, Delete Measurement Report (SCHED:MEASREPT a;DLT!)	DLP-525
	3. If Measurement Report Was Deleted, Verify Report Deletion (VER:MEASREPT a!)	DLP-524
2	If TGs Or TSGs Are To Be Added, Perform Following:	—
	1. Print Out And Retain Verify Measurement Report (VER:MEASREPT a!)	DLP-520
	2. Print Out And Retain TSG List For Trunk Group (TG) Or Office	DLP-523
	3. Print Out And Retain TSG List For Report To Be Changed (OP:MEASREPT a:TSG!)	DLP-522
	4. Print Out And Retain MSCOMS List For Report To Be Changed (OP:MEASREPT a:MSCOMS!)	DLP-521
	5. Print Out And Retain Output Timetable (OP:MEASREPT:OTT!)	DLP-503
	6. Perform One Of Following (A or B) To Add TGs Or TSGs:	—
	A. Add TGs (SCHED:MEASREPT a;ADD:TG b!)	DLP-532
	B. Add TSGs (SCHED:MEASREPT a;ADD:TSG b!)	DLP-538
3	Verify TG/TSG List	DLP-539

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Print Out And Retain Verify Measurement Report (VER:MEASREPT a!)	DLP-520
2	If Error Report Analysis Program (ERAP) Is Being Used For Report, Perform Following:	-
	1. Instruct Maintenance Operations Center To Inhibit ERAP Function For Report Being Deleted	-
	2. Delete Measurement Report (SCHED:MEASREPT a;DLT!)	DLP-525
3	If ERAP Is Not Being Used For Report, Delete Measurement Report (SCHED:MEASREPT a;DLT!)	DLP-525
4	Verify Measurement Report Deletion (VER:MEASREPT a!)	DLP-524

[1] From Machine Administrator, obtain TSI frame number(s) and Switching and Permuting Circuit(s) (SPC) to be designated for usage measurements

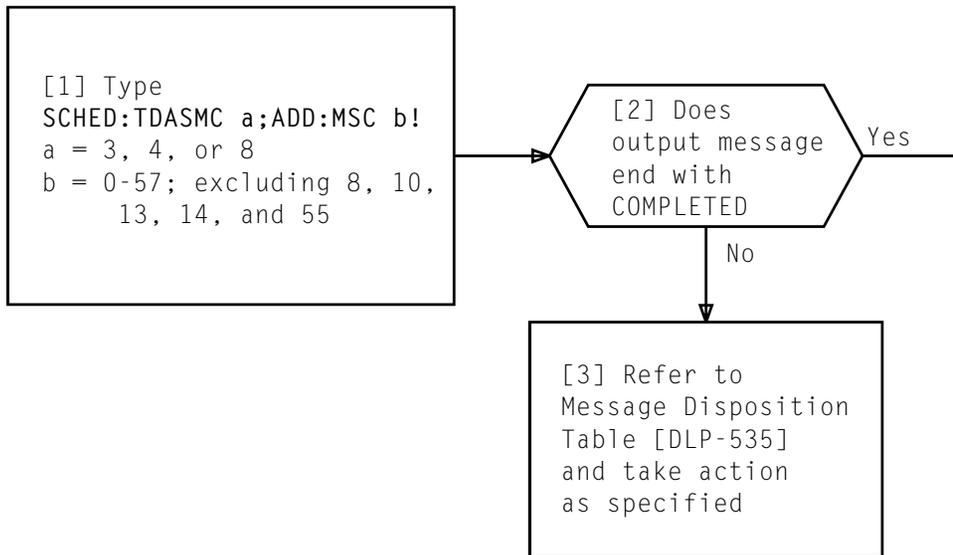
[2] See NOTE 1. Type ALW:USGMEAS:TSI a,SPC b!
 a = TSI frame number (0 through 63)
 b = SPC (0 or 1)



ALW:USGMEAS:TSI 12, SPC 0 COMPLETED

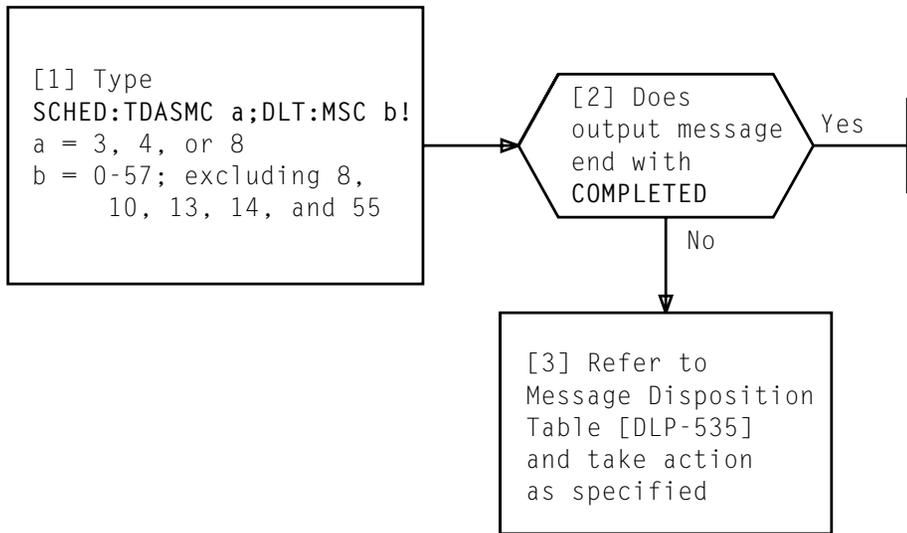
Figure 1 - Typical ALWTISI Output Message

NOTE 1	
A separate message is required to enter each TSI frame/SPC designation. Two input messages are required to designate entire TSI frame	
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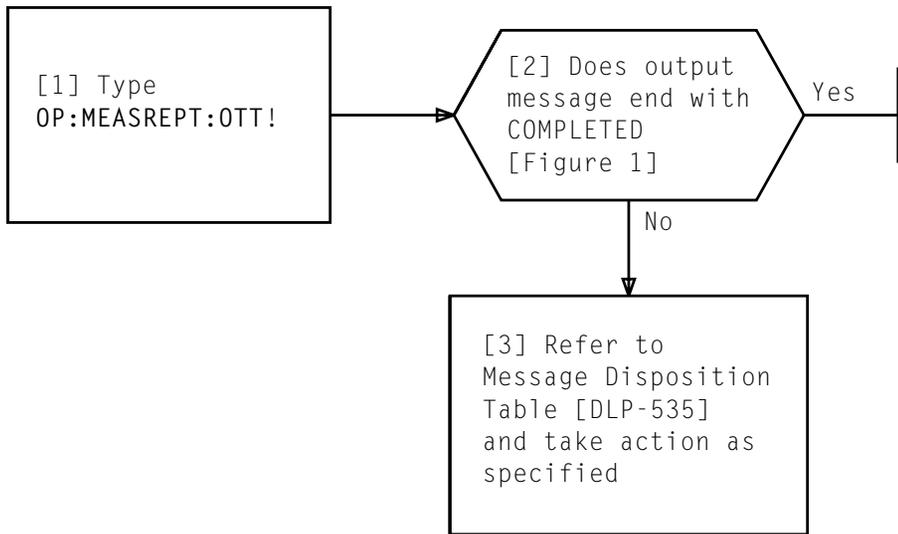
ADD MSC TO TDASMC 3, 4, OR 8

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DELETE MSC FROM TDASMC 3, 4, OR 8

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OP:MEASREPT:OTT MSG COMPLETED
MEASREPT 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1
          3 2 1 0 9 8 7 6 5 4 3 2 1 0 9 8 7 6 5 4 3 2 1 0
MON 0800 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
MON 1200 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0
TUE 1300 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
.
.
.
TOTAL 32 LINES OF DATA
.
FRI 0900 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0
  
```

Figure 1 - Typical Output Timetable (OTT) Printout

PRINT OUT OUTPUT TIMETABLE (OTT)

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[1] Using MSCOMS pairs from report request worksheet, locate and record respective MAXM numbers [TABLE A, Page 2]

[2] Add all MAXM numbers from Step 1, and record sum

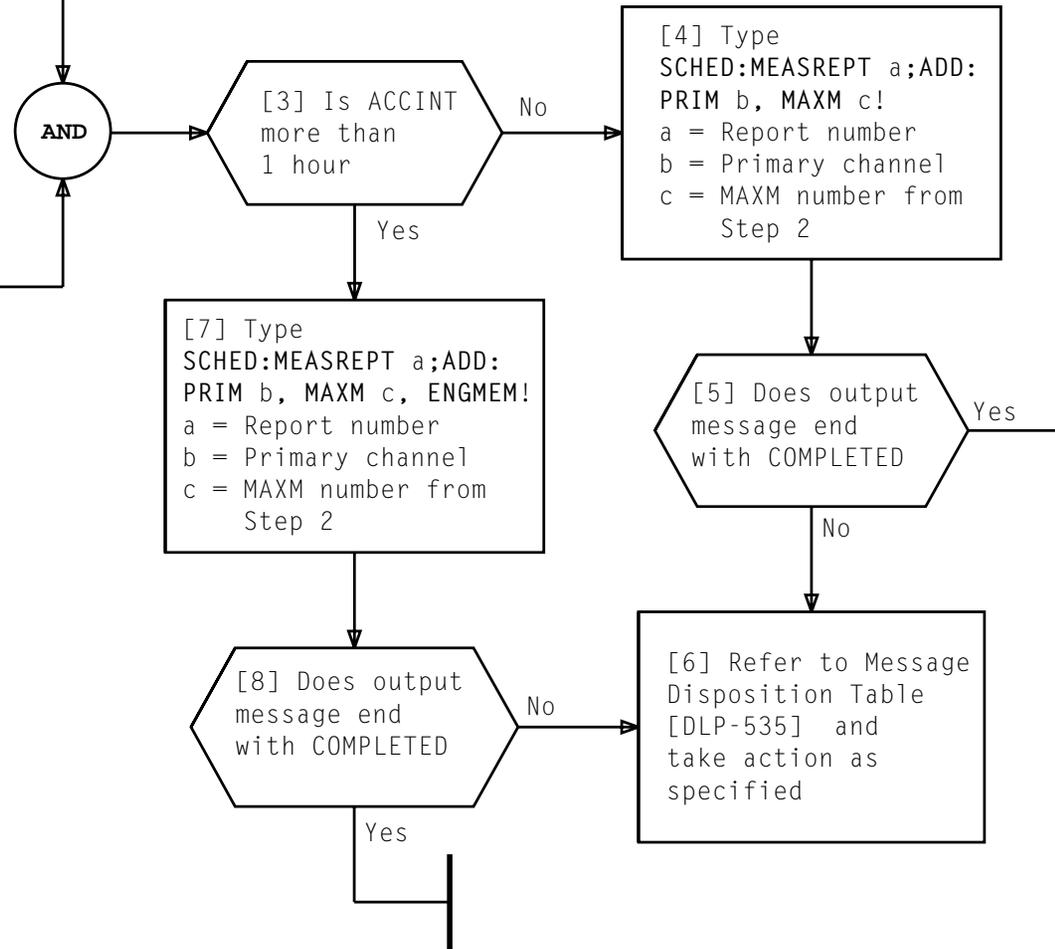


TABLE A																					
MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM				
0	0	15	11	2	8	22	0	2	36	0	23	45	6	4	50	0	4				
0	1	1	11	3	16	22	0	2	36	1	16	45	7	6		thru	per				
0	2	17	11	4	26	22	1	2	36	2	24	45	8	7		511	OMS				
0	3	6	11	5	2	23	0	3	36	3	21	46	0	56	51	0	2				
0	4	21	11	6	4	23	1	14	36	4	26	46	1	14		thru	per				
			12	0	16	23	2	14	36	5	2	46	2	28		63	OMS				
1	0	6	13	TSG	16 per TSG	23	3	7	36	6	13	46	3	14	52	0	1				
2	0	8				23	4	2	36	7	4	46	4	25		46	4	25	thru	per	
3	1 thru 30	1 per OMS	14	0 thru 255	32 per OMS	23	4	2	36	8	6	46	5	21		53	0	1			
3	32	32				23	5	5	36	9	7	46	6	10	46		6	10	thru	per	
3	33 thru 160	1 per OMS	24	0	1	36	10	5	46	7	35	46	7	35	127		OMS				
3			15	0	7	24	1	18	37	0	10	47	0	50	54	0	32				
4	0	4	15	1	6	24	2	63	37	1	8	47	1	50		thru	per				
4	1	1	15	2	34	25 thru 34, 38, 39, and 48	0	2	38	See MSC 25-34, 38, 39, & 48		47	2	28		31	OMS				
4	1	1	15	3	1		1	61						47	3	50					
5	0	7	15	4	11		2	22	39	See MSC 25-34, 38, 39, & 48			47	4	50	55	0	16			
5	1	26	16	0	5		3	49	3					47	5	28	55	1	55		
5	2	3	16	1	31		4	11	40	0	64		47	6	50	55	2	55			
5	3	1	17	0	46		5	15	40	1	64		47	7	50	55	3	55			
5	4	9	17	1	11		6	5	40	2	64		47	8	28	55	4	55			
5	5	10	17	2	2		7	6	40	3	64		47	9	50	55	5	64			
5	6	25	17	3	3		8	24	41	0	4		47	10	50	55	6	64			
5	7	2	18	0	10		9	21		0	1		47	11	28	55	7	40			
5	8	2	19	0	19		10	10	42	thru	per		48	Same as MSC 25 thru 34, 38, 39, and 48	Same as MSC 25 thru 34, 38, 39, and 48	56	0	60			
5	9	2	19	1	2		11	12		31	OMS									1	60
6	0	65	19	2	5		12	2	43	0	1									2	40
7	0	32	20	0	15		13	6		thru	per									3	64
7	1	5	20	1	37		14	5		31	OMS								4	20	
9	0	2	20	2	5		15	2	44	0	1					57	0	70			
9	1	8	20	3	1		16	38	45	0	57										
10	0 thru 1023	2 per OMS	20	4	41	17	2	45	1	5											
			21	0	8	35	0	7	45	2	1	49	0	3							
			21	1	2	35	1	19	45	3	25	49	1	17							
11	0	3	21	2	3	35	2	3	45	4	11	49	2	7							
11	1	8	21	3	16	35	3	2	45	5	16										

ADD PRIM, MAXM, AND ENGMEM — MSCOMSS ONLY —
 REPORTS 1 THROUGH 23

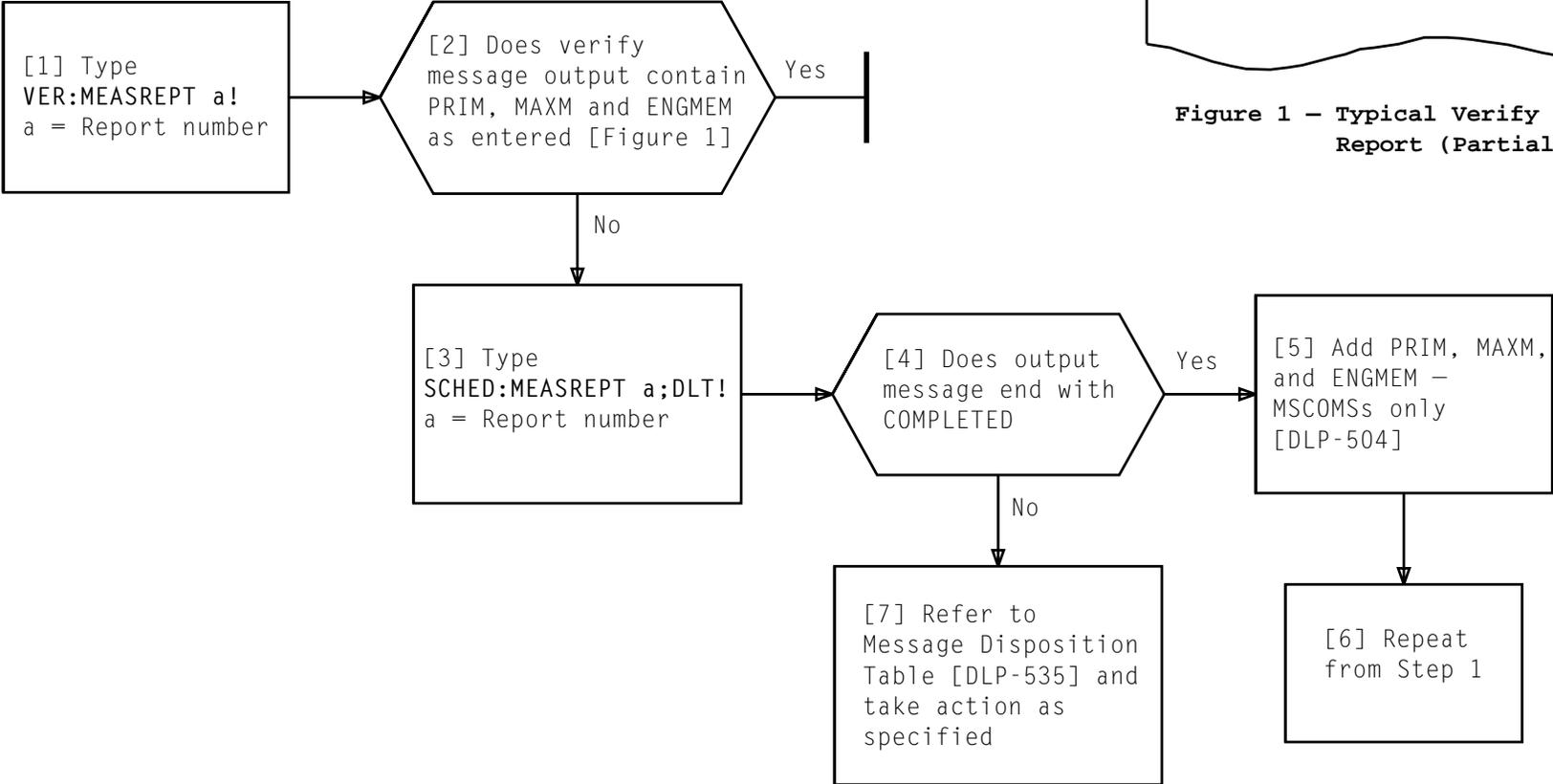
SUMMARY

Verify that PRIM, MAXM, and ENGMEM (if required) are as entered. If not, delete report and reestablish, using correct entries

```

VER:MEASREPT 5 COMPLETED PRIM TRF1
MAXM TSGCAP ENGMEM TAPE ERAP PRINT
750 0 Y N N Y
  
```

Figure 1 - Typical Verify Measurement Report (Partial)



[1] See NOTE 1. For Each TG CIN on report request worksheet, type Message 1, TABLE A and obtain printout _____

[2] Using printouts, count number of TSG CINs in each TG [Figure 1] _____

[3] See NOTE 2. Add all TSG CINs, and record sum as TSGCAP _____

[4] Multiply TSGCAP number by 16, and record product as MAXM _____

AND

[5] Is ACCINT more than 1 hour

No

Yes

[7] Type Message 2, TABLE A

[6] Type Message 3, TABLE A

[8] Does output message end with COMPLETED

Yes

No

[9] Refer to Message Disposition Table [DLP-535] and take action as specified

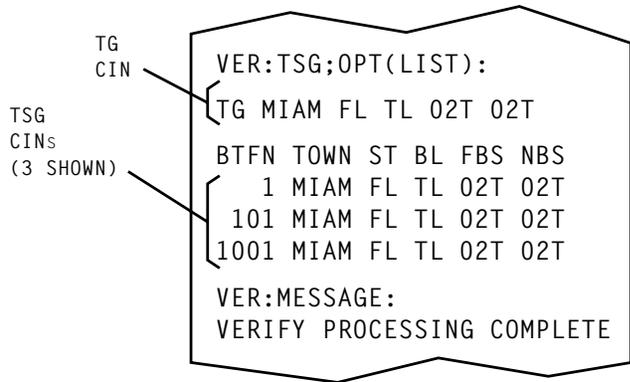


Figure 1 - Typical TSG List Printout

NOTES	
1. Only one TG CIN may be entered per input message	
2. No more than 64 TSG CINs may be entered on any one report	
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ADD PRIM, MAXM, TSGCAP, AND ENGMEM - TGs ONLY - REPORTS 1 THROUGH 23

TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:TSGLIST:a! Example: VER:TSGLIST:MIAM FL TL 02T 02T!
2	SCHED:MEASREPT b;ADD:PRIM c,MAXM d,TSGCAP e! Example: SCHED:MEASREPT 4;ADD:PRIM TRF1,MAXM 350,TSGCAP 30!
3	SCHED:MEASREPT b;ADD:PRIM c,MAXM d,TSGCAP e,ENGMEM! Example: SCHED:MEASREPT 4;ADD:PRIM TRF1,MAXM 350,TSGCAP 30,ENGMEM!
a = TG CIN b = Report number c = Primary channel d = MAXM number e = TSG capacity	

ADD PRIM, MAXM, TSGCAP, AND ENGMEM — TGs ONLY —
REPORTS 1 THROUGH 23

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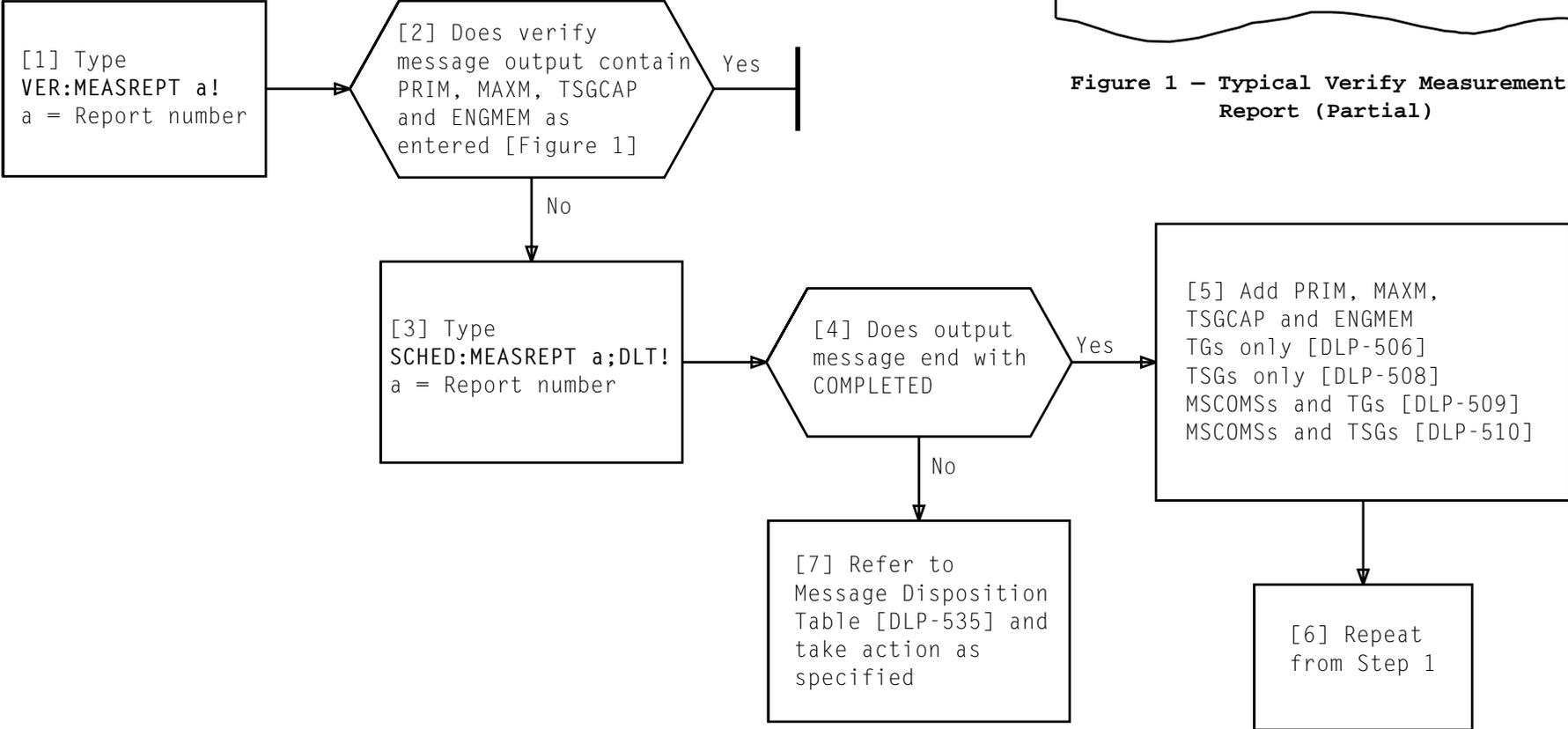
SUMMARY

Verify that PRIM, MAXM, TSGCAP, and ENGMEM (if required) are as entered. If not, delete report and reestablish, using correct entries

```

VER:MEASREPT 5 COMPLETED PRIM TRF1
MAXM TSGCAP ENGMEM TAPE ERAP PRINT
75 3 Y N N Y
  
```

Figure 1 - Typical Verify Measurement Report (Partial)



[1] See NOTE 1. Add all TSG CINs on report request worksheet, and record sum as TSGCAP

[2] Multiply TSGCAP number by 16, and record product as MAXM

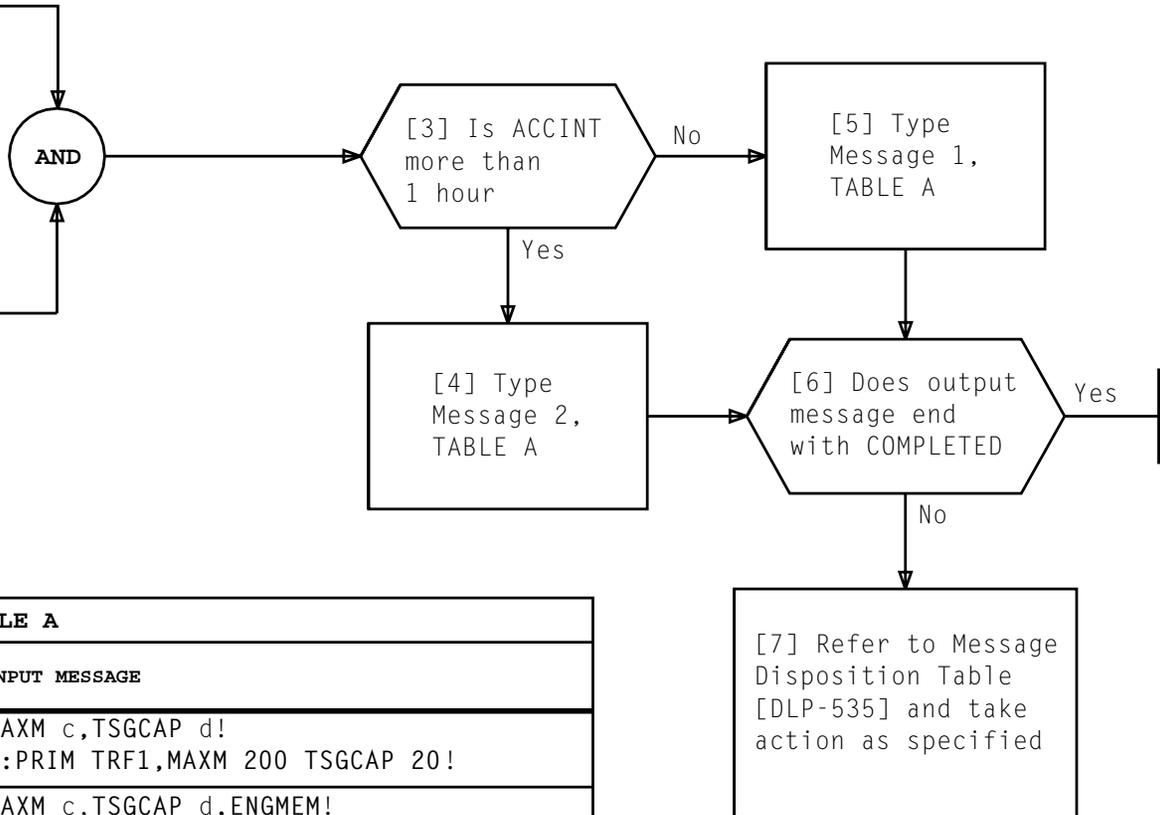


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d! Example: SCHED:MEASREPT 3;ADD:PRIM TRF1,MAXM 200 TSGCAP 20!
2	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d,ENGMEM! Example: SCHED:MEASREPT 3;ADD:PRIM TRF1,MAXM 200,TSGCAP 20, ENGMEM!
a = Report number b = Primary channel c = MAXM number d = TSG capacity	

NOTE 1	
No more than 64 TSG CINs may be entered on any one report	
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ADD PRIM, MAXM, TSGCAP AND ENGMEM – TSGs ONLY – REPORTS 1 THROUGH 23

[1] Using MSCOMS pairs from report request worksheet, locate and record respective MAXM numbers [TABLE A, Page 2]

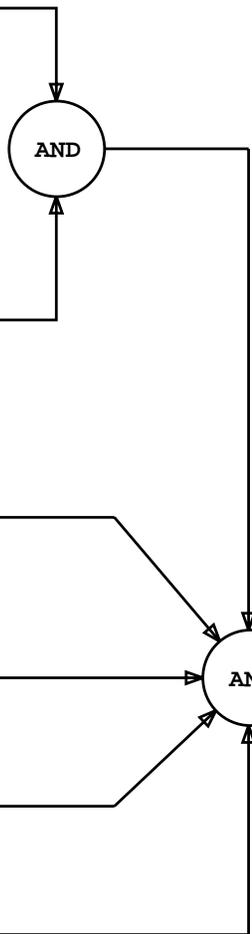
[2] Add all MAXM numbers from Step 1, and record sum

[3] See NOTE 1. For each TG CIN on report request worksheet, type Message 1, TABLE B and obtain printout

[4] Using printouts, count number of TSG CINS in each TG [Figure 1]

[5] See NOTE 2. Add all TSG CINS and record sum as TSGCAP

[6] Multiply TSGCAP number by 16, and record product



```

TG CIN --> VER:TSG;OPT(LIST):
          TG MIAM FL TL 02T 02T
TSG CINS --> BTFN TOWN ST BL FBS NBS
(3 SHOWN) --> 1 MIAM FL TL 02T 02T
              101 MIAM FL TL 02T 02T
              1001 MIAM FL TL 02T 02T
          VER:MESSAGE:
          VER|FY PROCESSING COMPLETE
  
```

Figure 1 - Typical TSG List Printout

[7] Add numbers from Steps 2 and 6, and record sum as MAXM

Page 3

NOTES	
1. Only one TG CIN may be entered per input message	
2. No more than 64 TSG CINS may be entered on any one report	
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TABLE A

MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM		
0	0	15	11	2	8	22	0	2	36	0	23	45	6	4	50	0	4		
0	1	1	11	3	16	22	0	2	36	1	16	45	7	6		thru	per		
0	2	17	11	4	26	22	1	2	36	2	24	45	8	7		511	OMS		
0	3	6	11	5	2	23	0	3	36	3	21	46	0	56	51	0	2		
0	4	21	11	6	4	23	1	14	36	4	26	46	1	14		thru	per		
			12	0	16	23	2	14	36	5	2	46	2	28		63	OMS		
1	0	6	13	TSG	16 per TSG	23	3	7	36	6	13	46	3	14	52	0	1		
2	0	8				23	4	2	36	7	4	46	4	25		46	4	25	thru
3	1 thru 30	1 per OMS	14	0 thru 255	32 per OMS	23	4	2	36	8	6	46	5	21		53	0	1	
3	32	32				23	5	5	36	9	7	46	6	10	46		6	10	thru
3	33 thru 160	1 per OMS	24	0	1	36	10	5	46	7	35	46	7	35	127		OMS		
3			15	0	7	24	1	18	37	0	10	47	0	50	54	0	32		
4	0	4	15	1	6	24	2	63	37	1	8	47	1	50		thru	per		
4	1	1	15	2	34	25 thru 34, 38, 39, and 48	0	2	38	See MSC 25-34, 38, 39, & 48		47	2	28		31	OMS		
4	1	1	15	3	1		1	61					47	3	50				
5	0	7	15	4	11		2	22	39	See MSC 25-34, 38, 39, & 48		47	4	50	55	0	16		
5	1	26	16	0	5		3	49					47	5	28	55	1	55	
5	2	3	16	1	31		4	11	40	0	64		47	6	50	55	2	55	
5	3	1	17	0	46		5	15	40	1	64		47	7	50	55	3	55	
5	4	9	17	1	11		6	5	40	2	64		47	8	28	55	4	55	
5	5	10	17	2	2		7	6	40	3	64		47	9	50	55	5	64	
5	6	25	17	3	3		8	24	41	0	4		47	10	50	55	6	64	
5	7	2	18	0	10		9	21		0	1		47	11	28	55	7	40	
5	8	2	19	0	19		10	10	42	thru	per		48	Same as MSC 25 thru 34, 38, 39, and 48	Same as MSC 25 thru 34, 38, 39, and 48	56	0	60	
5	9	2	19	1	2		11	12		31	OMS						1	60	
6	0	65	19	2	5		12	2	43	0	1						2	40	
7	0	32	20	0	15		13	6		thru	per						3	64	
7	1	5	20	1	37		14	5		31	OMS					4	20		
9	0	2	20	2	5		15	2	44	0	1		57	0	70				
9	1	8	20	3	1		16	38	45	0	57								
			20	4	41	17	2	45	1	5									
10	0 thru 1023	2 per OMS	21	0	8	35	0	7	45	2	1	49	0	3					
			21	1	2	35	1	19	45	3	25	49	1	17					
11	0	3	21	2	3	35	2	3	45	4	11	49	2	7					
11	1	8	21	3	16	35	3	2	45	5	16								

ADD PRIM, MAXM, TSGCAP, AND ENGMEM – MSCOMSs
AND TGs – REPORTS 1 THROUGH 23

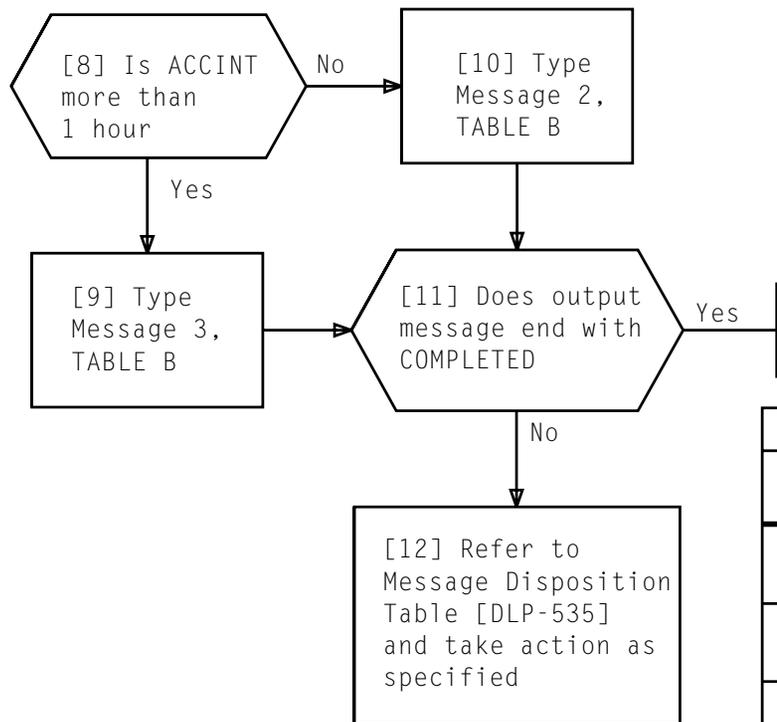


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:TSGLIST:a! Example: VER:TSGLIST:MIAMFLTLO2T02T!
2	SCHED:MEASREPT b;ADD:PRIM c,MAXM d,TSGCAP e! Example: SCHED:MEASREPT 3;ADD:PRIM TRF1,MAXM 200,TSGCAP 15!
3	SCHED:MEASREPT b;ADD:PRIM c,MAXM d,TSGCAP e,ENGMEM! Example: SCHED:MEASREPT 3;ADD:PRIM TRF1,MAXM 200,TSGCAP 15,ENGMEM!
a = TG CIN b = Report number c = Primary channel d = MAXM number e = TSG capacity	

**ADD PRIM, MAXM, TSGCAP, AND ENGMEM – MSCOMSS
AND TGs – REPORTS 1 THROUGH 23**

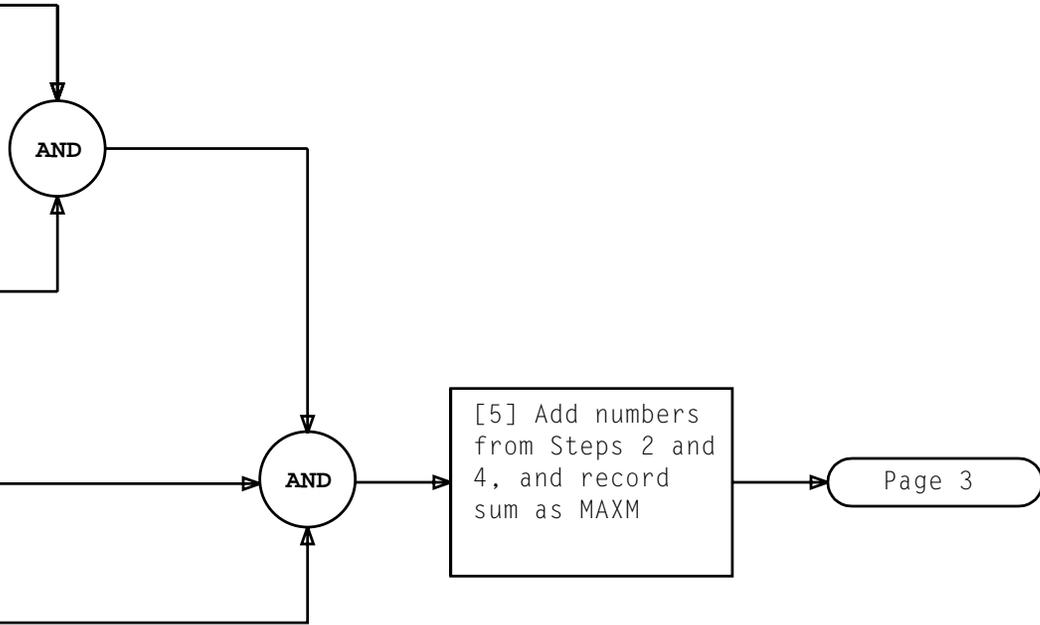
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[1] Using MSCOMS pairs from report request worksheet, locate and record respective MAXM numbers [TABLE A, Page 2]

[2] Add all MAXM numbers from Step 1, and record sum _____

[3] Add all TSG CINs to be reported and record sum as TSGCAP number _____

[4] Multiply TSGCAP number by 16, and record product _____



**ADD PRIM, MAXM, TSGCAP, AND ENGMEM -- MSCOMSS
AND TSGs _ REPORTS 1 THROUGH 23**

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TABLE A

MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM		
0	0	15	11	2	8	22	0	2	36	0	23	45	6	4	50	0	4		
0	1	1	11	3	16	22	0	2	36	1	16	45	7	6		thru	per		
0	2	17	11	4	26	22	1	2	36	2	24	45	8	7		511	OMS		
0	3	6	11	5	2	23	0	3	36	3	21	46	0	56	51	0	2		
0	4	21	11	6	4	23	1	14	36	4	26	46	1	14		thru	per		
			12	0	16	23	2	14	36	5	2	46	2	28		63	OMS		
1	0	6	13	TSG	16 per TSG	23	3	7	36	6	13	46	3	14	52	0	1		
2	0	8				23	4	2	36	7	4	46	4	25		46	4	25	thru
3	1 thru 30	1 per OMS	14	0 thru 255	32 per OMS	23	4	2	36	8	6	46	5	21		53	0	1	
3	32	32				23	5	5	36	9	7	46	6	10	46		6	10	thru
3	33 thru 160	1 per OMS	15	0	7	24	1	18	36	10	5	46	7	35	127		OMS		
			15	1	6	24	2	63	37	0	8	47	0	50	54	0	32		
4	0	4	15	2	34	25 thru 34, 38, 39, and 48	0	2	38	See MSC 25-34, 38, 39, & 48		47	2	28		thru	per		
4	1	1	15	3	1		1	61					47	3		50	31	OMS	
5	0	7	15	4	11		2	22	39	See MSC 25-34, 38, 39, & 48			47	4	50	55	0	16	
5	1	26	16	0	5		3	49					47	5	28	55	1	55	
5	2	3	16	1	31		4	11	40	0	64		47	6	50	55	2	55	
5	3	1	17	0	46		5	15	40	1	64		47	7	50	55	3	55	
5	4	9	17	1	11		6	5	40	2	64		47	8	28	55	4	55	
5	5	10	17	2	2		7	6	40	3	64		47	9	50	55	5	64	
5	6	25	17	3	3		8	24	41	0	4		47	10	50	55	6	64	
5	7	2	18	0	10		9	21		0	1		47	11	28	55	7	40	
5	8	2	19	0	19		10	10	42	thru	per		48	Same as MSC 25 thru 34, 38, 39, and 48	Same as MSC 25 thru 34, 38, 39, and 48	56	0	60	
5	9	2	19	1	2		11	12		31	OMS						1	60	
6	0	65	19	2	5		12	2	43	0	1						2	40	
7	0	32	20	0	15		13	6		thru	per						3	64	
7	1	5	20	1	37		14	5		31	OMS		4	20					
9	0	2	20	2	5		15	2	44	0	1		57	0	70				
9	1	8	20	3	1		16	38	45	0	57								
			20	4	41	17	2	45	1	5									
10	0 thru 1023	2 per OMS	21	0	8	35	0	7	45	2	1	49	0	3					
			21	1	2	35	1	19	45	3	25	49	1	17					
11	0	3	21	2	3	35	2	3	45	4	11	49	2	7					
11	1	8	21	3	16	35	3	2	45	5	16								

ADD PRIM, MAXM, AND TSGCAP, AND ENGMEM – MSCOMSs AND TGs – REPORTS 1 THROUGH 23

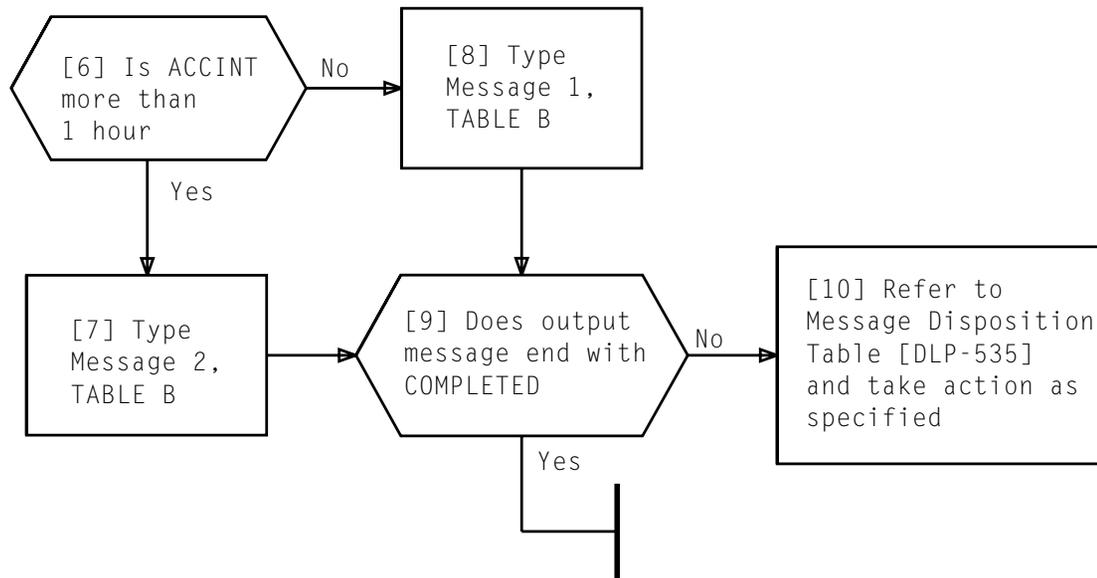


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d! Example: SCHED:MEASREPT 3;ADD:PRIM TRF1,MAXM 200 TSGCAP 10!
2	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d,ENGMEM! Example: SCHED:MEASREPT 3;ADD:PRIM TRF1,MAXM 200,TSGCAP 10, ENGMEM!
a = Report number b = Primary channel c = MAXM number d = TSG capacity	

**ADD PRIM, MAXM, TSGCAP, AND ENGMEM – MSCOMSS
AND TSGs – REPORTS 1 THROUGH 23**

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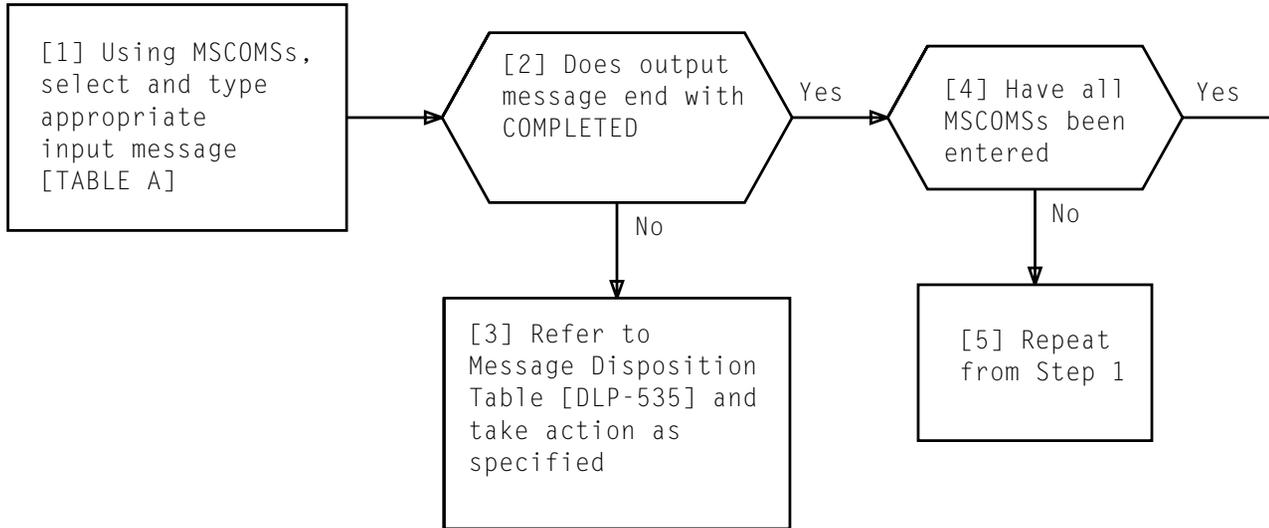
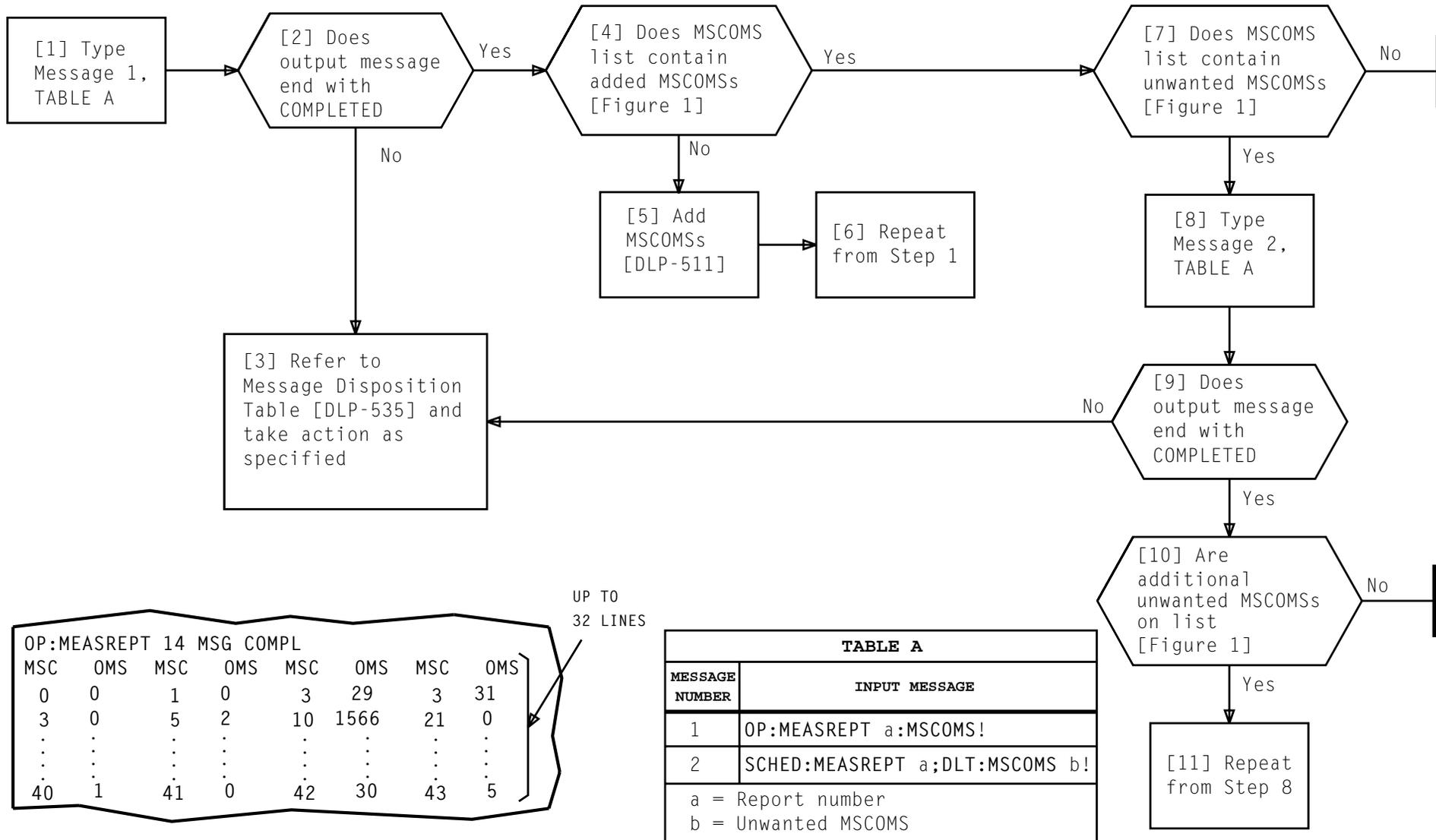


TABLE A	
MSCOMS GIVEN	INPUT MESSAGE
One MSCOMS only	SCHED:MEASREPT a;ADD:MSCOMS bbcccc! Example: SCHED:MEASREPT 2;ADD:MSCOMS 090000!
More than one MSCOMS	SCHED:MEASREPT a;ADD:MSCOMS(bbcccc,bbcccc)! Example: SCHED:MEASREPT 3;ADD:MSCOMS(110000,160000)!
Inclusive MSCOMSs	SCHED:MEASREPT a;ADD:MSCOMS (bbcccc-bbcccc)! Example: SCHED:MEASREPT 4;ADD:MSCOMS 110000-110005!
MSCOMS and inclusive MSCOMSs	SCHED:MEASREPT a;ADD:MSCOMS(bbcccc,bbcccc-bbcccc)! Example: SCHED:MEASREPT 5;ADD:MSCOMS(090000,110000-110005)!
a = Report number b = MSC number (00 thru 57) c = OMS number (0000 thru 1023)	

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UP TO 32 LINES

OP:MEASREPT 14 MSG COMPL							
MSC	OMS	MSC	OMS	MSC	OMS	MSC	OMS
0	0	1	0	3	29	3	31
3	0	5	2	10	1566	21	0
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
40	1	41	0	42	30	43	5

TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	OP:MEASREPT a:MSCOMS!
2	SCHED:MEASREPT a;DLT:MSCOMS b!
a = Report number b = Unwanted MSCOMS	

Figure 1 - Typical Printout of MSCOMS List Showing Message Complete

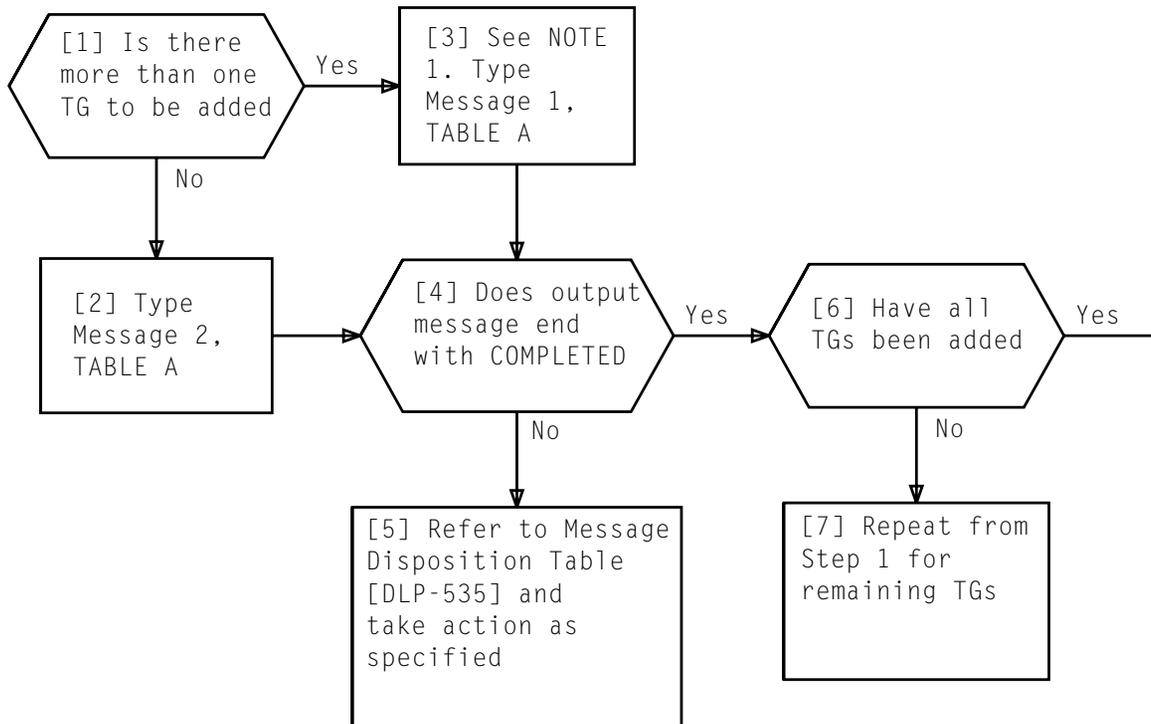


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;ADD:TG(bbbbbbbbbbbbbbb,bbbbbbbbbbbbbb)! Example: SCHED:MEASREPT 5;ADD:TG(MIAMFLTLO2T,TAMPFLXA02T02T)!
2	SCHED:MEASREPT a;ADD:TG bbbbbbbbbbbbbbb! Example: SCHED:MEASREPT 5;ADD:TG MIAMFLTLO2T02T
a = Report number b = TG CIN (14 characters)	

NOTE 1 No more than two CINs may be entered with single message due to line space limitation of 80 characters	
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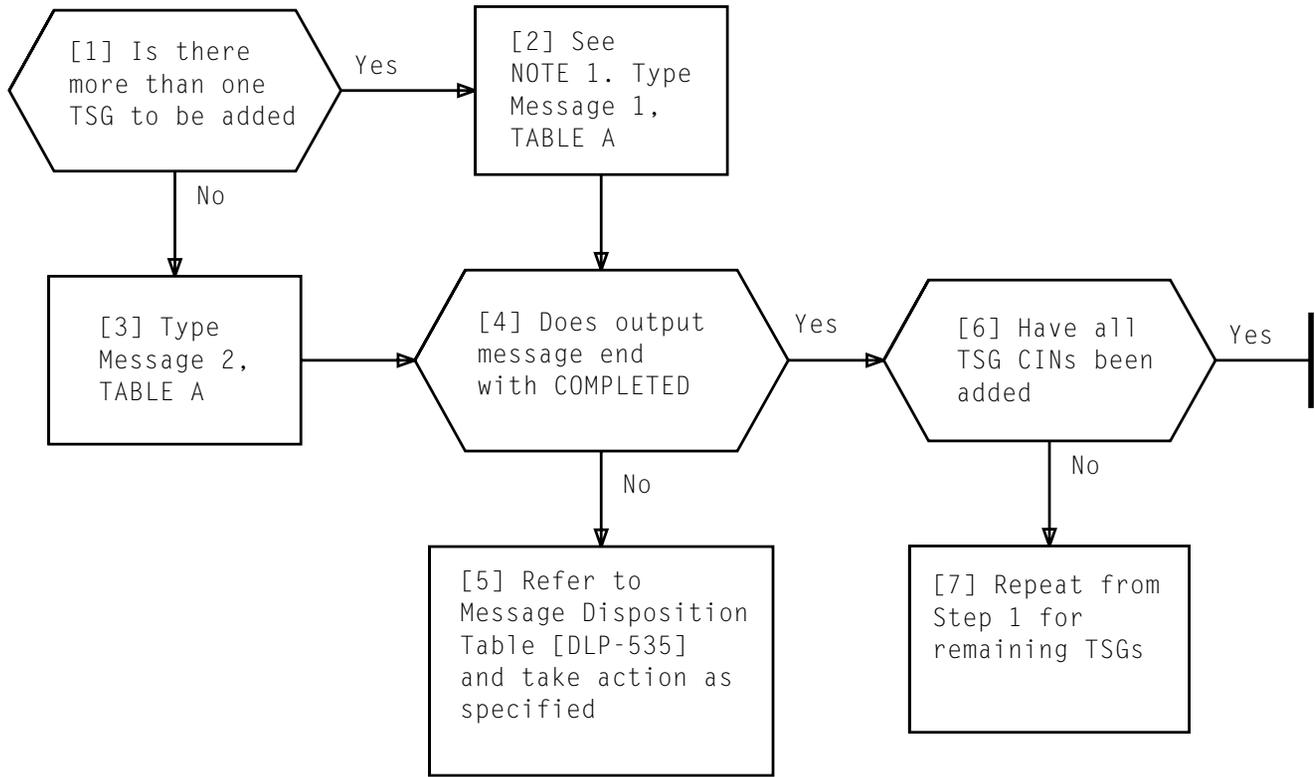


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;ADD:TSG(bbbbbbbbbbbbbbbbbbb,bbbbbbbbbbbbbbbbbb)! Example: SCHED:MEASREPT a,ADD:TSG(1MIAMFLTL02T02T,1001MIAMFLTL02T02T)!
2	SCHED:MEASREPT a;ADD:TSG bbbbbbbbbbbbbbbbbbb! Example: SCHED:MEASREPT a,ADD:TSG 1001MIAMFLTL02T02T!
a = Report number b = TSG CIN (15 to 18 characters)	

NOTE 1
No more than two CINs may be entered with single message due to line space limitation of 80 characters

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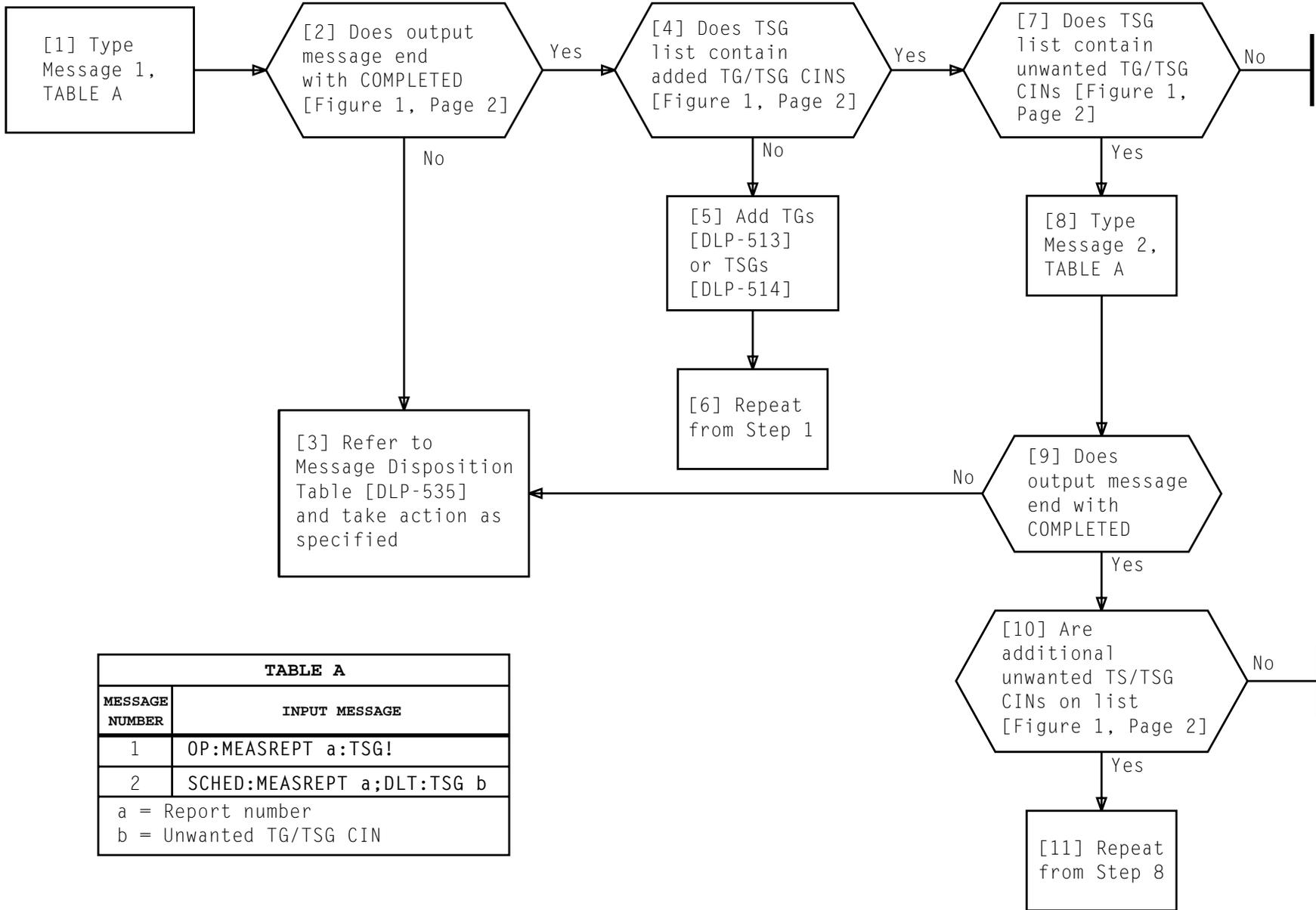


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	OP:MEASREPT a:TSG!
2	SCHED:MEASREPT a;DLT:TSG b
a = Report number b = Unwanted TG/TSG CIN	

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```

OP:MEASREPT 15:TSG MSG COMPL
      CIN          SIZE          CIN          SIZE
0001KSCY MO 01 581 57T 120 0101STLS MO 05 582 57T 24
. . . . . . . . . . . . . . . . . . . . . . . . . .
. . . . . . . . . . . . . . . . . . . . . . . . . .
0022ALBQ NM RT 1FL 57T 168 0202TULS OK 07 2A1 57T 48

```

UP TO 32
LINES

Figure 1 - Typical Printout of TSG List
Showing Message Complete

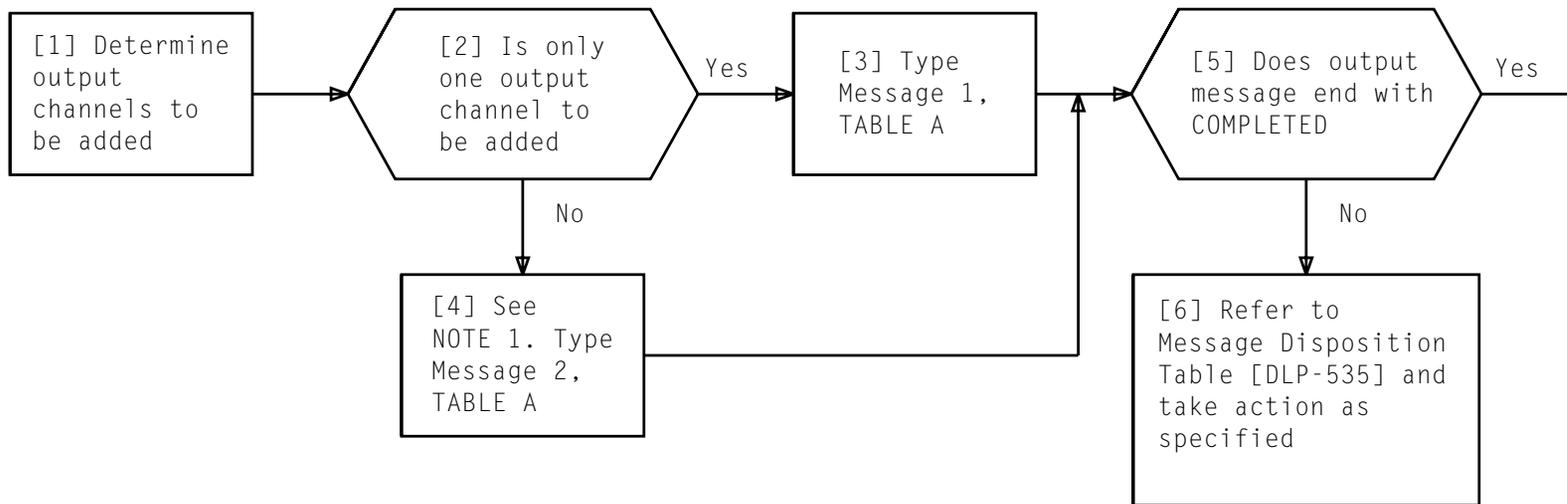
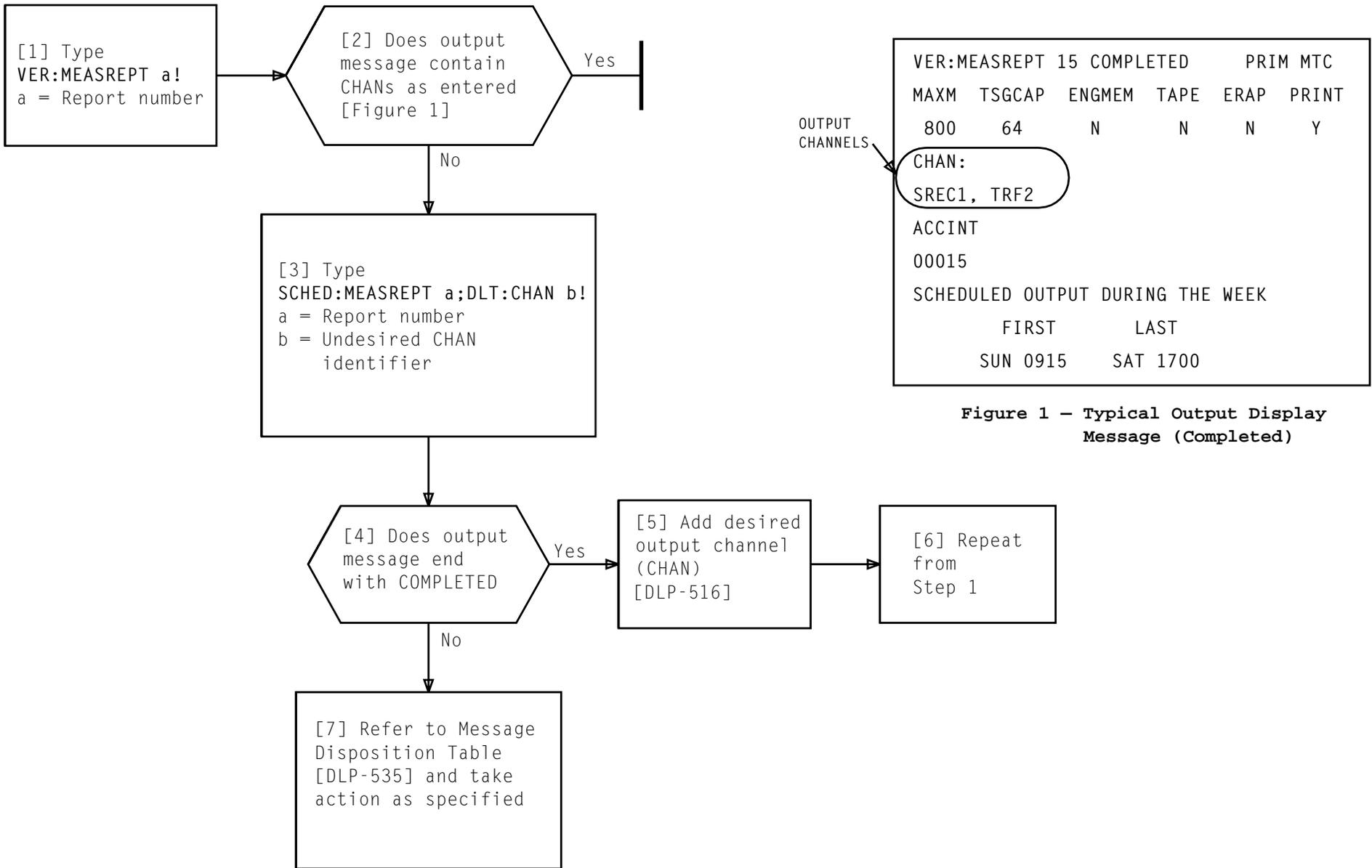


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;ADD:CHAN b! Example: SCHED:MEASREPT 2;ADD:CHAN TRF1!
2	SCHED:MEASREPT a;ADD:CHAN(b,b)! Example: SCHED:MEASREPT 2;ADD:CHAN(TRF1,RCREC)!
a = Report number b = Output channel identifier	

NOTE 1 Up to five channels may be entered with single message	
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[1] See NOTES 1 and 2. Determine accumulation interval and required output time

[2] Determine appropriate input message [TABLE B, Page 2]

[3] Type message

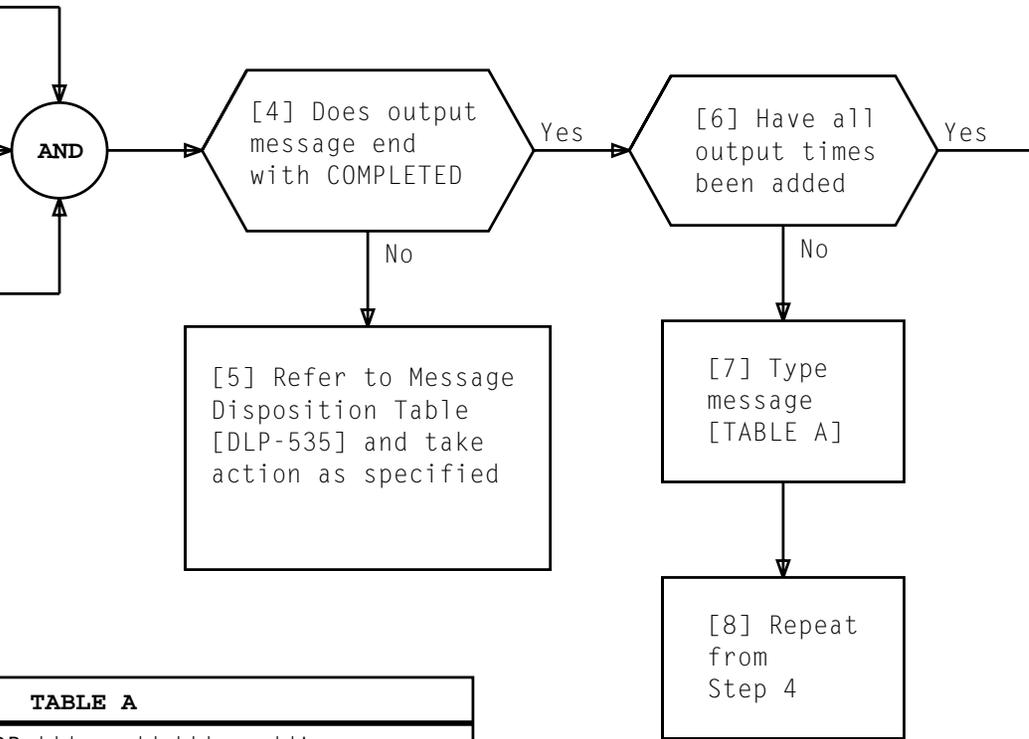


TABLE A
SCHED:MEASREPT a;ADD:bbb ccdd,bbb ccdd! Example: SCHED:MEASREPT 2;ADD:TUE 0700,WED 0900!
a = Report number b = Day of week c = Hour of day d = Minutes of hour

NOTES

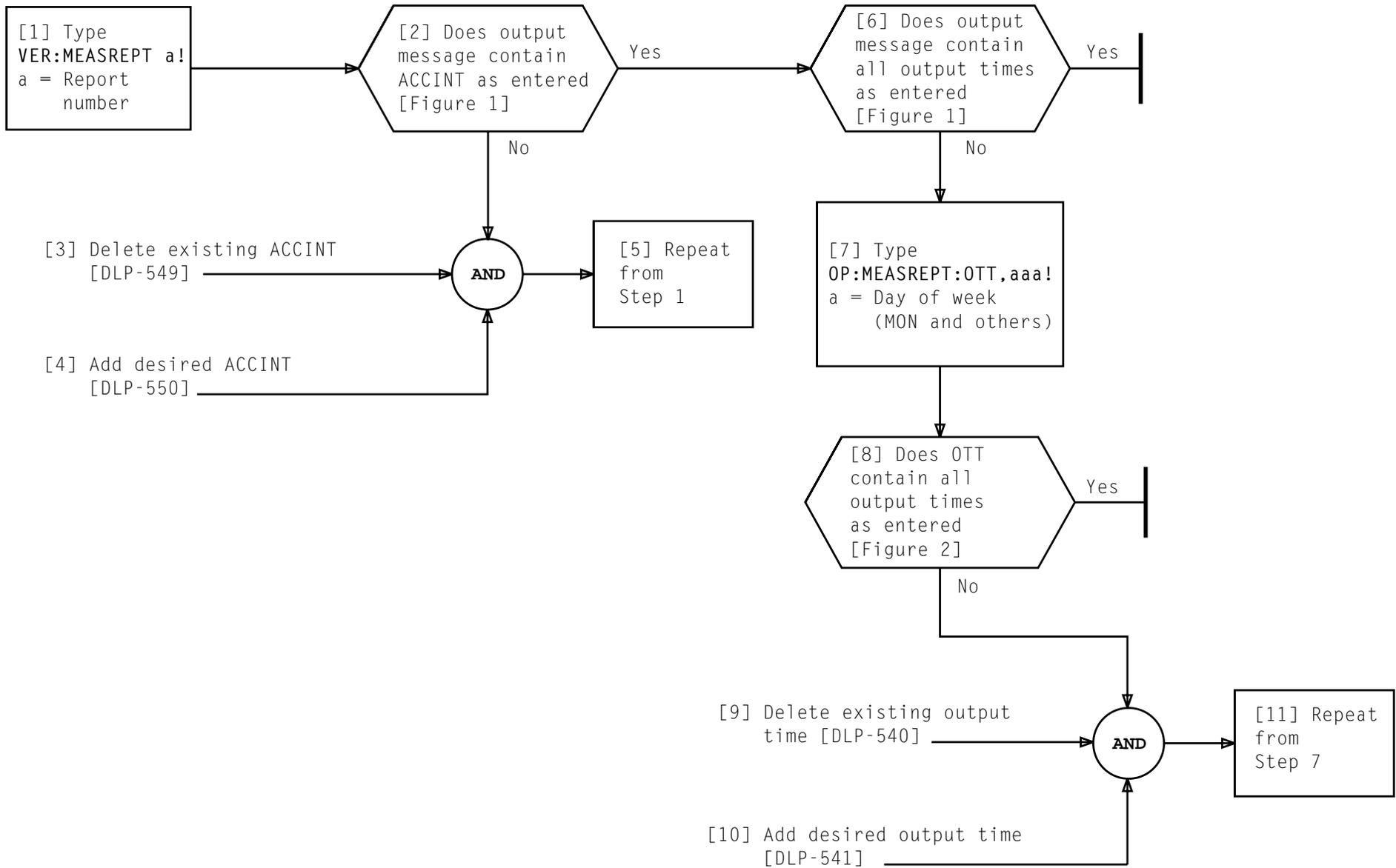
1. ACCUMULATION INTERVAL = Interval of time when data is collected
2. OUTPUT TIME = Time of printout. Output time determines when data is printed out during the day or week

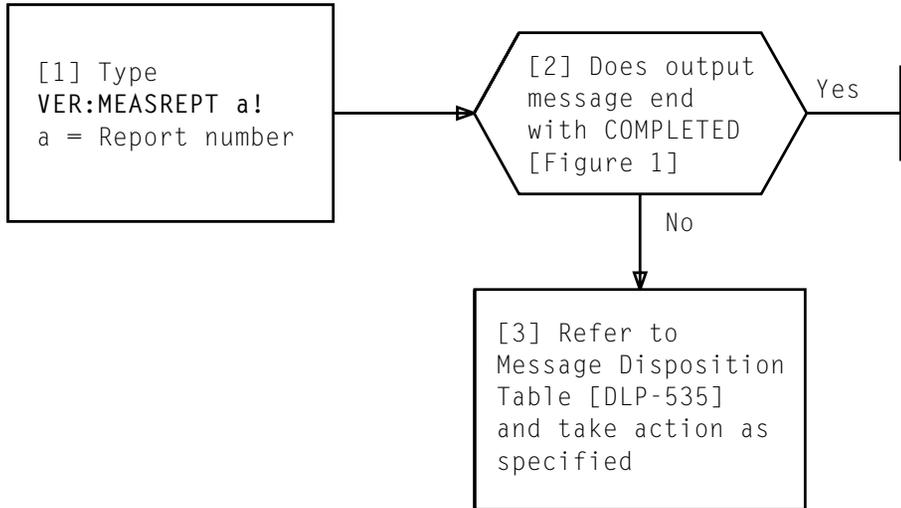
ADD ACCUMULATION INTERVAL (ACCINT) AND OUTPUT TIME (OT) – REPORTS 1 THROUGH 23

TABLE B

REQUIRED OUTPUT TIME	INPUT MESSAGE
Continuous during one day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd! Example: SCHED:MEASREPT 2;ADD:ACCINT 00400,THU!
Continuous during more than one day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd,ddd! Example: SCHED:MEASREPT 2;ADD:ACCINT 00200,WED,THU!
One specific time of a day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd eeff! Example: SCHED:MEASREPT 3;ADD:ACCINT 00200,TUE 1430!
More than one specific time of a day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd(eeff,eeff)! Example: SCHED:MEASREPT 4;ADD:ACCINT 00200,MON(1200,1700,2300)!
Inclusive times of a day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd eeff-eeff! Example: SCHED:MEASREPT 7;ADD:ACCINT 00300,FRI 0900-1800!
One specific time of more than one day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd eeff,ddd eeff! Example: SCHED:MEASREPT 6;ADD:ACCINT 00400,TUE 1200,THU 1200!
More than one specific time of more than one day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd(eeff,eeff),ddd(eeff,eeff)! Example: SCHED:MEASREPT 1;ADD:ACCINT 00630,MON(0600,1700),FRI(0700,1800)!
Inclusive times of more than one specific day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd eeff-eeff,ddd eeff-eeff! Example: SCHED:MEASREPT 8;ADD:ACCINT 00400,MON 1000-2300,THU 0900-2200!
Both specific time and inclusive times of a day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd eeff,ddd eeff-eeff! Example: SCHED:MEASREPT 10;ADD:ACCINT 00200,WED 1000,WED 1200-1600!
Both specific time and inclusive times of more than one day	SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd eeff,dddeeff-eeff,ddd eeff,dddeeff-eeff! Example: SCHED:MEASREPT 3;ADD:ACCINT 00200,WED 0900,WED 1300-1700, THU 1100, THU 1700-2000! THU 1700-2000!
<p>a = Report number bbb = Hours of accumulation (000 thru 168) cc = Minutes of accumulation (00, 15, 30, 45) ddd = Day of week (SUN, MON, TUE, WED, THU, FRI, SAT) ee = Hour of day (24-hour clock) (00 thru 23) ff = Minutes of hour (00, 15, 30, 45)</p> <p style="margin-left: 400px;">} Accumulation Interval } Output Time</p>	

**ADD ACCUMULATION INTERVAL (ACCINT) AND OUTPUT TIME (OT) —
REPORTS 1 THROUGH 23**



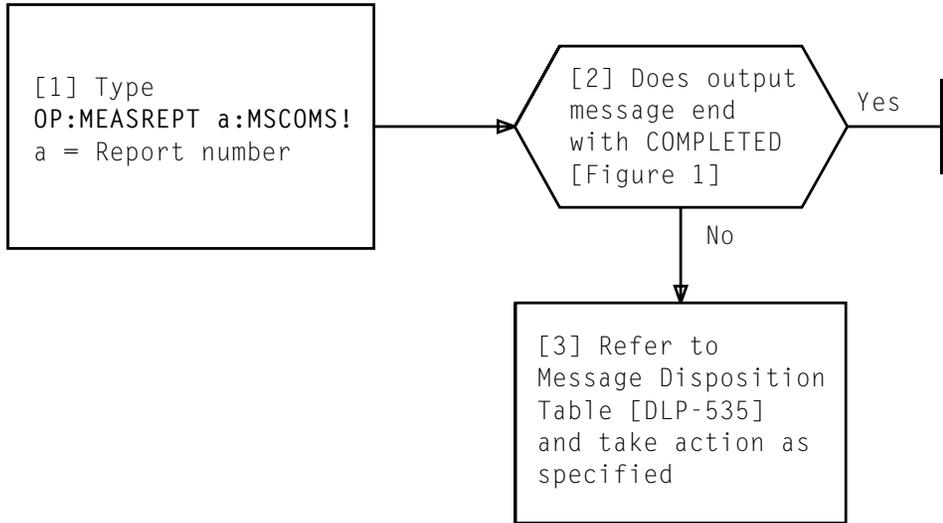


```

VER:MEASREPT 2 COMPLETED          PRIM TRF1
MAXM  TSGCAP  ENGMEM  TAPE  ERAP  PRINT
1000   64      Y      N    N    Y
CHAN
TRF1
ACCINT
00300
SCHEDULES OUTPUT DURING WEEK
      FIRST          LAST
MON 0900          TUE 0900
  
```

Figure 1 - Typical Verify Measurement
Report Printout for Report 2

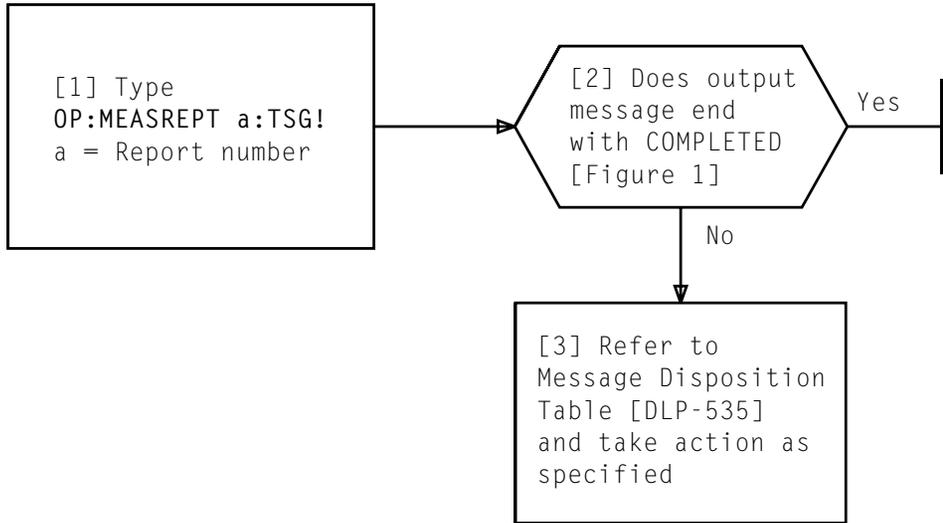
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```

OP:MEASREPT 14:MSCOMS MSG COMPLETED
MSC  OMS  MSC  OMS  MSC  OMS  MSC  OMS
0    0    1    0    3    29   3    31
4    0    5    2    10   1566 21    0
.    .    .    .    .    .    .    .
.    .    .    .    .    .    .    .
.    .    .    .    .    .    .    .
40   1    41   0    42   30   43   5
  
```

Figure 1 - Typical Printout of MSCOMS List Showing Message Complete



```

OP:MEASREPT 15:TSG MSG COMPLETED
      CIN          SIZE          CIN          SIZE
0001KSCY MO 01 581 57T 120 0101STLS MO 05 5B2 57T 24
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
0022ALBQ NM RT 1FL 57T 168 0202TULS OK 07 2A1 57T 48
  
```

UP TO 32
LINES OF
DATA

Figure 1 - Typical Printout of TSG List
Showing Message Complete

[1] Determine appropriate input message to obtain desired TSG list [TABLE A]

[2] See NOTE 1. Type message

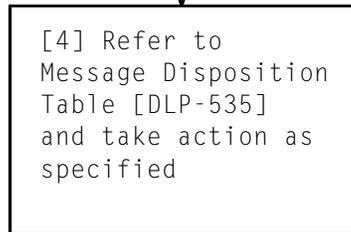
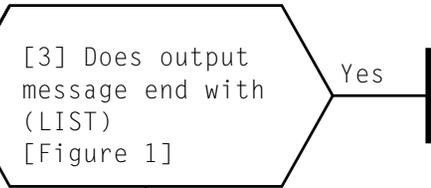
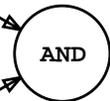


TABLE A	
REQUIRED LIST	INPUT MESSAGE
All TSG CINs in office	VER:TSGLIST!
TSG CINs in specific TG	VER:TSGLIST:a!
a = Specific TG CIN	

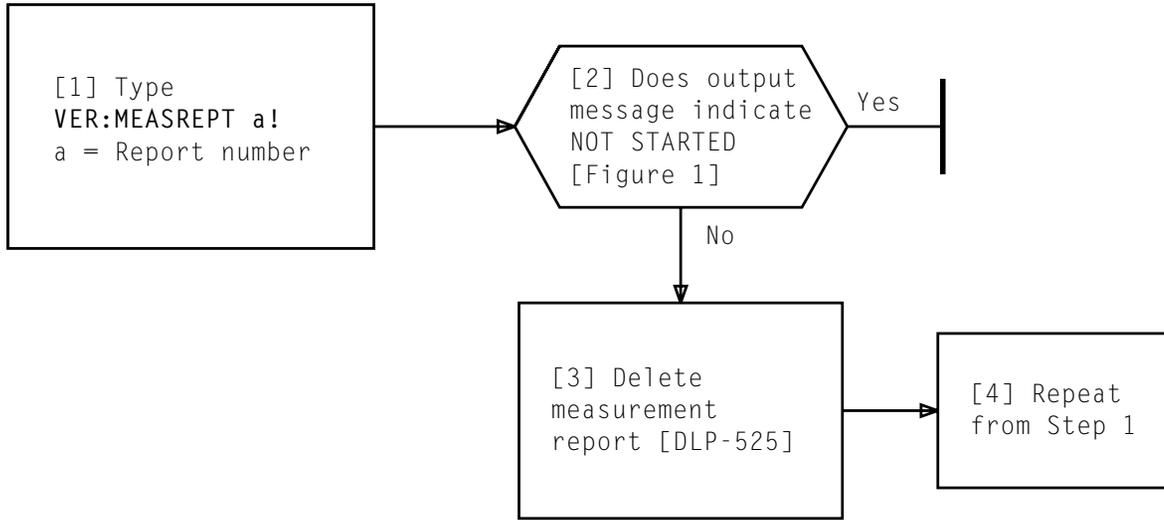
```

VER:TSG;OPT(LIST):
TG MIAM FL TL 02T 02T
BTFN TOWN ST BL FBS NBS
  1 MIAM FL TL 02T 02T
 101 MIAM FL TL 02T 02T
1001 MIAM FL TL 02T 02T

VER:MESSAGE:
VERIFY PROCESSING COMPLETE
  
```

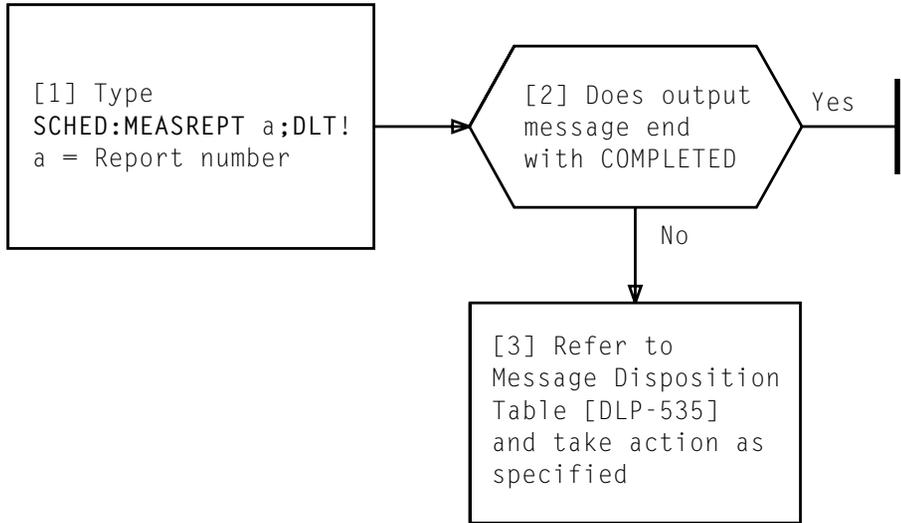
Figure 1 - Typical TSG List Printout

NOTE 1	
Only one TG CIN may be entered per input message	
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VER:MEASREPT 3 NOT STARTED MEASREPT UNAS

Figure 1 - Typical Verify Output Message



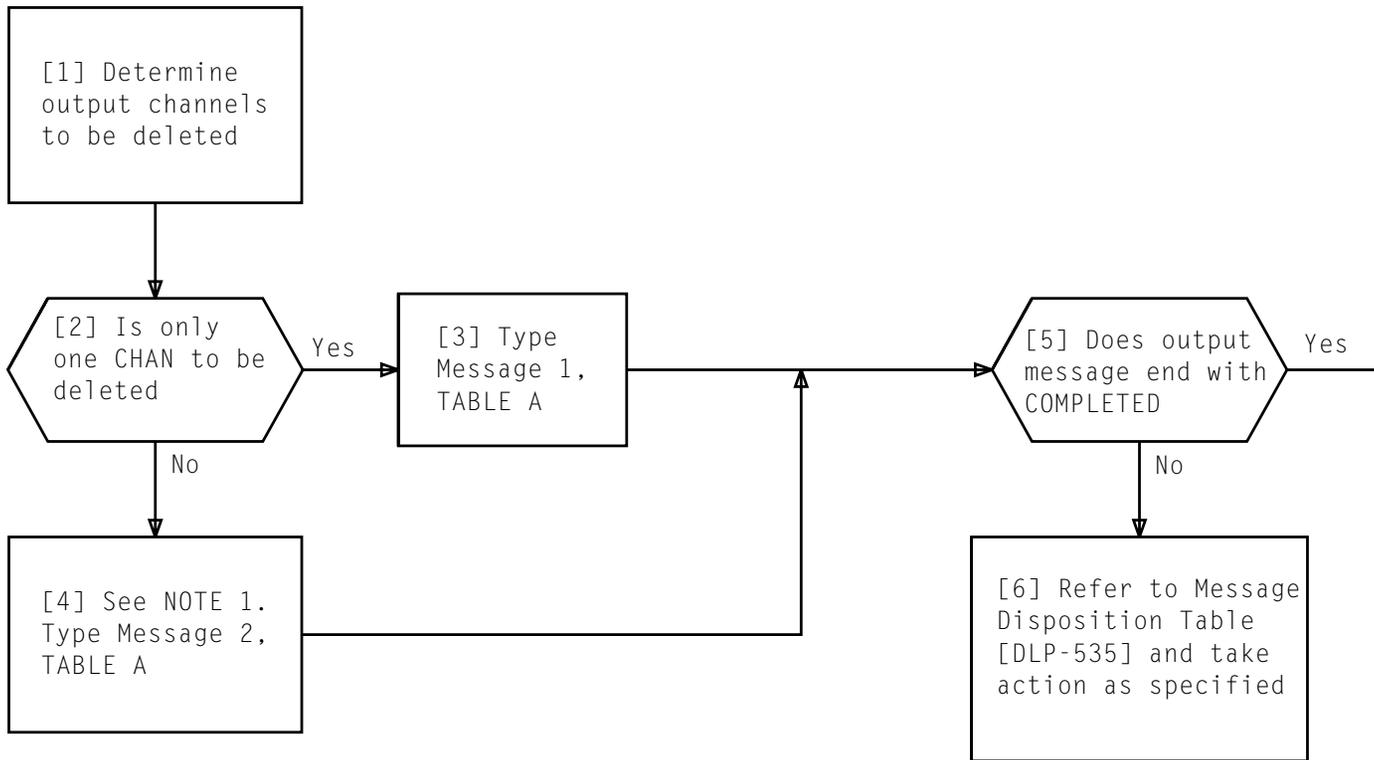


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;DLT:CHAN b! Example: SCHED:MEASREPT 2;DLT:CHAN TRF1!
2	SCHED:MEASREPT a;DLT:CHAN(b,b)! Example: SCHED:MEASREPT 2;DLT:CHAN(TRF1,RCREC)!
a = Report number b = Output channel identifier	

NOTE 1 Up to five channels may be entered per input message	
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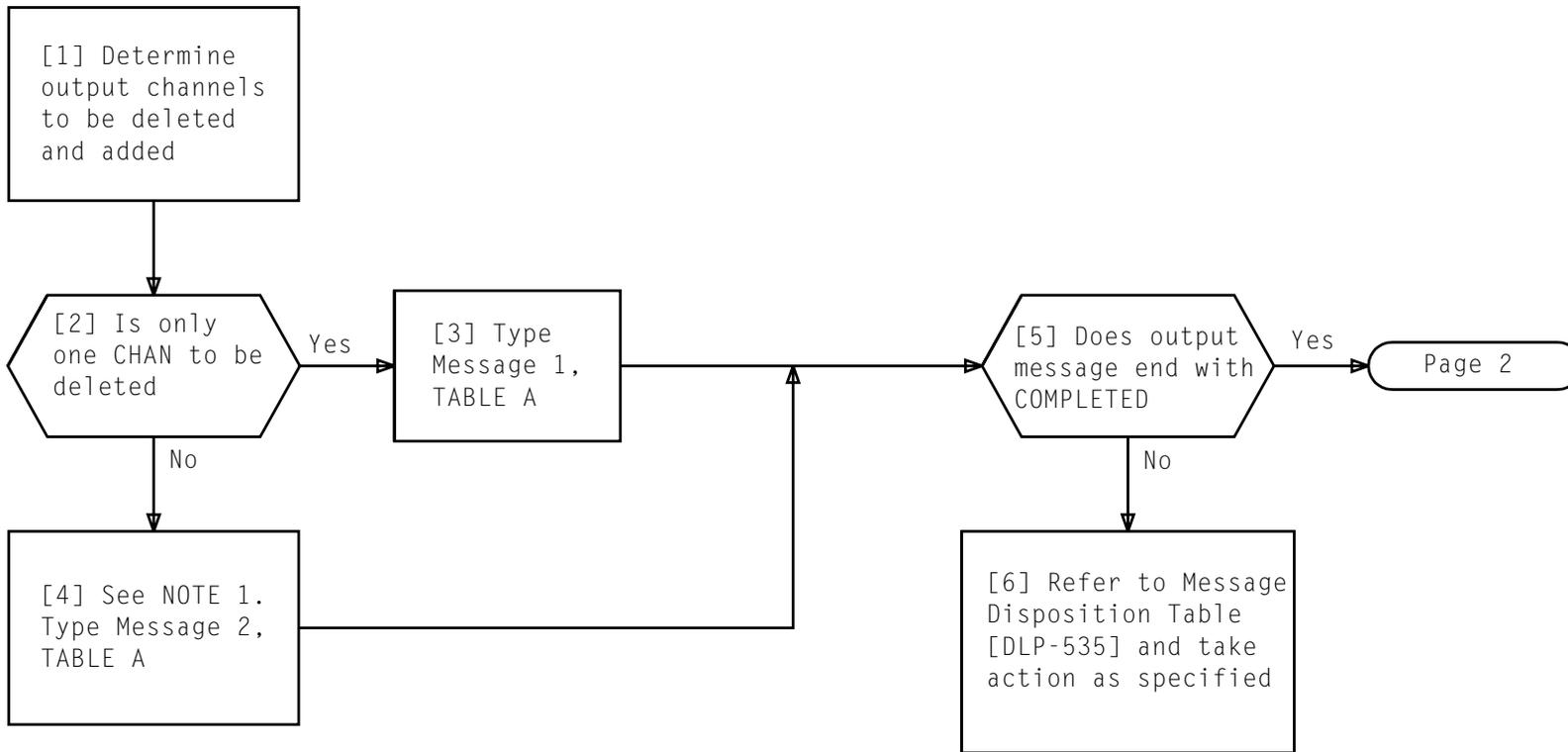


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;DLT:CHAN b! Example: SCHED:MEASREPT 2;DLT:CHAN TRF1!
2	SCHED:MEASREPT a;DLT:CHAN(b,b)! Example: SCHED:MEASREPT 2;DLT:CHAN(TRF1,RCREC)!
a = Report number b = Output channel identifier	

NOTE 1 Up to five channels may be entered per input message	
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**DELETE EXISTING AND ADD NEW OUTPUT CHANNEL(S)
(CHAN) – REPORTS 1 THROUGH 23**

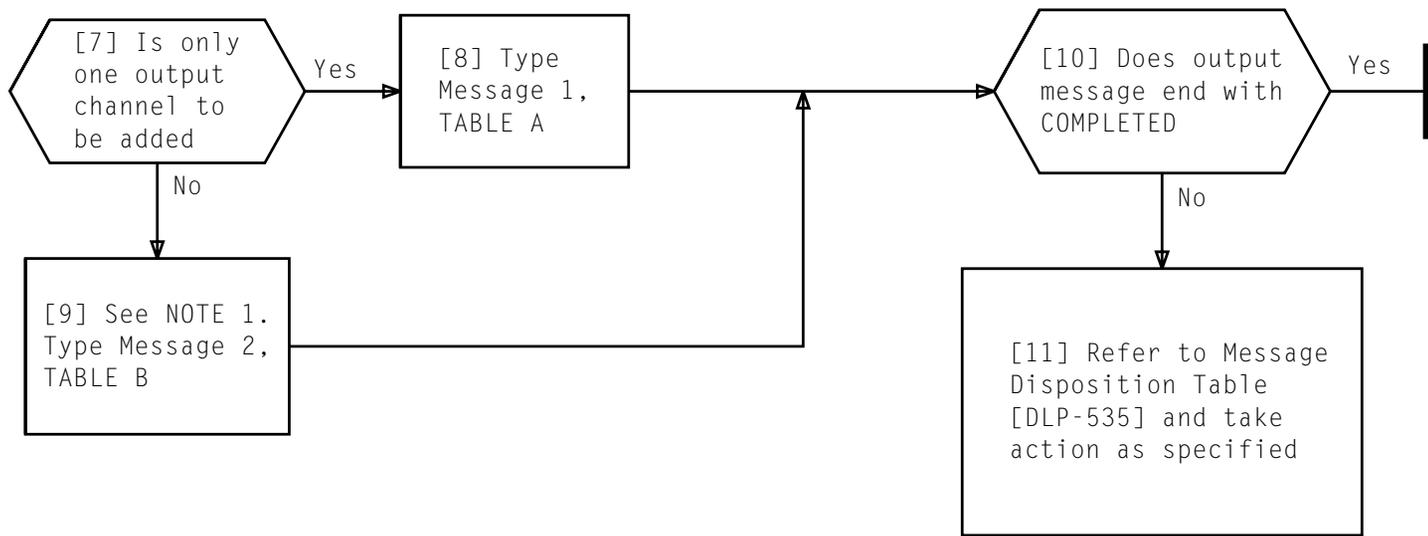


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;ADD:CHAN b! Example: SCHED:MEASREPT 2;ADD:CHAN TRF1!
2	SCHED:MEASREPT a;ADD:CHAN(b,b)! Example: SCHED:MEASREPT 2;ADD:CHAN(TRF1,RCREC)!
a = Report number b = Output channel identifier	

**DELETE EXISTING AND ADD NEW OUTPUT CHANNEL(S)
(CHAN) – REPORTS 1 THROUGH 23**

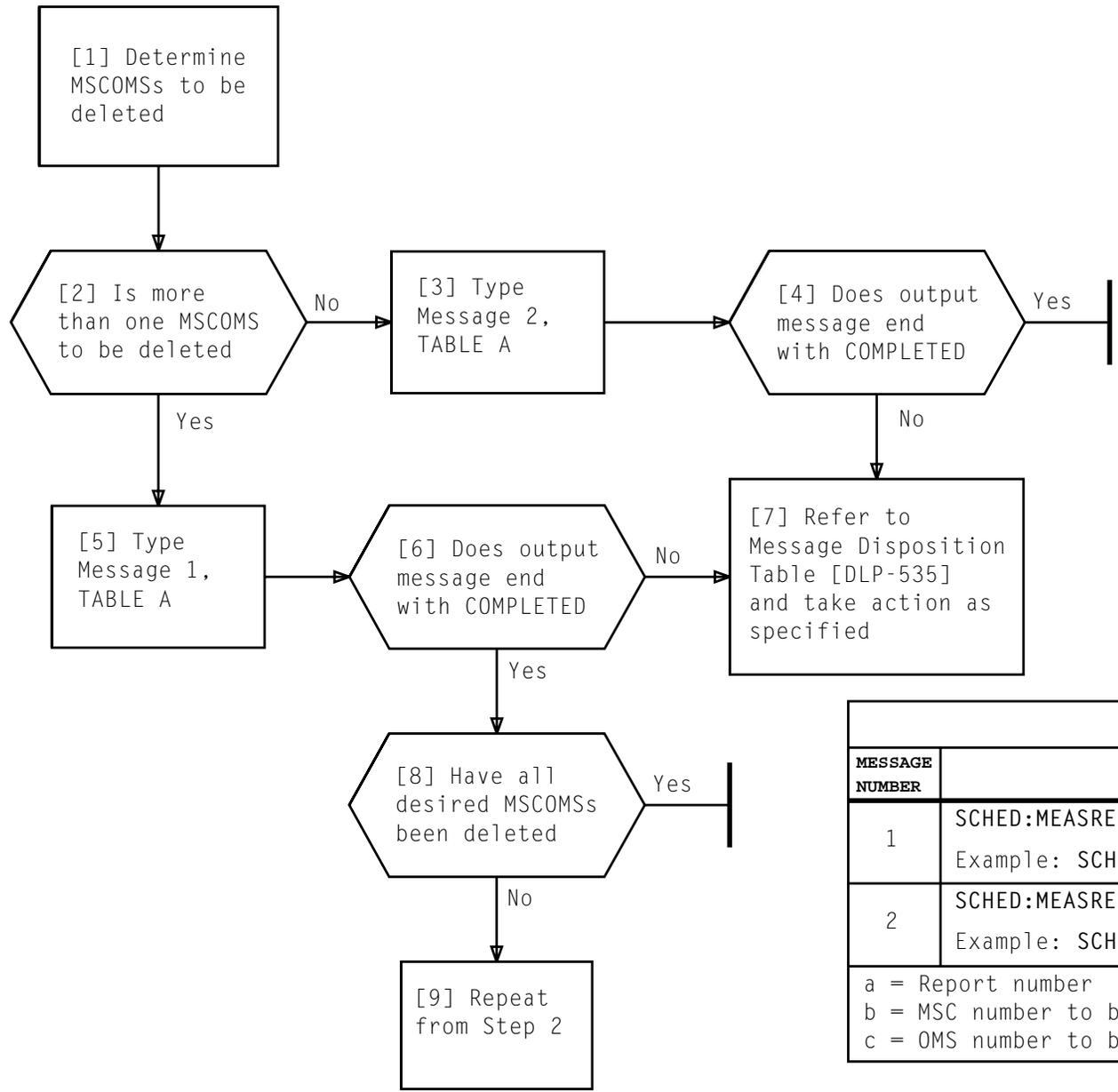


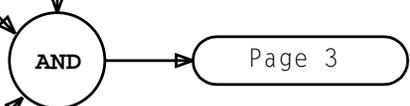
TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;DLT:MSCOMS(bbcccc,bbcccc)! Example: SCHED:MEASREPT 2;DLT:MSCOMS(220013,240025)!
2	SCHED:MEASREPT a;DLT:MSCOMS bbcccc! Example: SCHED:MEASREPT 3;DLT:MSCOMS 050016!
a = Report number b = MSC number to be deleted (0 thru 57) c = OMS number to be deleted (0 thru 1023)	

[1] For MSCOMSS to be added, locate and record MAXM number [TABLE A, Page 2]

[2] Add all MAXM numbers from Step 1 and record sum

[3] Add MAXM numbers from Step 2 and MAXM numbers from retained Verify Measurement Report and record sum as MAXM for input message

[4] Delete measurement report [DLP-525]



**ADD NEW MSCOMSS — ACCINT LESS THAN 1 HOUR —
REPORTS 1 THROUGH 23**

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TABLE A																						
MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM					
0	0	15	11	2	8	22	0	2	36	0	23	45	0	57	49	0	3					
0	1	1	11	3	16	22	1	2	36	1	16	45	1	5	49	1	17					
0	2	17	11	4	26	23	0	3	36	2	24	45	2	1	49	2	7					
0	3	6	11	5	2	23	1	14	36	3	21	45	3	25	50	0	4					
0	4	21	11	6	4	23	2	14	36	4	26	45	4	11		thru	per					
			12	0	16	23	3	7	36	5	2	45	5	16		511	OMS					
1	0	6	13	TSG	16 per TSG	23	4	2	36	6	13	45	6	4	51	0	2					
2	0	8				23	5	5	36	7	4	45	7	4		45	7	6	thru	per		
3	1 thru 30	1 per OMS	14	0 thru 255	32 per OMS	24	0	1	36	8	6	45	8	7		52	0	1				
3	32	32				24	1	18	36	9	7	46	0	56	46		1	14	thru	per		
3	33 thru 160	1 per OMS	15	0	7	25 thru 34, 38, 39, and 48	0	2	37	0	8	46	2	28	53		0	1				
			15	1	6		1	61	37	1	8	46	3	14		thru	per					
4	0	4	15	2	34		2	22	38	See MSC 25-34, 38, & 39, & 48	46	4	25	46		5	21	127	OMS			
4	1	1	15	3	1		3	49	39	See MSC 25-34, 38, & 39, & 48	46	6	10	46	7	35	54	0	32			
5	0	7	15	4	11		4	11			40	0	64	47	0	50		thru	per			
5	1	26	16	0	5		5	15	40	1	64	47	1	50	31	OMS						
5	2	3	16	1	31		6	5	40	2	64	47	2	28	55	0	16					
5	3	1	17	0	46		7	6	40	3	64	47	3	50	55	1	55					
5	4	9	17	1	11		8	24	40	0	4	47	4	50	55	2	55					
5	5	10	17	2	2		9	21	40	1	64	47	5	28	55	3	55					
5	6	25	17	3	3		10	10	41	2	64	47	6	50	55	4	55					
5	7	2	18	0	10		11	12	42	0 thru 31	1 per OMS	47	7	50	55	5	64					
5	8	2	19	0	19		12	2				47	8	28	55	6	64	55	6	64		
5	9	2	19	1	2		13	6	43	0 thru 31	1 per OMS	47	9	50	55	7	40					
6	0	65	19	2	5		14	5				47	10	50	55	8	28	56	0	60		
7	0	32	20	0	15		15	2	47	11	28	55	9	50	1	60						
7	1	5	20	1	37		16	38	47	12	28	55	10	50	2	40						
9	0	2	20	2	5		17	2	44	0	1	47	11	28	3	64						
9	1	8	20	3	1		35	0	7	48	Same as MSC 25 thru 34, 38, 39, and 48	Same as MSC 25 thru 34, 38, 39, and 48	48	Same as MSC 25 thru 34, 38, 39, and 48	57	4	20					
10	0 thru 1023	2 per OMS	20	4	41		35	1	19							47	13	28	55	11	28	0
			21	0	8	35	2	3	47							14	28	55	12	28		
			21	1	2	35	3	2														
11	0	3	21	2	3																	
11	1	8	21	3	16																	

ADD NEW MSCOMS - ACCINT LESS THAN 1 HOUR -
 REPORTS 1 THROUGH 23

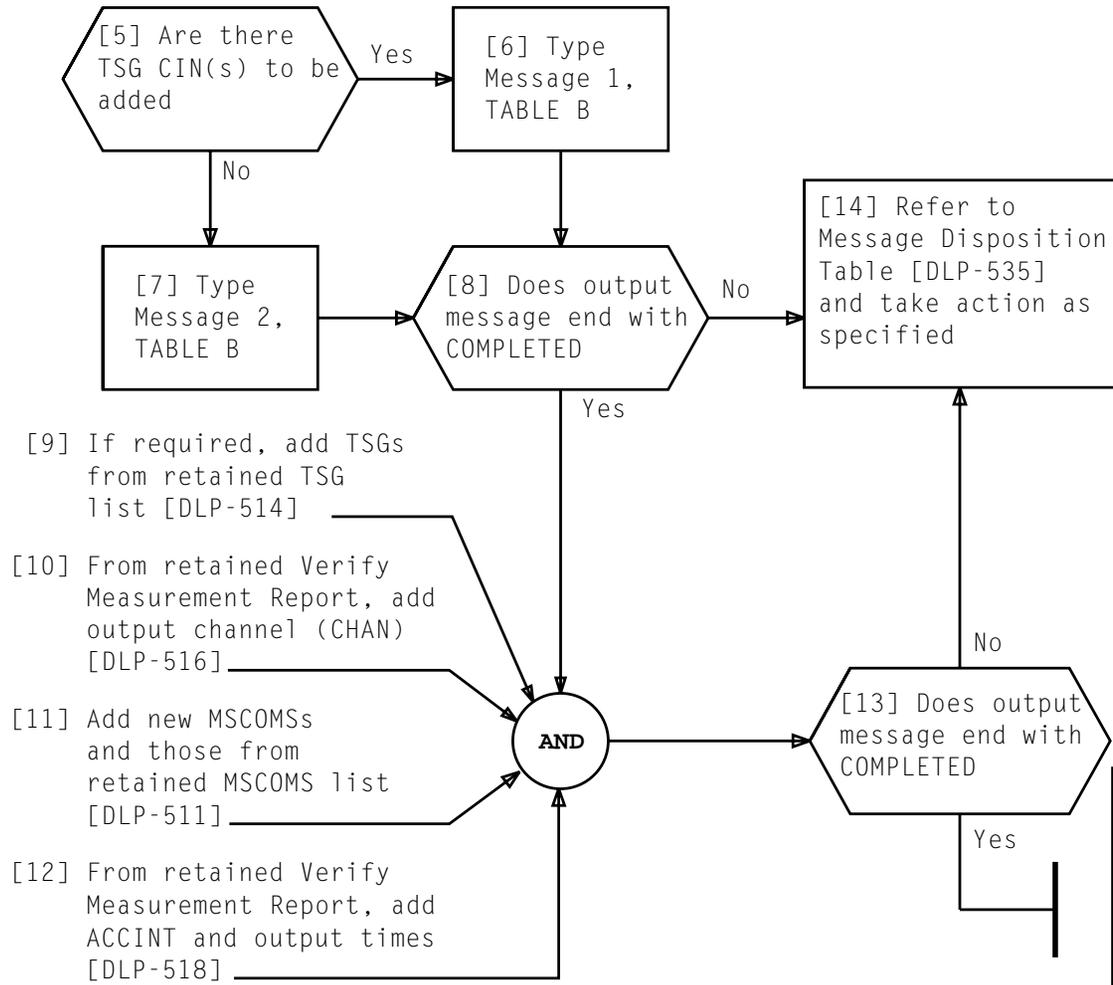
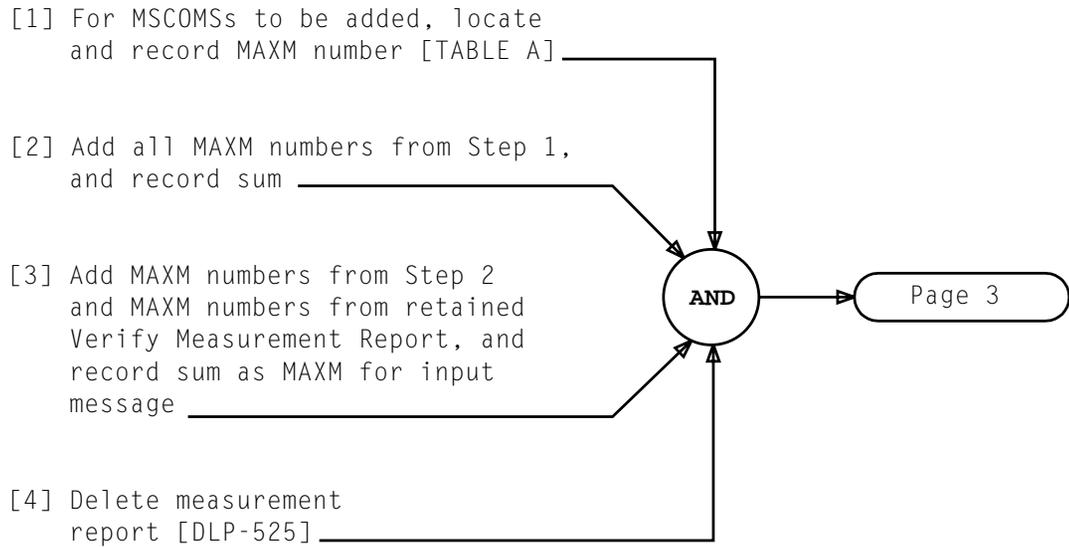


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d!
2	SCHED:MEASREPT a;ADD:PRIM b,MAXM c!

a = Report number
 b = Primary channel (from retained Verify Measurement Report)
 c = MAXM (from Step 3)
 d = TSGCAP (from retained Verify Measurement Report)

ADD NEW MSCOMs – ACCINT LESS THAN 1 HOUR – REPORTS 1 THROUGH 23



**ADD NEW MSCOMs — ACCINT MORE THAN 1 HOUR —
REPORTS 1 THROUGH 23**

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TABLE A																									
MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM	MSC	OMS	MAXM								
0	0	15	11	2	8	22	0	2	36	0	23	45	0	57	49	0	3								
0	1	1	11	3	16	22	1	2	36	1	16	45	1	5	49	1	17								
0	2	17	11	4	26	23	0	3	36	2	24	45	2	1	49	2	7								
0	3	6	11	5	2	23	1	14	36	3	21	45	3	25	50	0	4								
0	4	21	11	6	4	23	2	14	36	4	26	45	4	11		thru	per								
			12	0	16	23	3	7	36	5	2	45	5	16		511	OMS								
1	0	6	13	TSG	16 per TSG	23	4	2	36	6	13	45	6	4	51	0	2								
2	0	8				23	5	5	36	7	4	45	7	4		45	7	6	thru	per					
3	1 thru 30	1 per OMS	14	0 thru 255	32 per OMS	24	0	1	36	8	6	45	8	7		52	0	1							
3	32	32				24	1	18	36	9	7	46	0	56	46		1	14	thru	per					
3	33 thru 160	1 per OMS	15	0	7	25 thru 34, 38, 39, and 48	0	2	37	0	8	46	2	28	53		0	1							
			15	1	6		1	61	37	1	8	46	3	14		thru	per								
4	0	4	15	2	34		2	22	38	See MSC 25-34, 38, 39, & 48	46	4	25	46		5	21	127	OMS						
4	1	1	15	3	1		3	49	39	See MSC 25-34, 38, 39, & 48	46	6	10	46	7	54	0	32							
5	0	7	15	4	11		4	11			46	6	10				46	7	35	thru	per				
5	1	26	16	0	5		5	15	40	0	64	47	0	50	31					OMS					
5	2	3	16	1	31		6	5	40	1	64	47	1	50	55	0	16								
5	3	1	17	0	46		7	6	40	2	64	47	2	28	55	1	55								
5	4	9	17	1	11		8	24	40	3	64	47	3	50	55	2	55								
5	5	10	17	2	2		9	21	40	0	4	47	4	50	55	3	55								
5	6	25	17	3	3		10	10	41	0	4	47	4	50	55	4	55								
5	7	2	18	0	10		11	12	42	0 thru 31	1 per OMS	47	5	28	55	5	64								
5	8	2	19	0	19		12	2				47	6	50	55	6	64	55	6	64					
5	9	2	19	1	2		13	6				47	7	50	55	7	50	55	7	40					
6	0	65	19	2	5		14	5	43	0 thru 31	1 per OMS	47	8	28	55	8	40								
7	0	32	20	0	15		15	2				47	9	50	56	0	60	1	60	2	40				
7	1	5	20	1	37		16	38				47	10	50								3	64	4	20
9	0	2	20	2	5		17	2	44	0	1	47	11	28								57	0	70	
9	1	8	20	3	1		35	0	7	48	Same as MSC 25 thru 34, 38, 39, and 48	Same as MSC 25 thru 34, 38, 39, and 48	48	Same as MSC 25 thru 34, 38, 39, and 48	57	0	70								
10	0 thru 1023	2 per OMS	20	4	41		35	1	19									47	9	50	47	10	50		
			21	0	8	35	2	3	47									10	50	47	10	50			
			21	1	2	35	3	2																	
11	0	3	21	2	3																				
11	1	8	21	3	16																				

ADD NEW MSCOMSS – ACCINT MORE THAN 1 HOUR –
 REPORTS 1 THROUGH 23

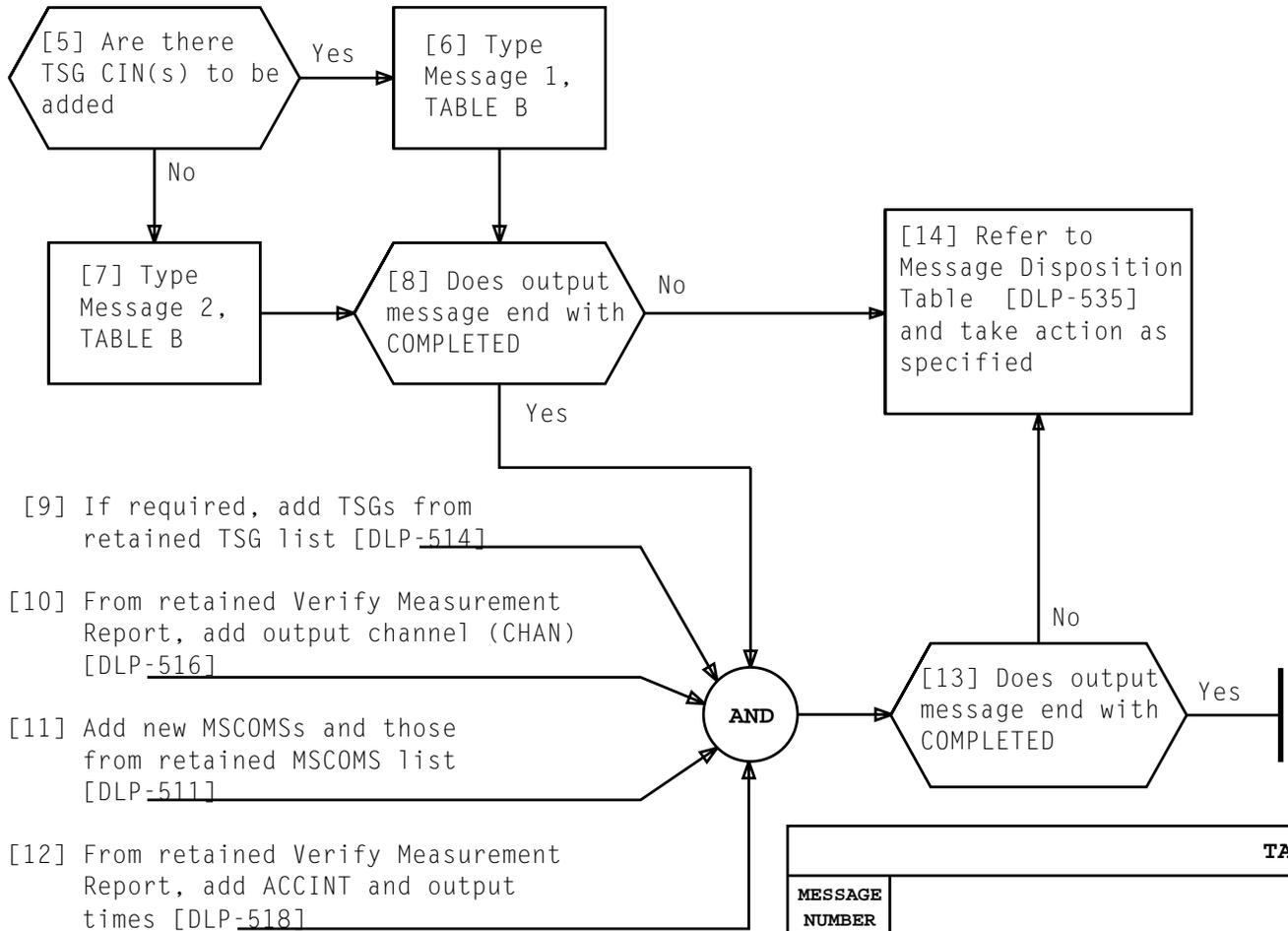


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d,ENGMEM!
2	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,ENGMEM!
a = Report number b = Primary channel (from retained Verify Measurement Report) c = MAXM (from Step 3) d = TSG CAP (from retained Verify Measurement Report)	

**ADD NEW MSCOMSSs – ACCINT MORE THAN 1 HOUR –
REPORTS 1 THROUGH 23**

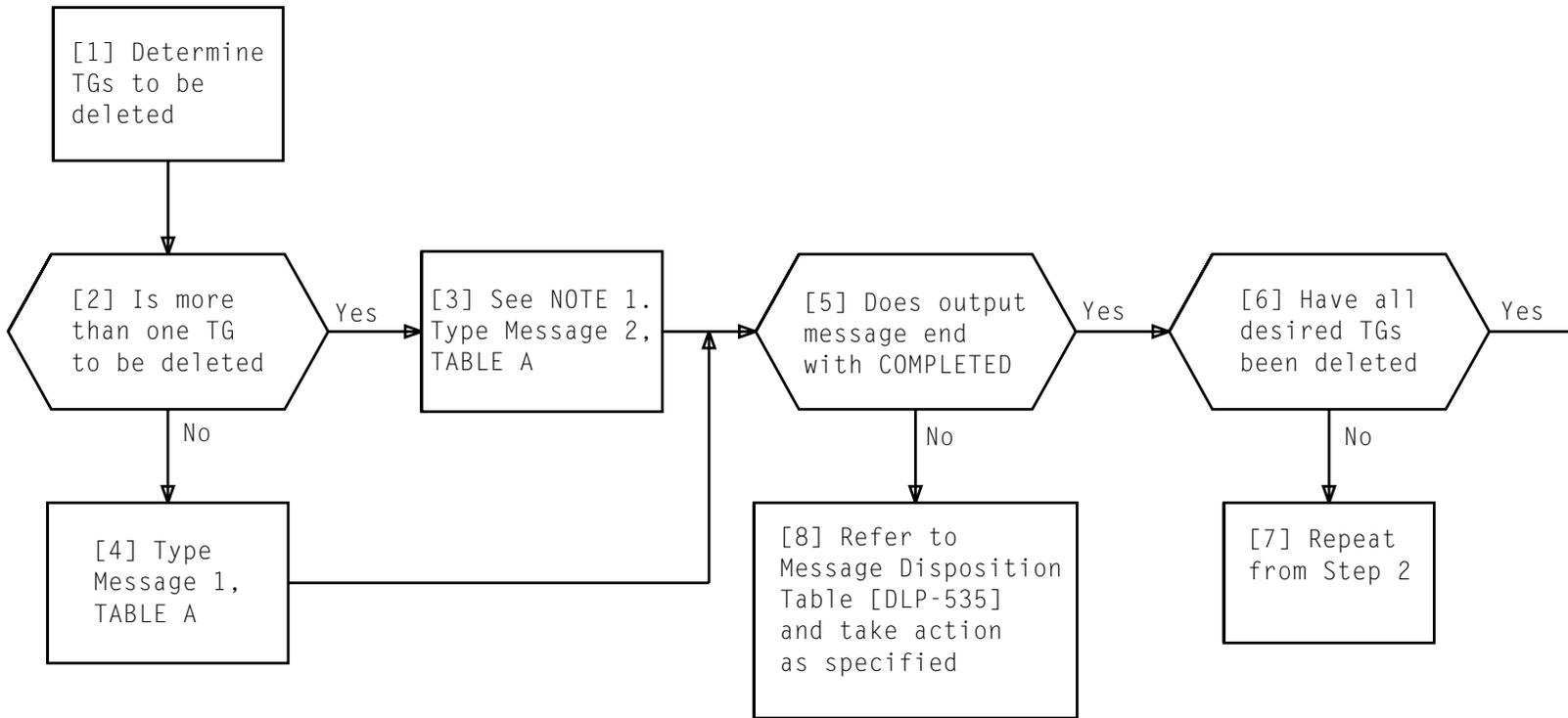
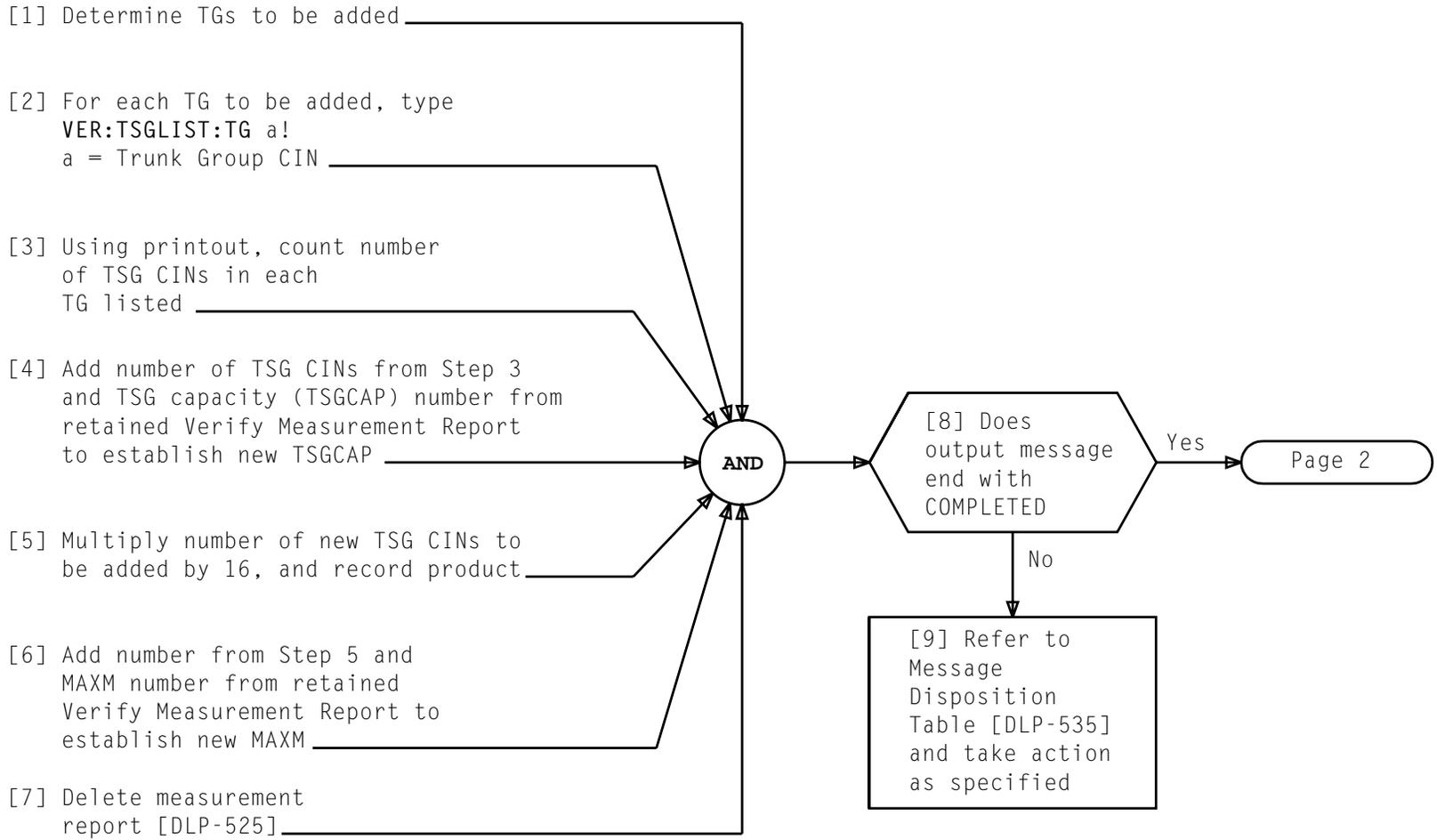


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;DLT:TG b!
2	SCHED:MEASREPT a;DLT:TG(b,b)!
a = Report number b = TG CIN to be deleted	

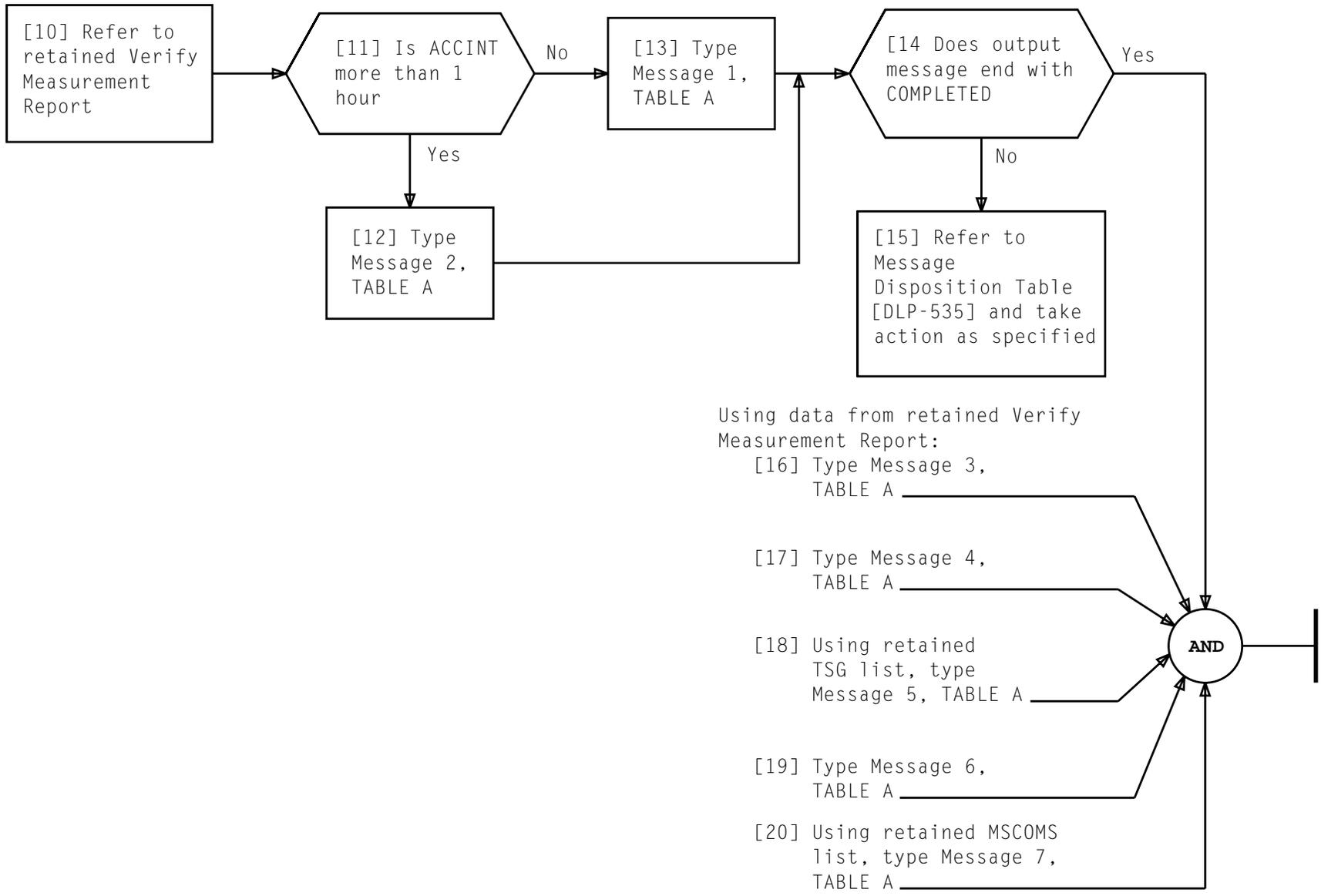
NOTE 1
No more than two CINs may be entered with single message due to line space limitation of 80 characters

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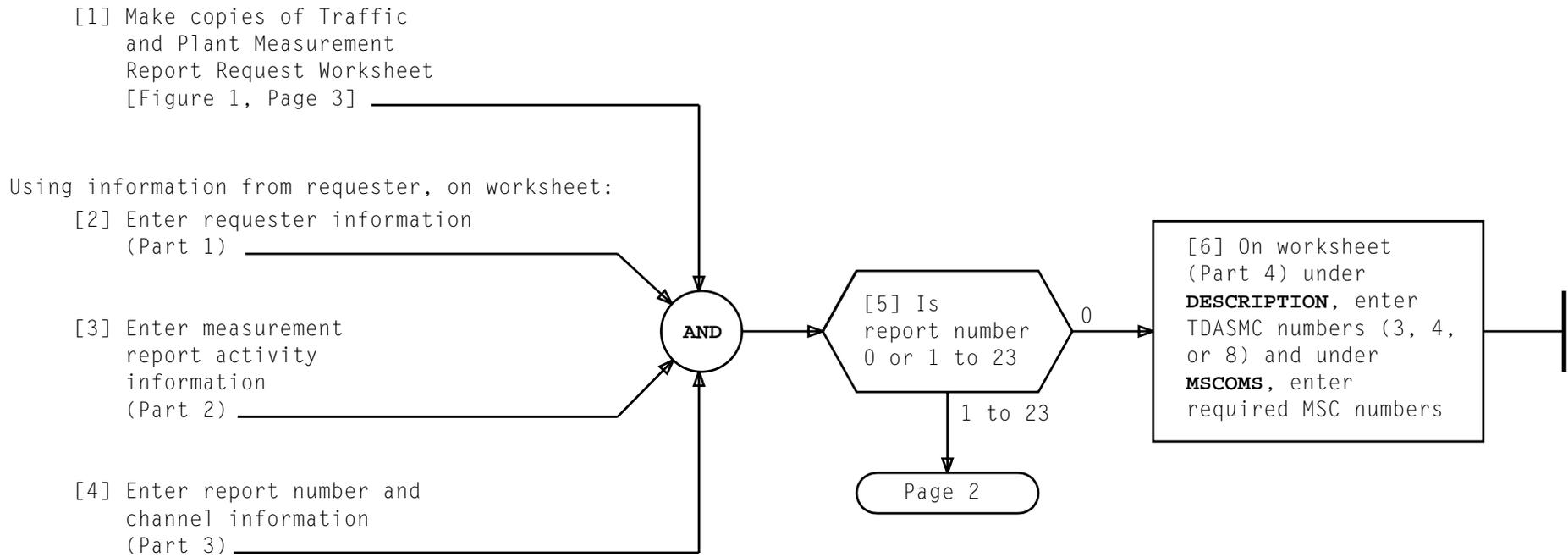
ADD NEW TGs — REPORTS 1 THROUGH 23

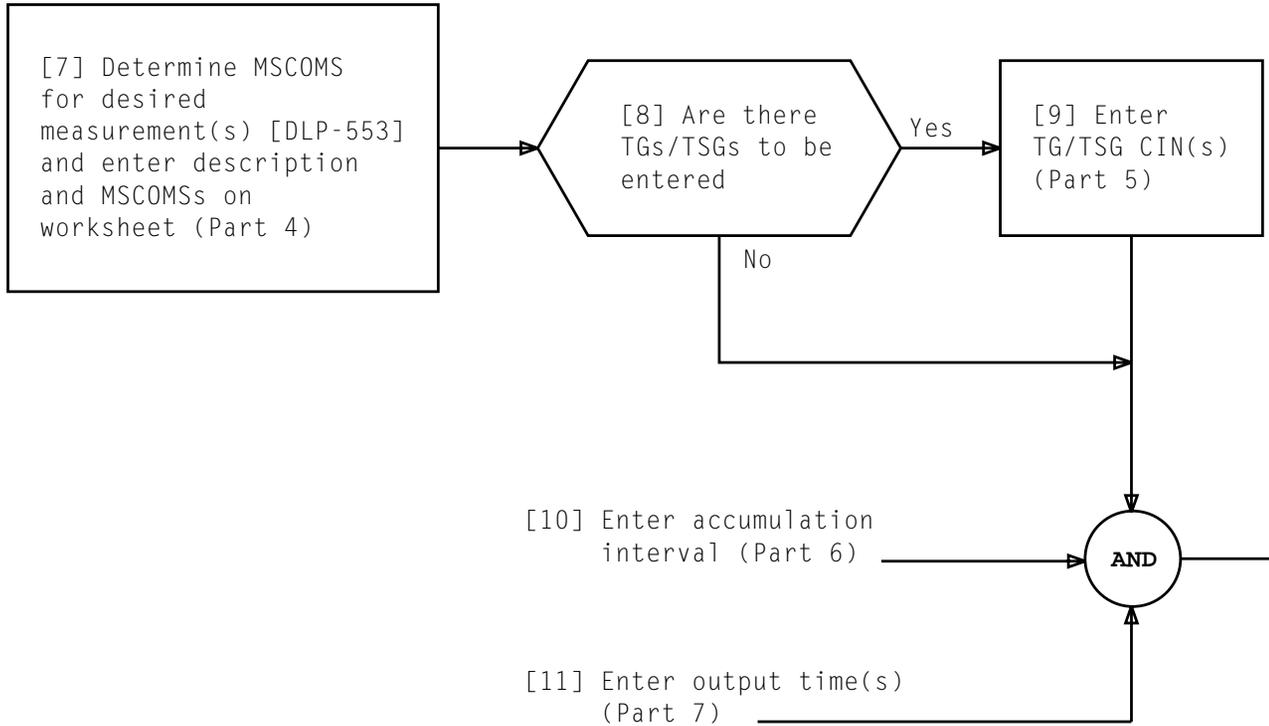
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Using data from retained Verify Measurement Report:

- [16] Type Message 3, TABLE A
- [17] Type Message 4, TABLE A
- [18] Using retained TSG list, type Message 5, TABLE A
- [19] Type Message 6, TABLE A
- [20] Using retained MSCOMS list, type Message 7, TABLE A





TRAFFIC AND PLANT MEASUREMENT REPORT REQUEST WORKSHEET						PAGE ____ of ____
1	REQUESTER _____	ORGANIZATION _____	ADDRESS _____	TELEPHONE _____	DELIVER TO _____	
2	MEASUREMENT REPORT ACTIVITY	ESTABLISH <input type="checkbox"/>	CHANGE <input type="checkbox"/>	DISCONTINUE <input type="checkbox"/>	DATE _____	
3	REPORT NO. (MEASREPT) _____	PRIMARY CHANNEL (PRIM) _____	OUTPUT CHANNEL(S) (CHAN) (1) _____ (2) _____ (3) _____ (4) _____ (5) _____			
4	MEASUREMENTS		MEASUREMENTS		MEASUREMENTS	
	DESCRIPTION	MSCOMS	DESCRIPTION	MSCOMS	DESCRIPTION	MSCOMS
5	TG/TSG CIN(S)		TG/TSG CIN(S)		TG/TSG CIN(S)	
6	ACCUMULATION INTERVAL (ACCINT) _____			7	OUTPUT TIME(S) _____	
REMARKS _____				_____		
_____				_____		

Figure 1 - Traffic and Plant Measurement Report Request Worksheet

GENERAL

In order to efficiently control the establishment, distribution, and deletion of Traffic and Plant Measurement Reports, it is necessary to establish and maintain a Traffic and Plant Measurement Report Logbook. By the use of a form (Form A, Page 3), the logbook, if correctly maintained, contains current and historical data related to specific report numbers 0 through 23. By the use of additional insertions, such as the report request worksheet and input message response printouts, information concerning the report contents is available during the period of time in which the report is active.

After the logbook has been set up and is ready for use, entries are made in three phases directly related to activities which occur from the time the report is established until the time it is discontinued. The phase approach is important because of the time lapse which may occur between phases.

The phases are defined as follows:

- Phase I - Occurs at the time the report is established.
- Phase II - Occurs at the time of the report's first scheduled output.
- Phase III - Occurs at the time the report is discontinued.

When a report has passed through all phases, the resultant data entered on the form may be referred to as historical data for application as desired. The phase activities are described in the following paragraphs.

DESCRIPTION OF PHASES AND RELATED ACTIVITIES

1. Set up Logbook

Set up the logbook initially by completing the following:

- Obtain a ring binder.
- Obtain index tabs numbered 0 through 23 and insert in binder to establish sections.
- Obtain copies of Form A and insert one in each section, 0 through 23.

2. Phase I - Establish Measurement Report

After a report has been established, complete the following activities in the binder section for the number assigned to the report:

- Record report establishment on Form A, under ESTABLISH, as follows:
 - a. Under DATE, record the date of establishment
 - b. Under OPERATOR, identify the operator who established the report.
- Insert the Traffic and Plant Measurement Report Request Worksheet used to establish the report.
- Remove data printed out at the receive-only printer (ROP) as the result of report establishment, and insert.
- Attach a red No. 2, steel filing signal to the edge of the index separator for use as an indicator that the report number is assigned.

NOTE: Report 0 is always run every hour. If TDASMCs 3, 4, and 8 are administered, they will be processed with the other TDASMCs.

3. Phase II – Printout of First Scheduled Output

This phase occurs at the time the first scheduled output of the report is printed out. The following two conditions must be considered:

(1) When the report request included directions to print out the report at a printer outside the MAC and (2) when the report was directed to print out at a MAC printer.

Under condition (1), assign a MAC output channel for the report printout in addition to the remote channel specified in the request. When the first scheduled report prints out, verify the fact that the report occurred as scheduled, and then delete the MAC channel from the output channel assignment. Insert the report printout into the logbook. Under condition (2), obtain a copy of the report printout, deliver the original as directed, and insert the copy into the logbook. On Form A, under REPORT PRINTOUT, record printout and delivery status.

NOTE: Report 0 is run every hour and does not generate only output reports.

4. Phase III – Discontinue Measurement Report

At the time the report is discontinued, complete the following procedure:

- On Form A, under DISCONTINUE, record the date the report was discontinued and identify the operator who performed the operation.
- Record the authority by which the report was discontinued.

- Record the fact that the requester has or has not been notified the report is discontinued. If not specifically directed to report the discontinuation, the operator may add a handwritten note to the last report printout to inform the requester that the report has been discontinued.
- From the report number section of logbook, remove all printed out data and the report request worksheet, leaving only Form A.
- Remove the red No. 2 filing signal from edge of index separator. The absence of a signal indicates the report number is available for assignment.

The disposition of data removed from a report number section after discontinuance of a report is optional in accordance with instructions from the MAC Supervisor. Form A, retained in the section, provides historical information regarding the report number.

1. Identify system response to input message
2. Locate identified system response [TABLE A]
3. Read description and perform specified action for identified system response [TABLE A]

TABLE A		
RESPONSE TO INPUT MESSAGE	DESCRIPTION	ACTION
Aborted	Processing interrupted and not complete, but memory may have been updated. May be brief break, not affecting function, being performed. Usually followed immediately by COMPLETED, indicating that interruption is over and processing is complete. If resumption of processing is delayed considerably before COMPLETED appears, activity in process could be affected; therefore, appropriate verify steps are in order	If ABORTED is not followed immediately by COMPLETED, perform appropriate verification procedure and reenter input message, if necessary
Not started ACCINT invalid	Input message attempts to enter ACCINT containing: <ol style="list-style-type: none"> a. Minutes other than 00, 15, 30, or 45 b. Hours in excess of 168 c. More than 5 characters in group If input is delete attempt, indication is that ACCINT entered for deletion is not identical to ACCINT in existing report	Determine error in input message; correct and reenter
Not started ACCINT previously ASN	Attempt was made to assign ACCINT to existing report already containing ACCINT. Existing ACCINT must be deleted before new one can be added. Report can contain only one ACCINT at a time	Delete old ACCINT; then add new
Not started ACCINT UNAS	ACCINT not assigned or attempt was made to add output time(s) without first adding ACCINT	Add ACCINT; then add output times
Not started accumulation interval overlap in Accumulation Timetable (ATT)	Attempt was made to specify ACCINT that overlaps interval previously assigned to report. Existing ACCINT must be deleted from ATT before new interval can be assigned to same time segment	Examine ATT and determine correct interval. Take necessary corrective steps and reenter report

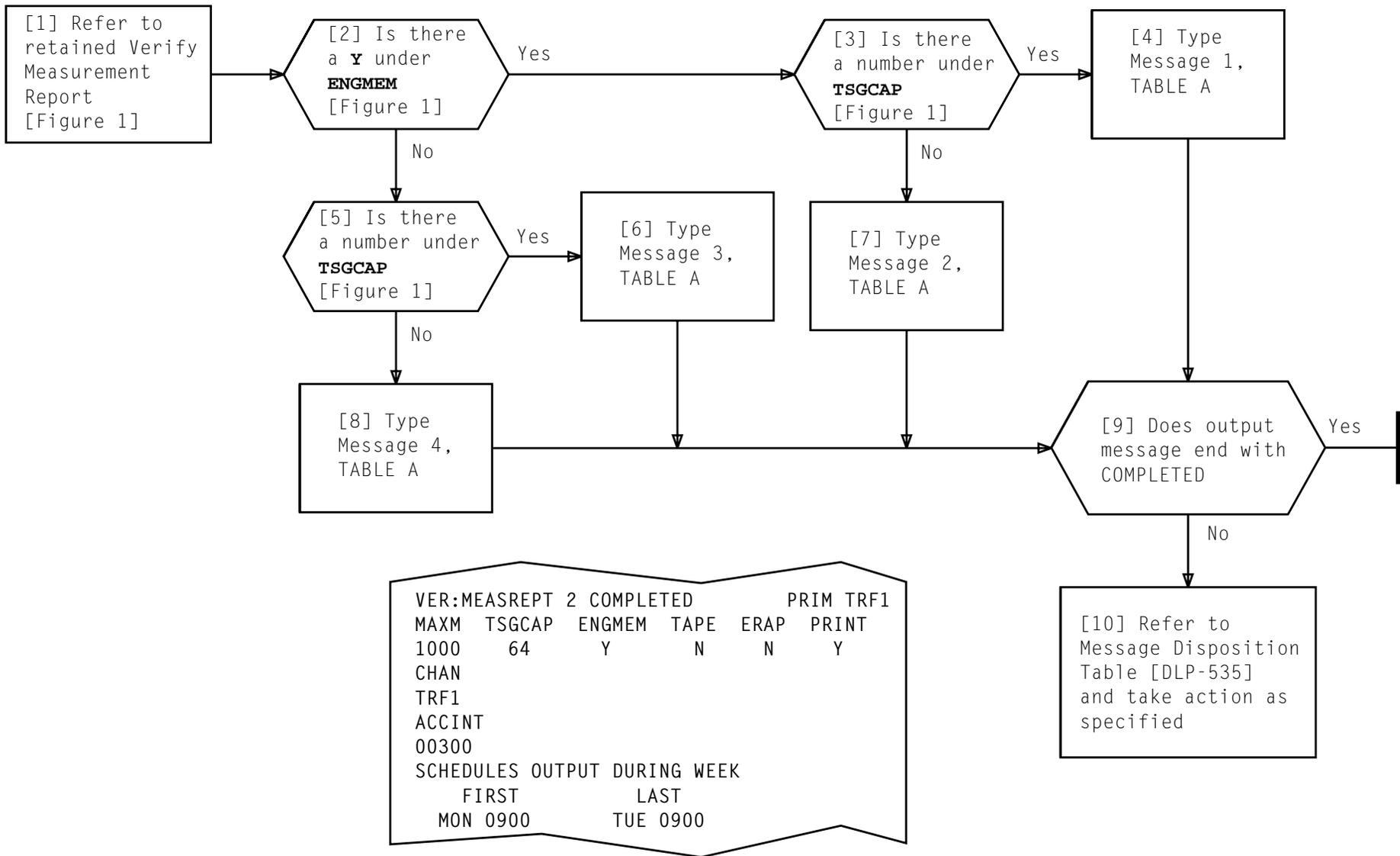
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TABLE A (Continued)

RESPONSE TO INPUT MESSAGE	DESCRIPTION	ACTION
Not started accumulation interval overlap in Accumulation Timetable (ATT) (Continued)	Also appears when attempt is made to extend interval from one week into next. 168-hour interval begins at 0000, Mon, and ends with 2300, Sun; therefore, output time(s) must reflect restricted ACCINT	Examine ATT and determine correct interval. Take necessary corrective steps and reenter report
Not started Accumulation Timetable (ATT) invalid input	Attempt was made to change ATT in report containing ACCINT of less than 1 hour. ATT does not list accumulation intervals less than 1 hour; therefore, term ATT is invalid for input when ACCINT is less than 1 hour	Delete ATT from input or change ACCINT to more than 1 hour
Not started CHAN previously ASN	Attempt was made to enter CHAN number already assigned to this report or attempt to add sixth output channel which exceeds maximum allowance of five CHANs per report	Examine and correct input data. Reenter input message
Not started data audit in progress	Attempt was made to enter input message interrupted by data audit. When audit is complete, components of interrupted report should be verified to determine if any changes to data occurred during audit	Use verify output to decide if message should be reentered. Take necessary action
Not started ENGMEM exceeded	Attempt was made to add TSG to report that exceeds allowed number of TSGs. Also, attempt was made to add data to existing report that exceeds engineered memory assigned by ODA	Reduce number of TSGs added to report. Examine engineered memory limit and adjust input
Not started invalid input CHAN	Attempt was made to change report on other than the primary input channel, MTC, SREC1, or SREC2	Go to assigned PRIM channel and enter message
Not started MAXM exceeded	Attempt was made to enter measurement data (MSCOMS and/or TSGs) for which MAXM count exceeds that assigned to existing report under MAXM entry	Delete existing report and reestablish, using increased MAXM count
Not started MEASREPT previously ASN	Attempt was made to establish report using MEASREPT number already assigned to a report	Select another report number and reenter message
Not started MEASREPT UNAS	Attempt was made to enter message with reference to MEASREPT number not assigned	Reenter input message containing valid MEASREPT number

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TABLE A (Continued)		ACTION
RESPONSE TO INPUT MESSAGE	DESCRIPTION	
Not started MSCOMS previously ASN	Attempt was made to enter MSCOMS pairs already assigned in this report	Reenter input message using only MSCOMS pairs not previously assigned
Not started MSCOMS UNAS	Attempt was made to delete MSCOMS where no MSCOMS was previously assigned	Invalid action. Reconsider
Not started output CHAN UNAS	Attempt was made to delete output channel (CHAN) where none was previously assigned	Invalid action. Reconsider
Not started TDASMC UNAS	Attempt was made to add or delete a MSC to a TDASMC number that is not 3, 4, or 8	Invalid action. Reconsider
Not started TSG previously ASN	Attempt was made to input TSG CIN already assigned to this report	Invalid entry. Notify MAC Supervisor
Not started TSG UNAS	Attempt was made to delete TSG CIN that has not been assigned	Invalid action. Reconsider
Not started MAXM not input	Attempt was made to complete report input without MAXM	Invalid action. Reconstruct input message to include MAXM
Not started UNEQ	Attempt was made to ALW TSI which is in nonoperational state	Select operational TSI and reenter
Not started previously ASN	Attempt was made to ALW TSI already assigned	Select another TSI not on list
Not started eight previously ASN	Attempt was made to add TSI to list already containing maximum of eight TSIs	Invalid action. Reconsider
Not started UNAS	Attempt was made to delete TSI not previously assigned	Invalid action. Reconsider



```

VER:MEASREPT 2 COMPLETED          PRIM TRF1
MAXM TSGCAP ENGMEM TAPE ERAP PRINT
1000  64    Y    N    N    Y
CHAN
TRF1
ACCINT
00300
SCHEDULES OUTPUT DURING WEEK
      FIRST          LAST
MON 0900          TUE 0900
  
```

Figure 1 - Typical Verify Measurement Report

TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d,ENGMEM! Example: SCHED:MEASREPT 3;ADD:PRIM TRF1,MAXM 200,TSGCAP 32,ENGMEM!
2	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,ENGMEM! Example: SCHED:MEASREPT 4;ADD:PRIM TRF1,MAXM 200,ENGMEM!
3	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d! Example: SCHED:MEASREPT 5;ADD:PRIM TRF1,MAXM 200,TSGCAP 24!
4	SCHED:MEASREPT a;ADD:PRIM b,MAXM c! Example: SCHED:MEASREPT 6;ADD:PRIM TRF1,MAXM 200!
a = Report number b = New primary channel number c = MAXM from retained Verify Measurement Report d = TSGCAP from retained Verify Measurement Report	

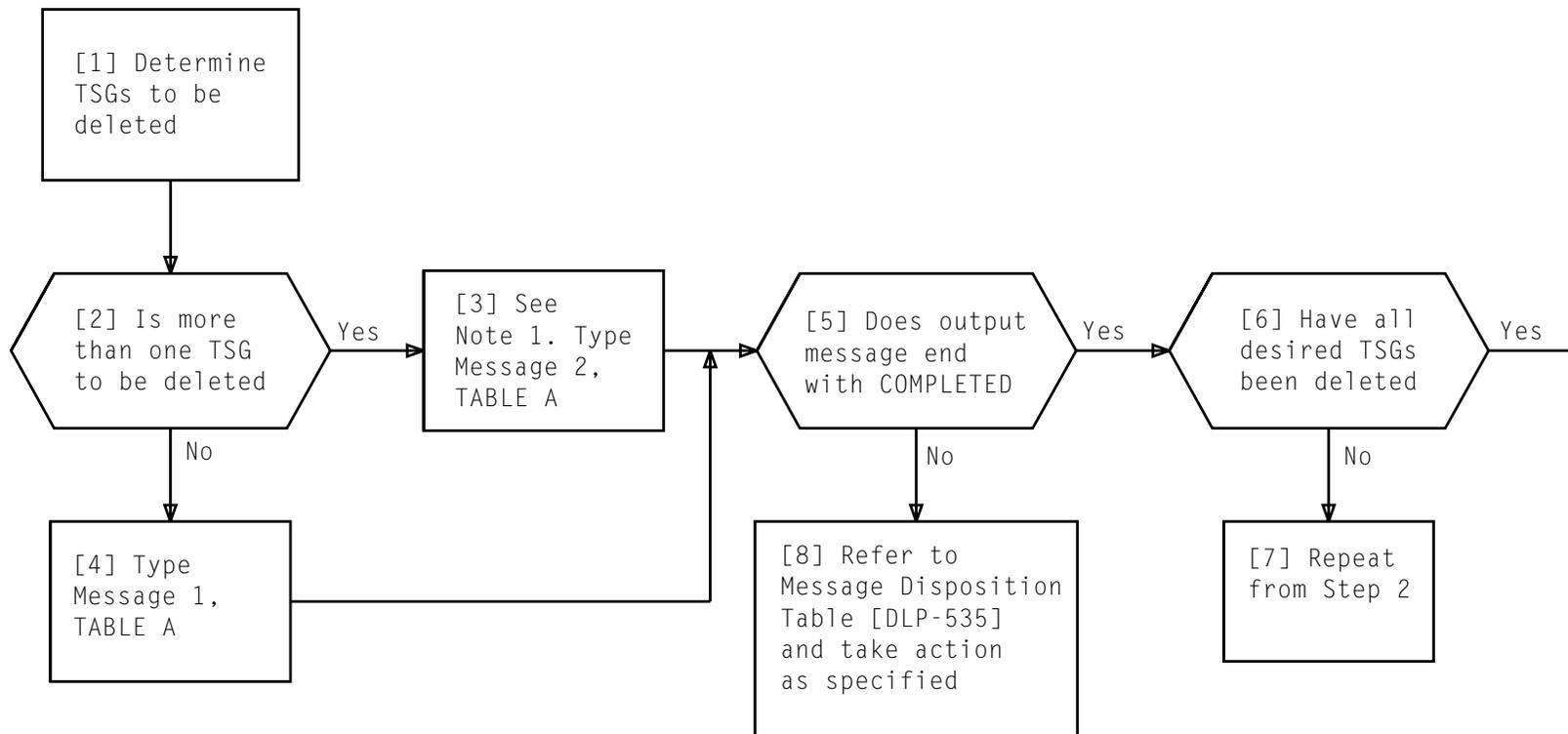
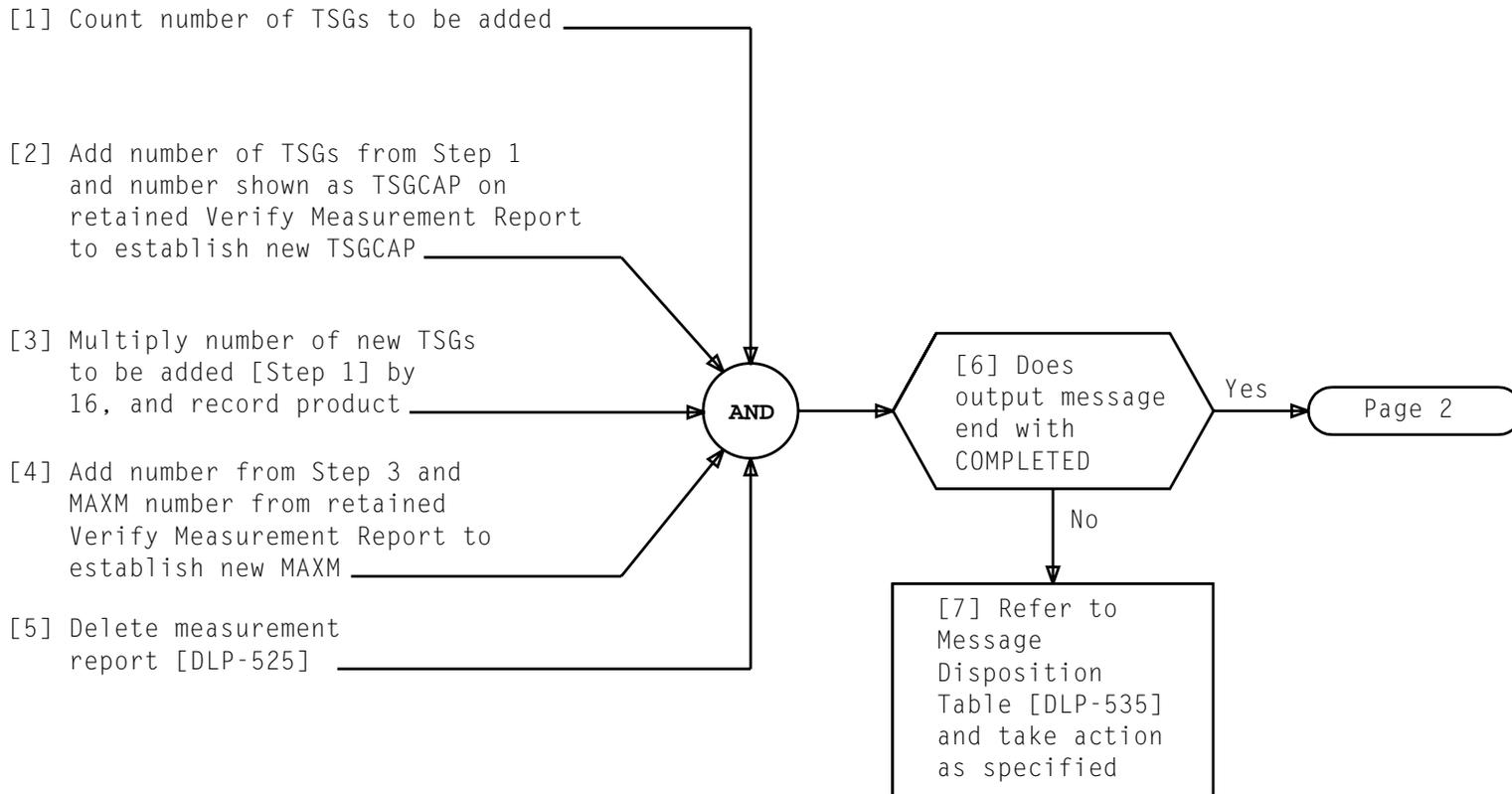


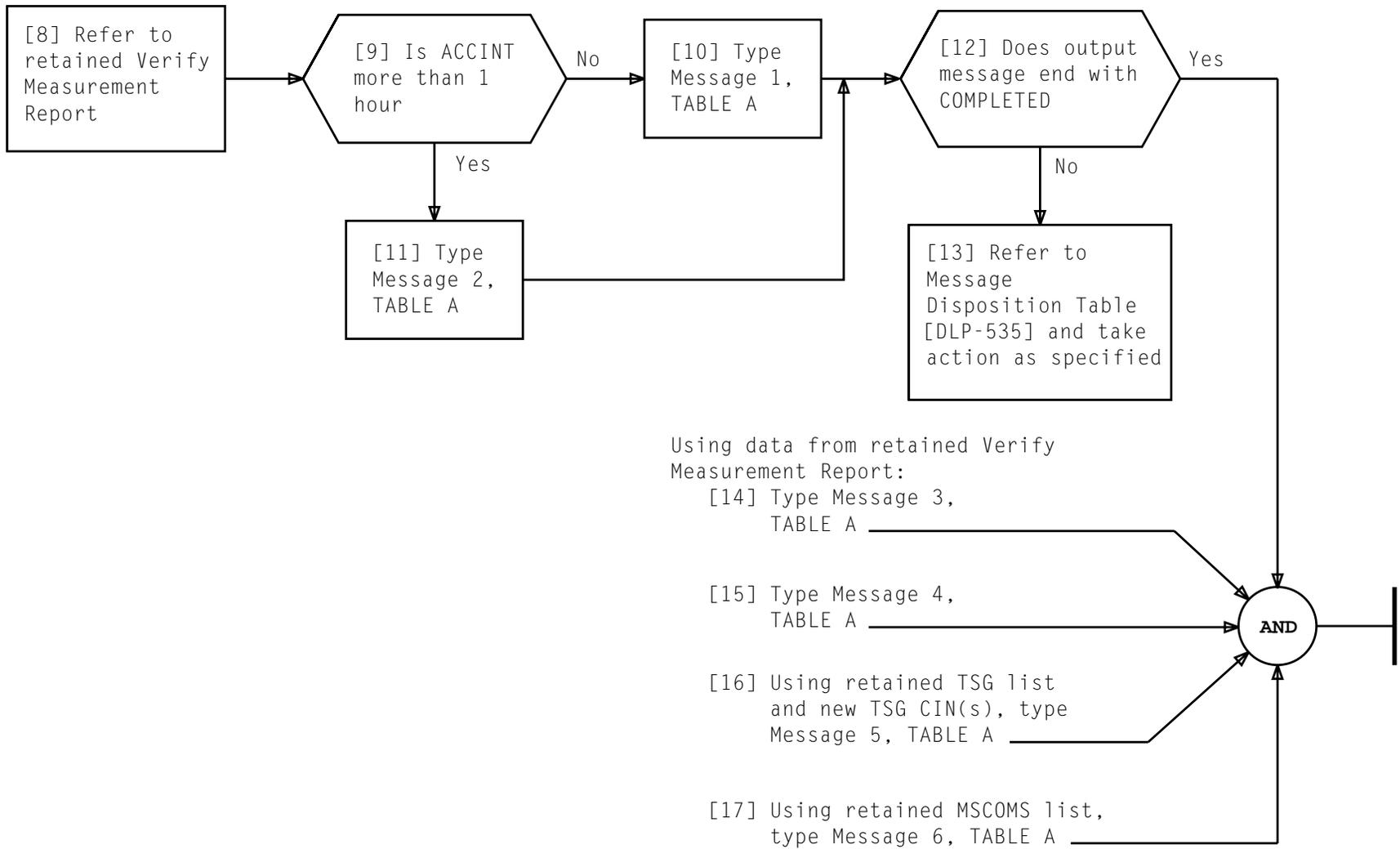
TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;DLT:TSG b! Example: SCHED:MEASREPT 2;DLT:TSG 1001MIAMFLTLO2T02T!
2	SCHED:MEASREPT a;DLT:TSG(b,b)! Example: SCHED:MEASREPT 3;DLT:TSG(1001MIAMFLTLO2T02T,1002MIAMFLTLO2T02T)!
a = Report number b = TSG CIN to be deleted	

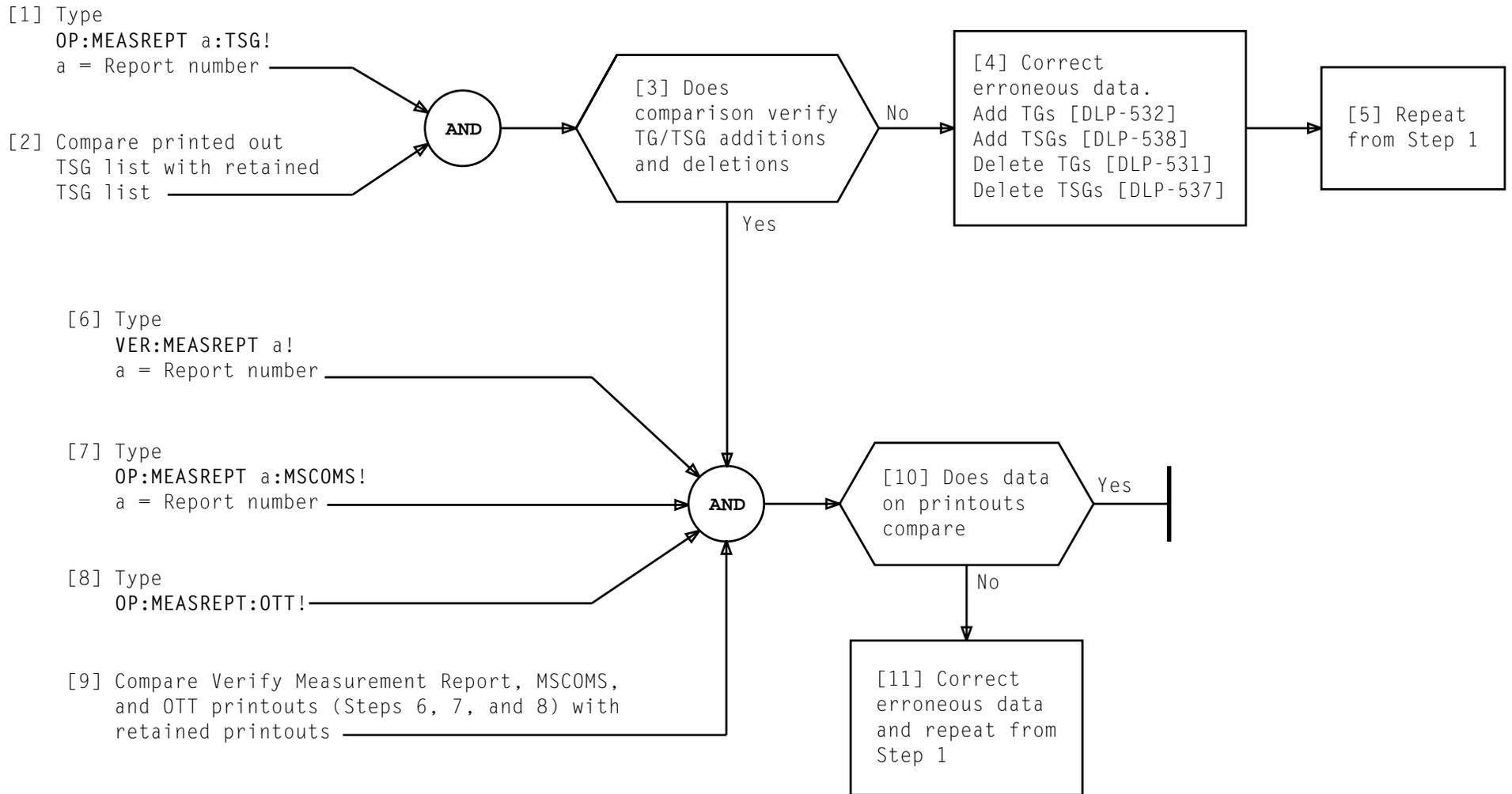
NOTE 1 No more than two CINs may be entered with single message due to line space limitation of 80 characters	
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SUMMARY

Compute new TSGCAP number and new MAXM count; then delete existing report. Reestablish report with new numbers and entry of unchanged data from deleted version



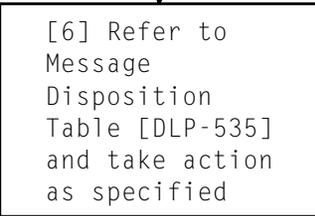
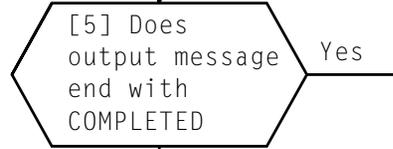
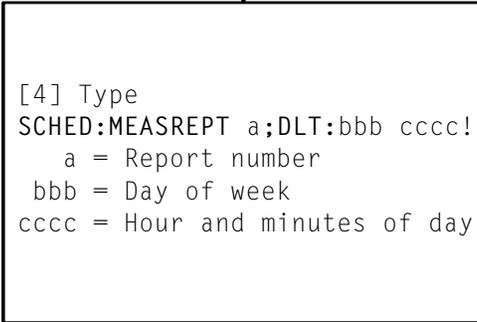
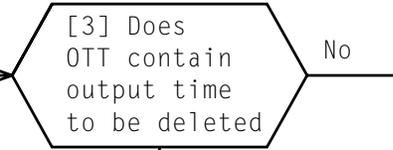




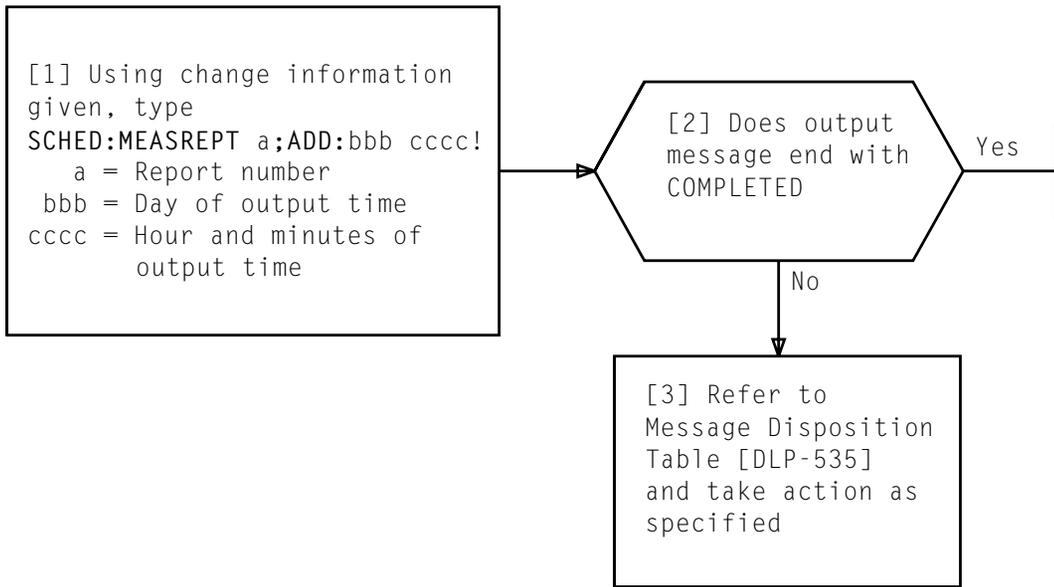
[1] Using retained Verify Measurement Report, determine first and last output time

[2] At PRIM channel, type appropriate message to obtain output timetable (OTT) printout [TABLE A]

TABLE A	
INPUT MESSAGE	RESULTS
OP:MEASREPT:OTT,aaa(bbbb-cccc)! Example: OP:MEASREPT:OTT,TUE(0700-1500)!	Printout for time between bbbb and cccc on a specific day
OP:MEASREPT:OTT,aaa! Example: OP:MEASREPT:OTT,TUE!	Printout for entire day
OP:MEASREPT:OTT!	Printout for entire week
aaa = Day of week bbbb = Hour and minutes - start of report time cccc = Hour and minutes - end of report time	

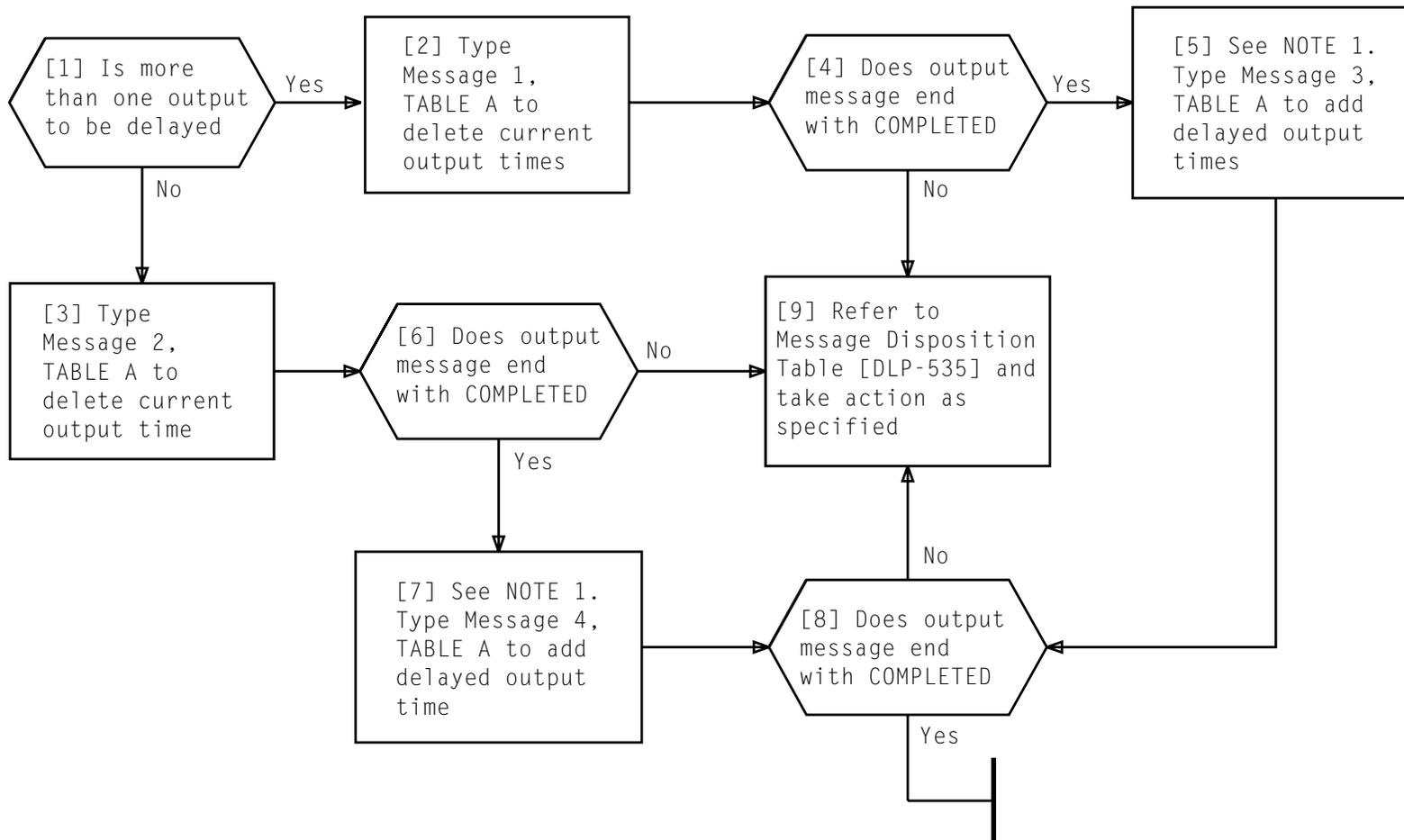


DELETE EXISTING OUTPUT TIME(S) - REPORTS 1 THROUGH 23



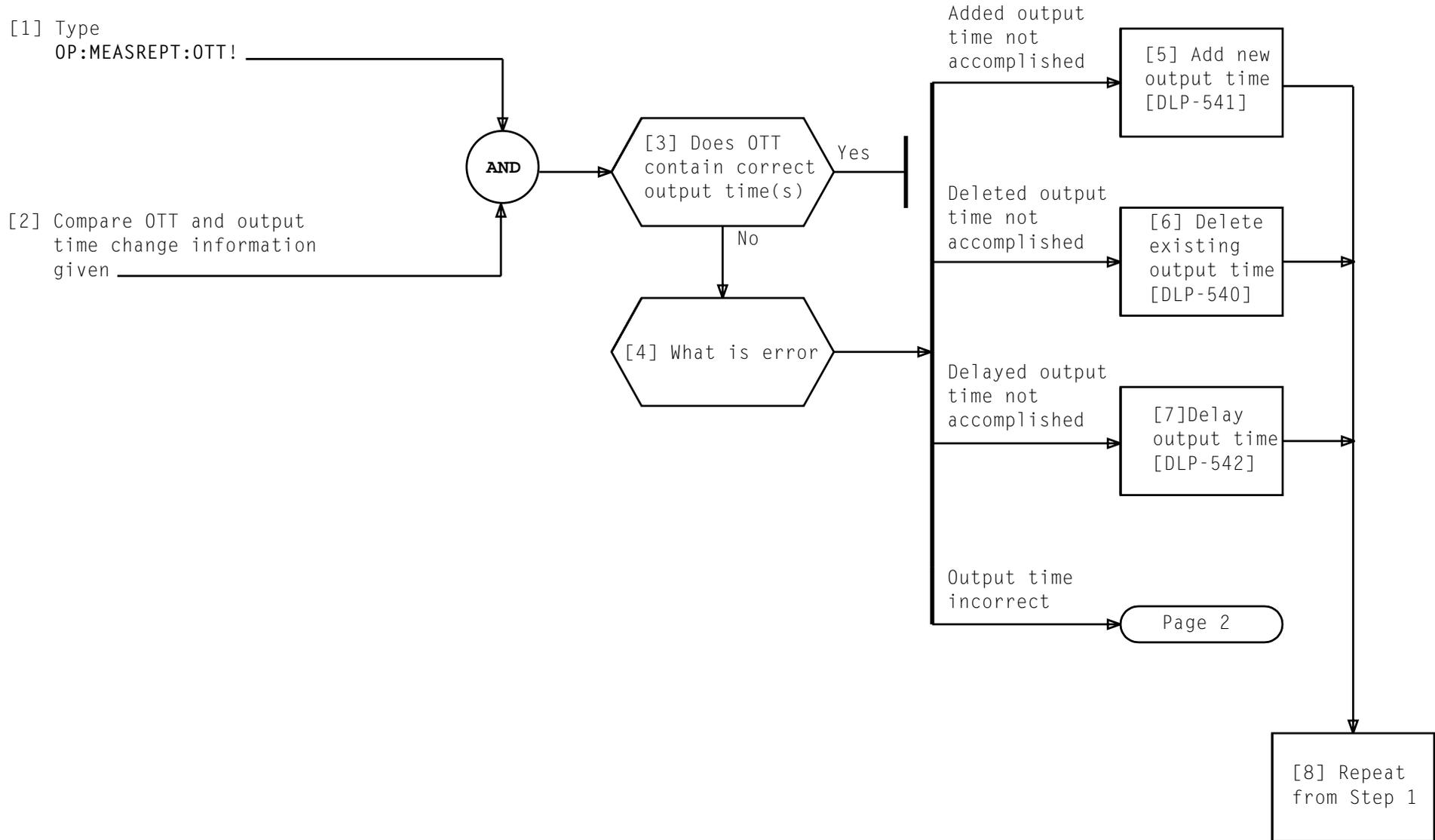
SUMMARY

Delay output time by deleting existing time from Output Timetable (OTT), then adding delayed output time to OTT. Specifying OTT in input message causes change to OTT but not Accumulation Interval. Delay feature may be used only when ACCINT is more than 1 hour.



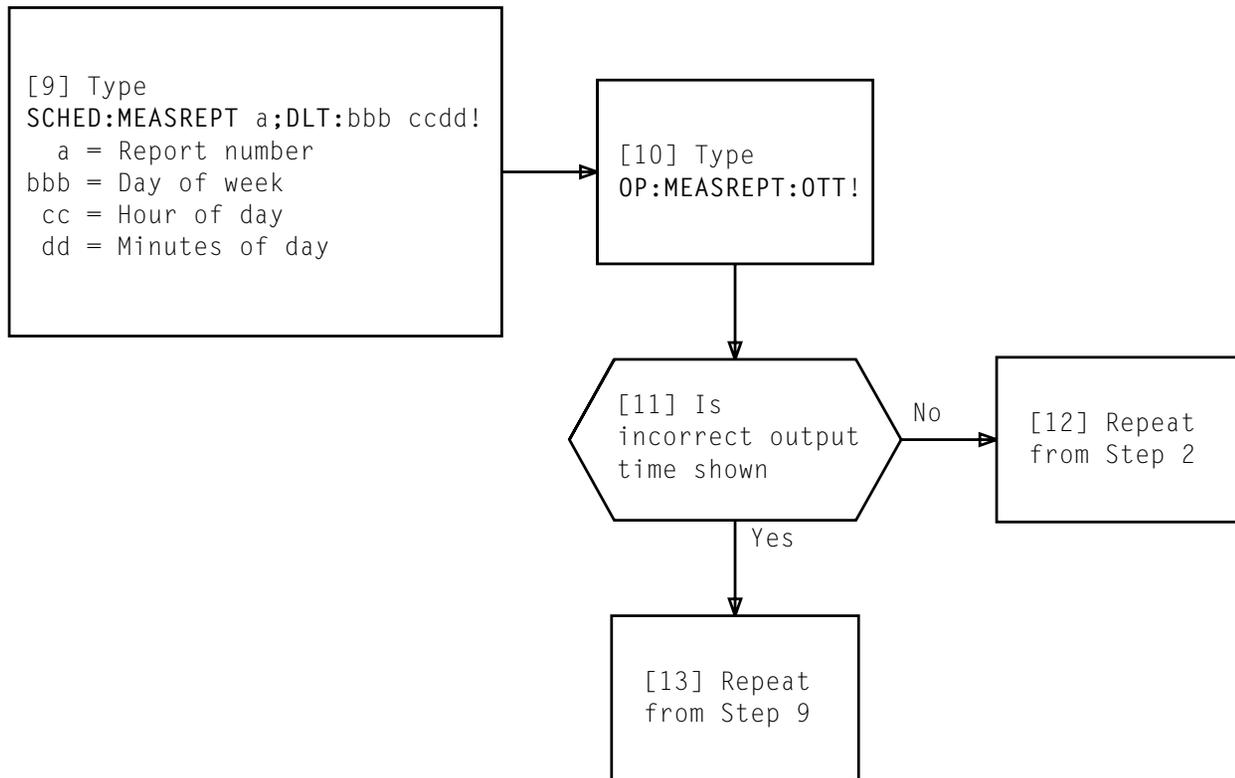
NOTE 1 Output time may be delayed 15 or 30 minutes from end of accumulation interval	
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TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	SCHED:MEASREPT a;DLT:OTT,bbb ccdd,bbb ccdd! Example: SCHED:MEASREPT 2;DLT:OTT,THU 0900,WED1000!
2	SCHED:MEASREPT a;DLT:OTT,bbb ccdd! Example: SCHED:MEASREPT 2;DLT:OTT,THU 0900!
3	SCHED:MEASREPT a;ADD:OTT,bbb eeff,bbb eeff! Example: SCHED:MEASREPT 2;ADD:OTT,THU 0930,WED1030!
4	SCHED:MEASREPT a;ADD:OTT,bbb eeff! Example: SCHED:MEASREPT 2;ADD:OTT,THU 0930!
a = Report number b = Output day of week c = Hour of current output time to be delayed d = Minutes of current output time to be delayed e = Hour of new, delayed, output time f = Minutes of new, delayed, output time	



**VERIFY CHANGE IN OUTPUT TIMETABLE (OTT) —
REPORTS 1 THROUGH 23**

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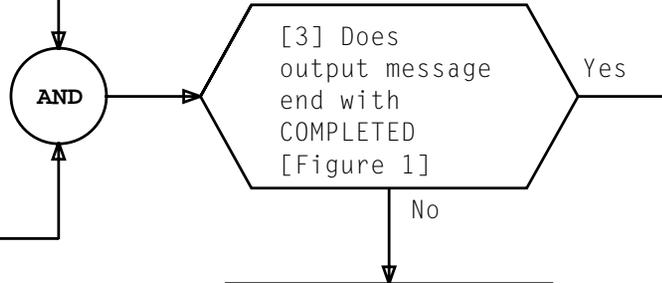


VERIFY CHANGE IN OUTPUT TIMETABLE (OTT) —
REPORTS 1 THROUGH 23

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[1] From information furnished, determine TSI frame number and Switching and Permuting Circuit(s) (SPC) to be inhibited for usage measurements

[2] See NOTE 1. Type
 INH:USGMEAS:TSI a,SPC b!
 a = TSI frame number (0 through 63)
 b = SPC (0 or 1)

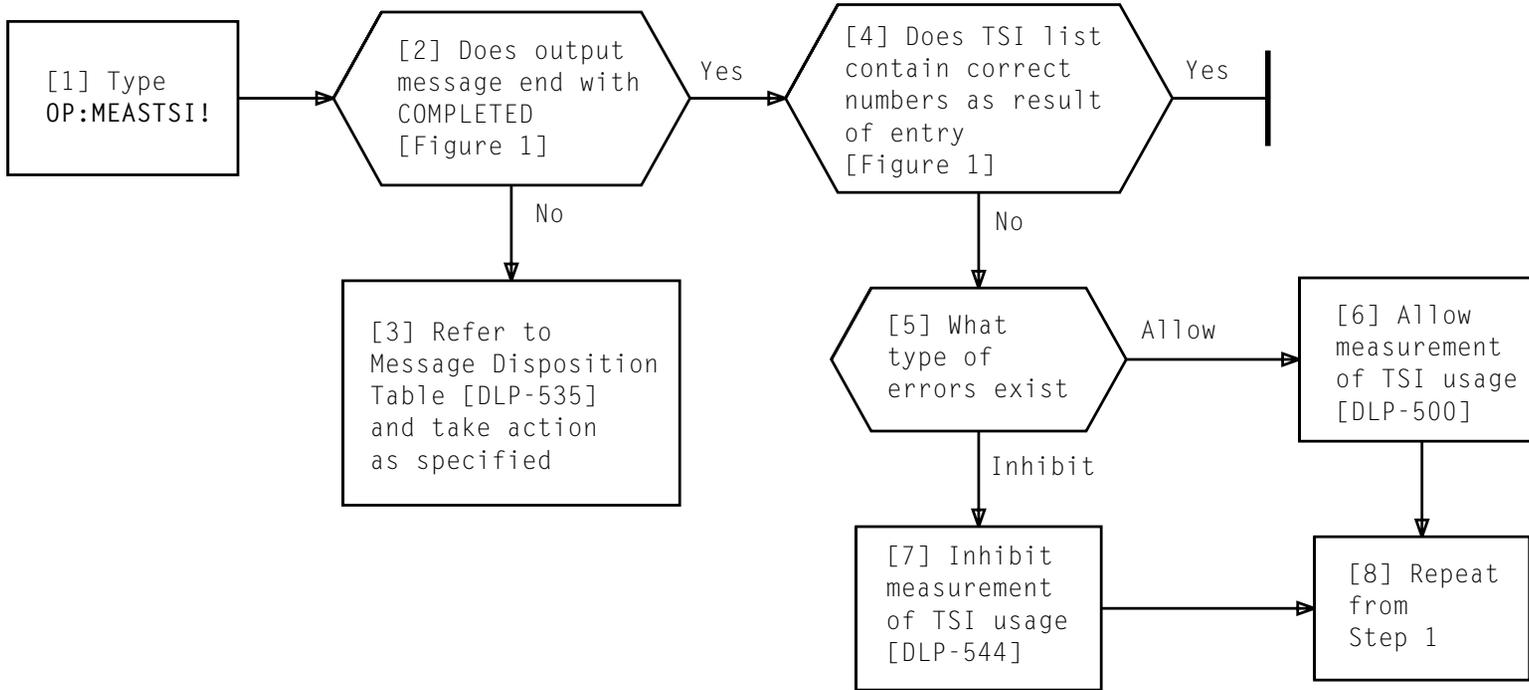


[4] Refer to Message Disposition Table [DLP-535] and take action as specified

INH:USGMEAS:TSI 13, SPC 1 COMPLETED

Figure 1 - Typical INH TSI Output Message

NOTE 1	
A separate message is required to inhibit each TSI frame/SPC designation. Two input messages are required to inhibit an entire TSI frame	
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```

OP:MEASTSI COMPLETED
TSIF SPC TSIF SPC TSIF SPC TSIF SPC
  5  1  10  0  13  0  13  1
 24  0  38  0  46  1  60  1
  
```

Figure 1 - Typical OP:MEASTSI Output Message

[1] Compare ACCINT on retained Verify Measurement Report with new ACCINT and select appropriate input message [TABLE A]

[2] Type input message

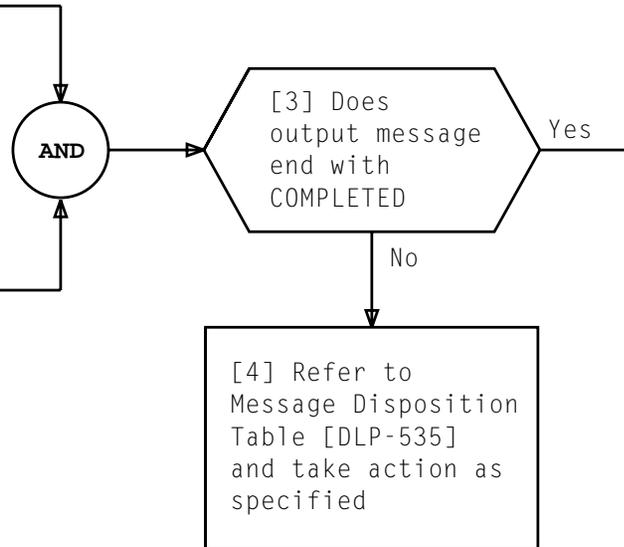
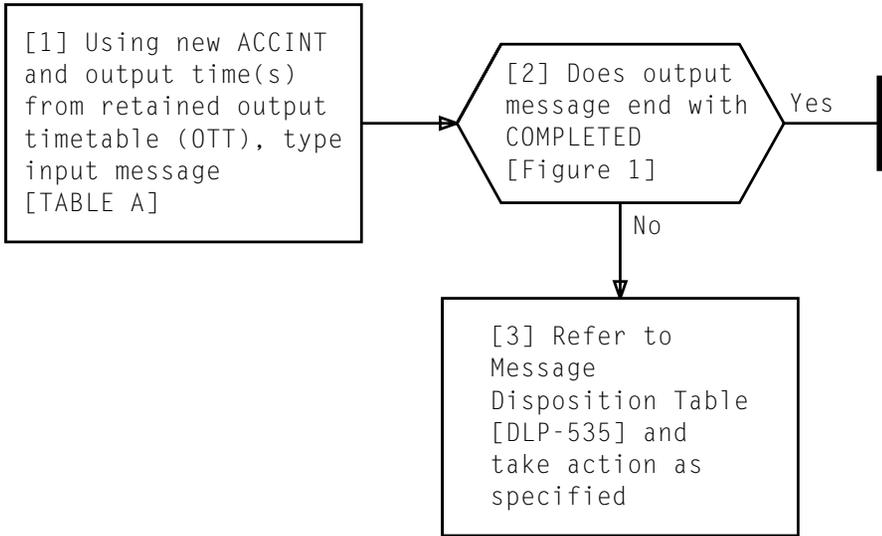


TABLE A		
ACCINT FROM RETAINED VERIFY MEASUREMENT REPORT	NEW ACCINT	INPUT MESSAGE
1 hour or less	More than 1 hour	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d,ENGMEM!
More than 1 hour	1 hour or less	SCHED:MEASREPT a;ADD:PRIM b,MAXM c,TSGCAP d!
a = Report number b = Primary channel (PRIM) c = MAXM number d = TSG capacity (TSGCAP)		From retained Verify Measurement Report

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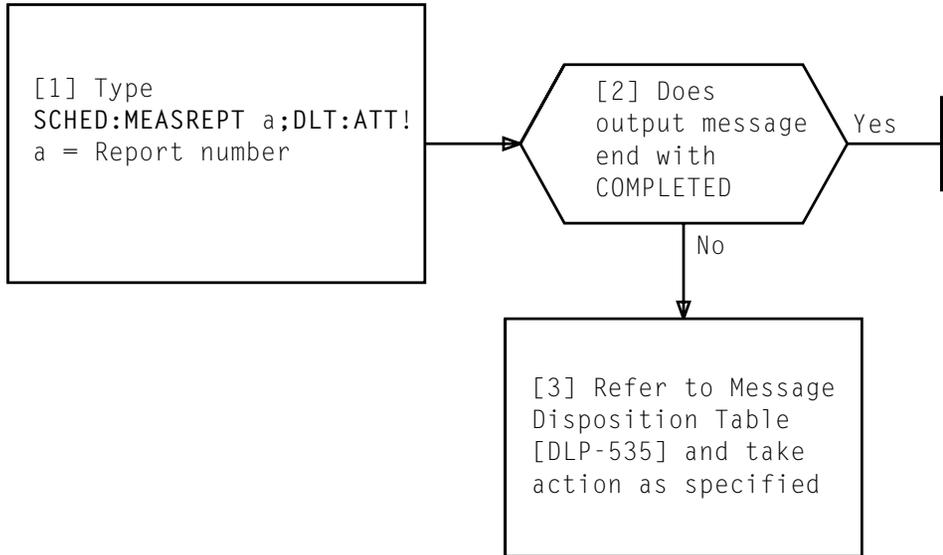
```

OP:MEASREPT:OTT MSG COMPLETED
MEASREPT 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1
          3 2 1 0 9 8 7 6 5 4 3 2 1 0 9 8 7 6 5 4 3 2 1 0
DAY TIME
TUE 0100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0
TUE 0300 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0
TUE 0845 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0
  
```

TABLE A	
INPUT MESSAGE	
SCHED:MEASREPT a;ADD:ACCINT bbbcc,ddd eeff! Example: SCHED:MEASREPT 2;ADD:ACCINT 00800,TUE 0930!	
a = Report number b = Hours of accumulation c = Minutes of accumulation d = Day of week for output time e = Hours of day for output time f = Minutes for output time	} New ACCINT } From retained OTT

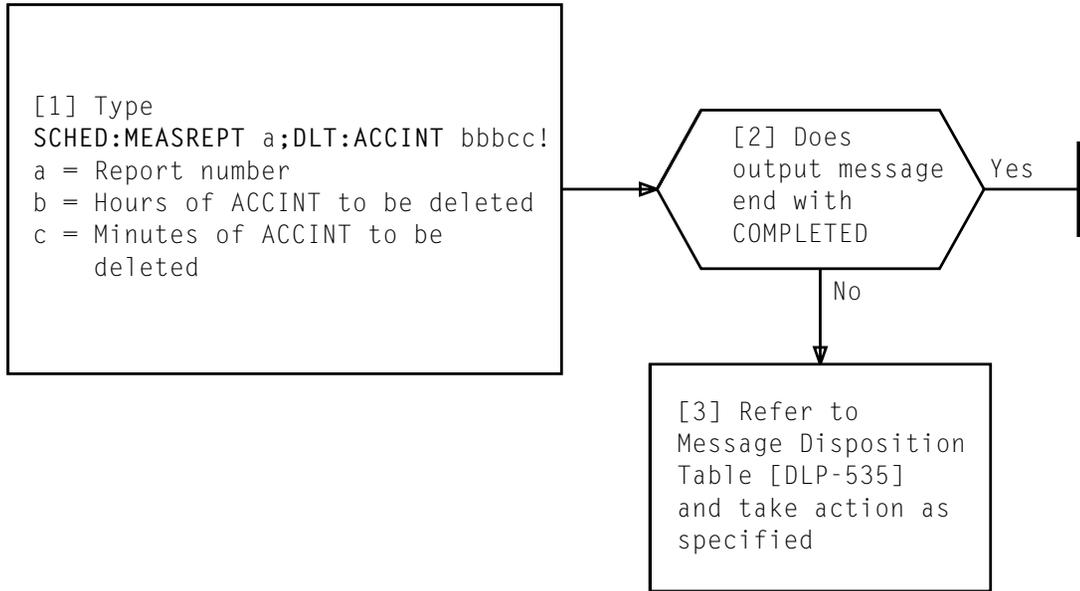
Figure 1 - Example of OTT Printout Showing Report 1 Scheduled for Printout on Tuesday at Various Times. MSG COMPL in Heading Indicates Only One Block of 32 Lines in Message

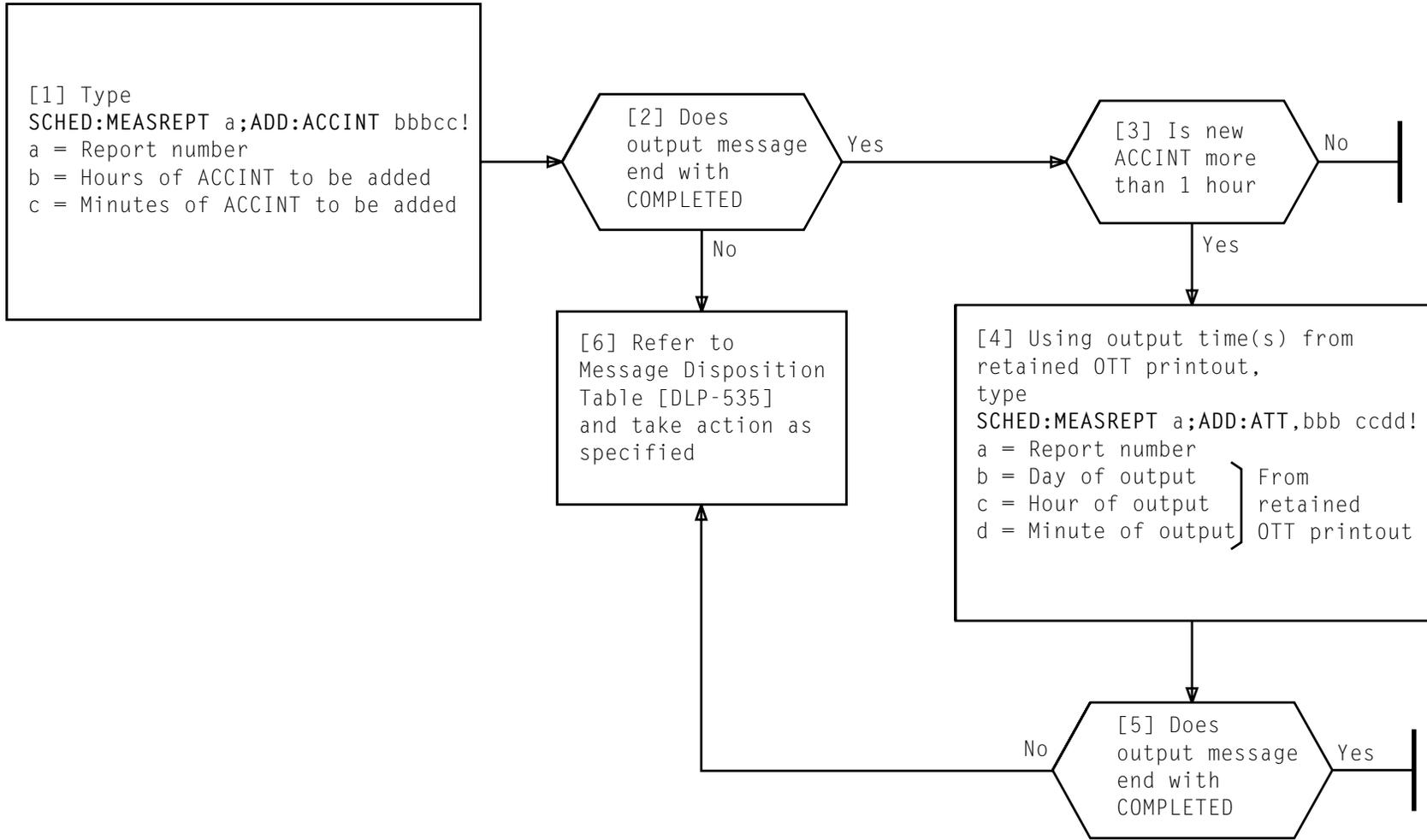
ADD ACCINT AND OUTPUT TIME(S) - CHANGE ACCINT - REPORTS 1 THROUGH 23



**DELETE ACCINT FROM ACCUMULATION TIMETABLE (ATT) —
REPORTS 1 THROUGH 23**

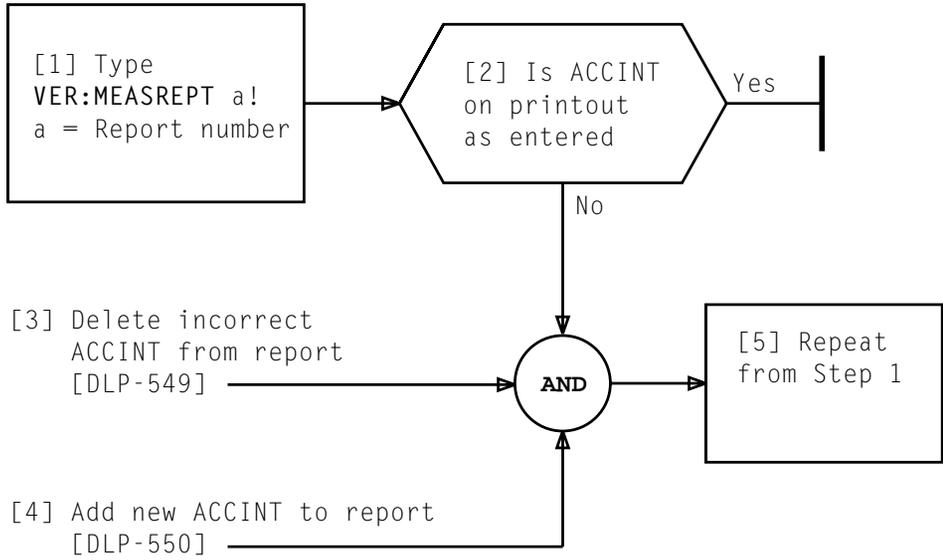
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ADD NEW ACCINT TO REPORT – REPORTS 1 THROUGH 23

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VERIFY CHANGED ACCINT – REPORTS 1 THROUGH 23

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1. CONTENTS

General - - - - - Part 2
 Accumulation Intervals - - - - - Part 3
 Output Times - - - - - Part 4
 Timetables - - - - - Part 5
 Delayed Output Time - - - - - Part 6

2. GENERAL

An Accumulation Interval (ACCINT) and an Output Time (OT) are required entries when a measurement report is established. Together, they instruct the 4ESS switch measurement system how long report data is to be gathered and when the gathered data is to be printed out. Accumulation intervals, output times, timetables, and output time delays are explained below.

3. ACCUMULATION INTERVALS

Accumulation Intervals are time periods during which data for a specific report is gathered. They are assigned in increments of hours and minutes. The minimum interval is 15 minutes and the maximum is 168 hours. There can be only one ACCINT assigned to a report. Should it be necessary to change the ACCINT on an active report, the current interval must be deleted and a new one added.

4. OUTPUT TIMES

Entry of an ACCINT without an accompanying output time (OT) entry results in no accumulation of data. The reason for this is that the machine "looks" forward to the assigned output time, then "backs up" the amount of time in the ACCINT and begins to accumulate data.

For example, if an ACCINT is 2 hours and the output time is Tuesday at 1100, the machine looks at TUE 1100, then backs up and begins collecting data at 0900 on Tuesday. At the output time of 1100, there are 2 hours of data collected for output.

It must be remembered that the accumulation period specified in the ACCINT entry must be honored if more than one output time is scheduled for a report. Again, for example, if the ACCINT is 2 hours, and output is scheduled for Tuesday at 1100, the data collection begins at 0900 and prints out at 1100. However, if a second output time is added, for instance, at 1200, the machine detects that it cannot look at 1200 and back up 2 hours because it would pass the previous output time of 1100. The 1200 output time is not accepted and an error message indicates an accumulation overlap.

An output entry of a day of the week with no subsequent hour/minute designated causes a default to the end of an accumulation time for printout. Printouts continue to occur at the end of each accumulation interval throughout the specified day.

5. TIMETABLES

There are two timetables which automatically list information about scheduled reports 1 through 23 when the reports are established. They are the Output Timetable (OTT) and the Accumulation Timetable (ATT). Although identical in format, the two tables provide nonrelated information pertinent to their respective functions which are described below.

**ACCUMULATION INTERVAL (ACCINT) AND OUTPUT TIME (OT)
 PHILOSOPHY OF USAGE AND INTERACTION – REPORTS 1 THROUGH 23**

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5.1 OUTPUT TIMETABLE (OTT)

The OTT (Figure 1, Page 3) lists all output times scheduled for any active report, 1 through 23. A binary 1, appearing below a report number and aligned with a specific day and time in the far left column of the table, indicates that the report is scheduled to print out at that time. The appearance of a binary 0 under the report numbers indicates those reports are not scheduled out at that time.

The OTT is available for display and/or printout by entry of message `OP:MEASREPT:OTT!`, which results in a list of all output times for every day in a week. Less than a complete list may be obtained by selecting the appropriate option from the Output Message Manual.

5.2 ACCUMULATION TIMETABLE (ATT)

The ATT (Figure 2, Page 3) lists times during which data is being accumulated for any report. It is important to note that only those reports with an ACCINT of more than 1 hour are accounted for on the ATT. Engineered Memory (ENGMEM) must be specified for the report in order for the ATT to be changed. As on the OTT, a binary 1 indicates that accumulation is active for a report at a specific time. For the same time, any other report not accumulating shows a binary 0.

It is also important to note that the first hour of data accumulation for any report is not indicated on the ATT. This fact can be misleading when one is attempting to verify the beginning and end of an interval. For example, if report 3 has an assigned ACCINT of 6 hours and a printout time

of TUE 1700, one would expect to see a binary 1 appear under 3 opposite the time TUE 1100. However, the 1 actually appears first opposite the time TUE 1200. This is because the data is accumulated and stored in a "holding" file during the first hour. This file is not reported in the ATT. At the end of the hour, the data must be printed out or transferred to another file. Otherwise, the data registers reset to zero and the accumulated data is lost. The "transfer to" file is the extended interval or ENGMEM file.

6. DELAYED OUTPUT TIME

Sometimes it is desirable or necessary to accumulate report data and then delay its output beyond the end of the accumulation interval. For example, when a relatively large number of reports are scheduled at the same output time, it may be impossible to print out all of them because of the 15-minute printout time restriction. A loss of data can be avoided by delaying the output of some of the reports. An output may be delayed 15 or 30 minutes from the original output time. Note that only reports with ENGMEM assigned may use the delayed output feature. The delay is set up by changing the OTT. A message is entered to delete the original output time and another message adds the new delayed time to the OTT. By this operation, only the output time is affected, not the accumulation time.

```

OP:MEASREPT:OTT MSG COMPL
MEASREPT 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1
          3 2 1 0 9 8 7 6 5 4 3 2 1 0 9 8 7 6 5 4 3 2 1 0
DAY TIME
TUE 0100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0
TUE 0300 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0
      .
      .
      .
          TOTAL OF 32 LINES
      .
      .
      .
TUE 0845 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0

```

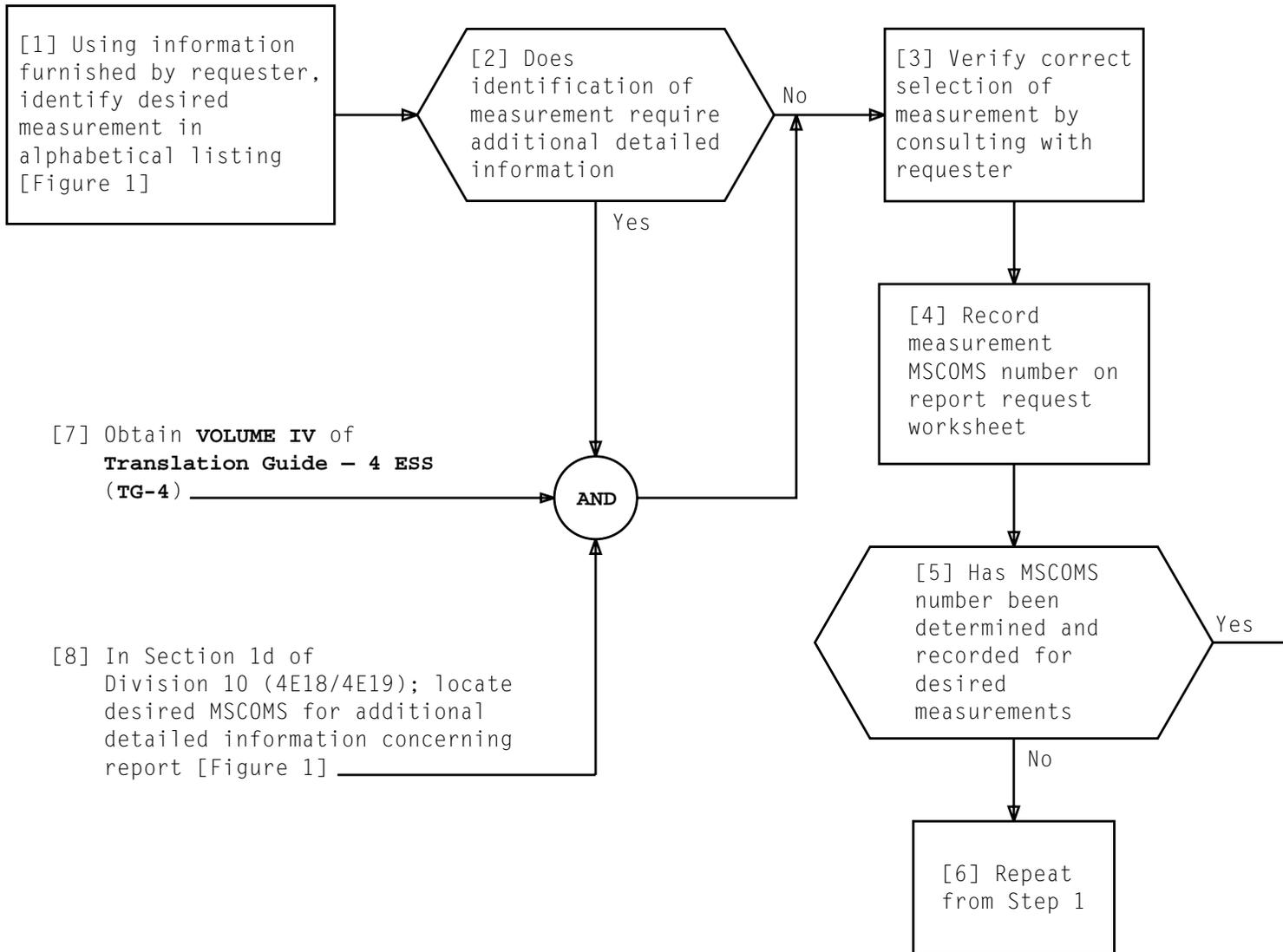
Figure 1 - Example of OTT Printout Showing Report 1 Scheduled for Printout on Tuesday at Various Times

```

OP:MEASREPT:ATT MSG COMPL
MEASREPT 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1
          3 2 1 0 9 8 7 6 5 4 3 2 1 0 9 8 7 6 5 4 3 2 1 0
DAY TIME
TUE 1200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0
TUE 1300 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0
      .
      .
      .
          TOTAL OF 32 LINES
      .
      .
      .
WED 0800 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0

```

Figure 2 - Example of ATT Printout Showing Data for Report 1 Being Accumulated Beginning at 1100 on Tuesday



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TABLE 4

OUTPUT MEASUREMENT SETS FOR MSC 4
(NETWORK)

MSC 4 NETWORK							
OMS 0							
PATH HUNT SUCS	PATH HUNT FAIL	USAGE	LSNC INTRAFBUF				
○	○	○	○				
OMS 1	SVC OBSV						
SVC OBSV NETWORK USAGE							
○							

MSC

Description of Measurements for MSC 4

count of calls sent to final handling due to network path hunt failure.

OMS 0

OMS 0

Network Total Usage (USAGE)

Network Path Hunt Success Peg Count
(PATH HUNT SUCS)

After every 180 second scan, the total number of occupied paths in the network is added to this counter. This data is converted to CCS by the traffic program before output.

This counter is incremented by one when a path through the network has been seized by setting the appropriate bits in the time division map. This action either reserves a path between an incoming trunk and an outgoing trunk or corresponds to the connection of a service circuit to an incoming or outgoing trunk.

LSNC Intra-Buffer Count
(LSNC INTRAFBUF)

This is a count of large scale nail up (LSNC) intra-buffer connections.

Network Path Hunt Failure Peg Count
(PATH HUNT FAIL)

OMS 1

OMS 1

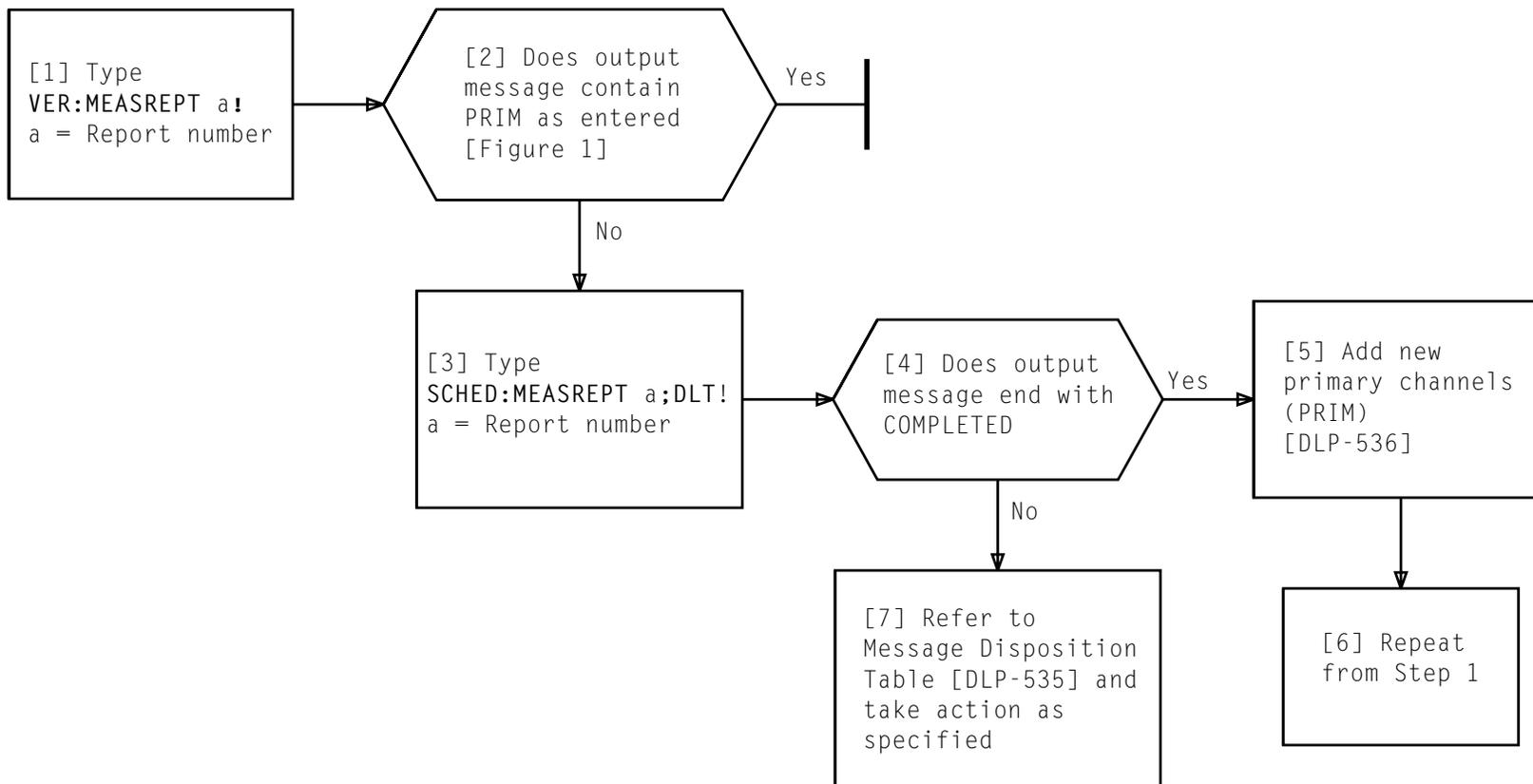
When attempt to seize an idle path through the network has failed because it appeared that no acceptable idle path was available, this counter is incremented by one. This counter contains the total number of network path hunt failures whereas the final trial network path hunt failure Peg counter (MSC 11 OMS 1) contains only the

Service Observing Network Usage
(SVC OBSV NETWORK USAGE)

This counter will indicate the total usage on the two service observing Trunk Sub-Groups. It will be used as an estimate of the network usage generated by service observing.

Figure 1 - Sample Layout of TG-4 Division 10 (MSCOMS Descriptions)

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VER:MEASREPT 5 COMPLETED (PRIM TRF1)
MAXM TSGCAP ENGMEM TAPE ERAP PRINT
75 3 Y N N Y
  
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Figure 1 - Typical Verify Measurement Report (Partial)

VERIFY PRIMARY CHANNEL (PRIM)

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ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE
TPG-000		DLP-519		DLP-554							
IXL-001		DLP-520		• CKL-891							
NTP-002		DLP-521		TNG-893							
NTP-003		DLP-522		DPL-895							
• NTP-004		DLP-523									
NTP-005		DLP-524									
NTP-006		DLP-525									
NTP-007		DLP-526									
NTP-008		DLP-527									
NTP-009		• DLP-528									
NTP-010		• DLP-529									
NTP-011		• DLP-530									
NTP-012		DLP-531									
NTP-013		DLP-532									
NTP-014		DLP-533									
NTP-015		DLP-534									
DLP-500		DLP-535									
DLP-501		DLP-536									
DLP-502		DLP-537									
DLP-503		DLP-538									
• DLP-504		DLP-539									
DLP-505		DLP-540									
DLP-506		DLP-541									
DLP-507		DLP-542									
DLP-508		DLP-543									
• DLP-509		DLP-544									
• DLP-510		DLP-545									
• DLP-511		DLP-546									
DLP-512		DLP-547									
DLP-513		DLP-548									
DLP-514		DLP-549									
DLP-515		DLP-550									
DLP-516		DLP-551									
DLP-517		DLP-552									
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• REVISED OR ADDED ITEM

☐ CANCELED ITEM

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CHECKLIST