



**EXHIBIT OSS – 54**  
**TAFI Functionality Overview**

## TAFI Functionality Overview

### 1 INTRODUCTION

BellSouth designed the Trouble Administration Facilitation Interface (TAFI) in 1993 as part of a major process improvement initiative for handling non-designed, telephone number based customer trouble reports. Prior to TAFI, BellSouth employed the two-step report processing methodology still used by many ILECs today:

1. The customer contacts a Call Receipt Center to report their trouble condition. The Customer Service Assistant (CSA) or Maintenance Administrator (MA) enters the customer's report into LMOS, informs the customer of the indicated commitment date/time and then tells the customer that someone will contact them regarding their trouble.
2. The report is routed via LMOS to the Installation/Maintenance Center serving the customer's geography where a Screening MA analyzes the report, makes the appropriate database verifications and test, determines the cause of the problem, resolves the problem or routes the report to the appropriate entity for resolution.

Using TAFI, the traditional screening function was moved to the Call Receipt Center. This enabled the initial contact CSA/MA to resolve many customer reports, often with the customer still on the line. If the problem requires additional effort, TAFI will automatically route the report (via LMOS) to the correct entity for resolution. This was accomplished by employing an Artificial Intelligence (AI) rules based system within TAFI to consistently guide the user to the correct outcome. All of the interactions with the various legacy systems are handled automatically by TAFI and TAFI presents the results of its analysis in plain English terms. By freeing the user from the burden of maintaining proficiency in using the legacy systems, the user can now focus on the customer and their needs.

### 2 REPORT PROCESSING

As indicated above, a TAFI user not only 'enters' a report, they actually 'process' the report to the extent available for the given condition. When the TAFI user completes their transaction, the report is either:

- A. Resolved to the customer's satisfaction and closed (a report is entered and automatically closed in LMOS to maintain an audit trail),
- B. Routed to the correct entity for further effort (via LMOS), or
- C. The TAFI transaction is canceled because the customer was not actually reporting a trouble condition on a BellSouth facility/service.

## 2.1 Initial Activity

When the user completes and sends the initial trouble entry window (i.e., the customer's telephone number), TAFI automatically obtains the following legacy system data:

1. The customer's CSR data (the bill to and the Service and Equipment (S&E) data) from CRIS,
2. Any pending service order data from SOCS,
3. Initiates the LMOS TE/TR transaction and returns the customer's LMOS data.
4. If the report is flagged as a Repeat Report in LMOS, TAFI automatically obtains the recent trouble history data.

TAFI 'knows' who the user is by information stored in their TAFI user profile. TAFI then allows the user to process reports for those customers belonging to them. For CLEC users, their company's OCN value is included in their profile<sup>1</sup>. TAFI will check for a matching OCN value first on a pending service order due 'today' (if one exists) and then in the CSR bill to data. If a match is found, the CLEC user is allowed to continue processing the report exactly the same way a BellSouth user would process the report. (Note: BellSouth users are allowed to process reports on all lines since the CLEC is a BellSouth customer.)

## 2.2 Process Flow

Once TAFI secures the initial legacy system data and validates the user, TAFI presents the user with the 'main menu' of possible trouble categories. One of the most challenging aspects of resolving a customer's trouble condition is determining exactly what is wrong with the service. To facilitate this task, TAFI employs a series of menus and sub-menus to obtain a clear understanding of what the customer is reporting. Once the problem is defined, TAFI enters into an interactive dialogue with the user to further analyze the situation. The response to these questions may prompt additional dialogue or some predefined action.

Part of the definition process is validating the customer's information against legacy data. If the customer was reporting a Feature problem (i.e., Call Forwarding doesn't work), TAFI will first verify that the feature appears on the customer's CSR. If the customer is not paying for the feature, the repair process stops and the customer is asked if they would like to add the feature. If yes, TAFI prompts the user to refer the caller to the Business Office. (CLEC users would refer their customers to their Business Office.) If no, the contact is ended. In both cases TAFI cancels the transaction to an appropriate code.

If the customer is paying for the feature, TAFI will then verify the Central Office (CO) translations (via Predictor) to ensure that the feature is correctly programmed. If the feature is not correctly programmed, TAFI instructs MARCH to add the feature to the customer's translations. If the feature is correctly programmed in the CO, TAFI will guide the user to provide proper instructions on the use of the feature. (Note: most feature-related problems stem from the customer not fully understanding its operation.)

If the customer was reporting a line problem (i.e., No Dial Tone), TAFI will automatically initiate a MLT test and determine what action to follow based upon the test results.

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<sup>1</sup> Effective 12/13/98 TAFI recognizes CLEC users whose company may have multiple OCN values. The OCN value found in the user's profile is matched against a list of 'allowed' OCN values for that particular company. That user can process any record that contains an OCN value entered in this allowed list.

If the customer was reporting that their buried service wire (a new drop wire was added at their location) has not been buried yet, TAFI queries the OSCPM database to obtain the current status of the particular subcontractor's work order.

Should a ported out customer (LNP) call to report a problem with their service, TAFI automatically recognizes the ported status, queries the LNP gateway to secure NPAC data, and the user can refer the caller to their new vendor for resolution.

If the report is a 'subsequent report' (i.e., LMOS currently has a trouble report for the given number), TAFI will automatically display the current status of the report to the user (i.e., Pending Dispatch Out). Additional information provided by the customer is applied and the appropriate action followed. (For example, the customer may be calling to close the report since the reported condition is cleared, or additional information is added that may change the status or severity of the report, etc.)

In summary, TAFI obtains data from the customer (via menu selection and subsequent dialogue) regarding the trouble condition, automatically obtains the correct legacy system(s) data, analyzes all of the available information and provides the user with a recommended course of action for resolution. In most cases, accepting TAFI's recommendation will provide the correct resolution. However, the user may have information not available to TAFI that would cause an alternate path. The user can 'override' TAFI's recommendation and redirect the report as necessary.

### 2.3 Examples

In this example, the user selected MemoryCall as the main menu category that caused TAFI to generate the appropriate sub-menu: (Note: If the customer did not have Memory Call as an option in their CSR, the report would stop at this point.)

```

02-25-00 Trouble Analysis Facilitation Interface  BRTAFIYM  BST R2000.1 SIM
TN 999 949 5038 NAME DUNCAN, JACK M 1AES
OOS N ADDRESS 867 RENEE DR , HAUGH

TDG
|DIAL TONE
|OUTGOING CALL
|INCOMING CALL | WIRELINE
|TRANSMISSION | WIRELESS
|MEMORY SERVIC | WIRELINE A
|MEMORYCALL
|CALLING PLANS/BILLING (ANI)
|LONG DISTANCE
|PHYSICAL
|DATA PROBLEMS
|ENHANCED SERVICES
|NEW FLOW 1
|NEW FLOW 2

|CALL WILL NOT GO MEMORYCALL
|NO STUTTER DIAL TONE
|STUTTER WITH NO MESSAGES
|TOO FEW/TOO MANY RINGS
|PASSWORD WON'T WORK
|FORGOT PASSWORD
|GETS GENERIC MESSAGE
|CANNOT RETRIEVE MESSAGES
|CANNOT DELETE MESSAGES
|SURROGATE MEMORYCALL DOESN'T WORK
|WON'T WORK WITH RINGMASTER
|MEMORYCALL PLUS PAGER DOESN'T WORK
|MEMORYCALL PLUS DOESN'T TRANSFER ON "0"
|MESSAGE DELIVERY SERVICE
|BUSINESS FAX SERVICE
|BUSINESS COMMUNITY MESSAGING SERVICE

BOCRIS Data Available for 9999495038 00:25 11:05:44

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From the sub-menu, the user selected the "Cannot Delete Messages" option which prompted the series of interactive dialogue questions leading up to, "Does Memory Call accept password?"

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02-25-00 Trouble Analysis Facilitation Interface BRTAFIYM BST R2000.1 SIM
TN 999 949 5038 NAME DUNCAN, JACK M 1AES
OOS N ADDRESS 867 RENEE DR , HAUGH
-
Rep: Advise customer MCAL passcode is needed to clear trouble. Advise customer once trouble is cleared it is strongly recommended the passcode be changed.
NOT GO MEMORYCALL
R DIAL TONE
ITH NO MESSAGES
OO MANY RINGS
WON'T WORK
|TRANSMISSION | WIRELESS |FORGOT PASSWORD
|MEMORY SERVIC | WIRELINE A |GETS GENERIC MESSAGE
|MEMORYCALL | |CANNOT RETRIEVE MESSAGES
|CALLING PLANS/BILLING (ANI) |CANNOT DELETE MESSAGES
|LONG DISTANCE |SURROGATE MEMORYCALL DOESN'T WORK
|PHYSICAL |WON'T WORK WITH RINGMASTER
|DATA PROBLEMS |MEMORYCALL PLUS PAGER DOESN'T WORK
|ENHANCED SERVICES |MEMORYCALL PLUS DOESN'T TRANSFER ON "0"
|NEW FLOW 1 |MESSAGE DELIVERY SERVICE
|NEW FLOW 2 |BUSINESS FAX SERVICE
|BUSINESS COMMUNITY MESSAGING SERVICE
BOCRIS Data Available for 9999495038 01:44 11:07:03
    
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02-25-00 Trouble Analysis Facilitation Interface BRTAFIYM BST R2000.1 SIM
TN 999 949 5038 NAME DUNCAN, JACK M 1AES
OOS N ADDRESS 867 RENEE DR , HAUGH
-
Did customer give the passcode?
NOT GO MEMORYCALL
R DIAL TONE
|DIAL TONE |STUTTER WITH NO MESSAGES
|OUTGOING CALL |TOO FEW/TOO MANY RINGS
|INCOMING CALL |PASSWORD WON'T WORK
|TRANSMISSION | WIRELINE |FORGOT PASSWORD
|MEMORY SERVIC | WIRELESS |GETS GENERIC MESSAGE
|MEMORYCALL | WIRELINE A |CANNOT RETRIEVE MESSAGES
|CALLING PLANS/BILLING (ANI) |CANNOT DELETE MESSAGES
|LONG DISTANCE |SURROGATE MEMORYCALL DOESN'T WORK
|PHYSICAL |WON'T WORK WITH RINGMASTER
|DATA PROBLEMS |MEMORYCALL PLUS PAGER DOESN'T WORK
|ENHANCED SERVICES |MEMORYCALL PLUS DOESN'T TRANSFER ON "0"
|NEW FLOW 1 |MESSAGE DELIVERY SERVICE
|NEW FLOW 2 |BUSINESS FAX SERVICE
|BUSINESS COMMUNITY MESSAGING SERVICE
BOCRIS Data Available for 9999495038 02:16 11:07:35
    
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02-25-00 Trouble Analysis Facilitation Interface BRTAFIYM BST R2000.1 SIM
TN 999 949 5038 NAME DUNCAN, JACK M 1AES
OOS N ADDRESS 867 RENEE DR , HAUGH
-
Rep: Enter the passcode in the TRBL Narr.
NOT GO MEMORYCALL
R DIAL TONE
ITH NO MESSAGES
TOO FEW/TOO MANY RINGS
PASSWORD WON'T WORK
FORGOT PASSWORD
GETS GENERIC MESSAGE
CANNOT RETRIEVE MESSAGES
CANNOT DELETE MESSAGES
SURROGATE MEMORYCALL DOESN'T WORK
WON'T WORK WITH RINGMASTER
MEMORYCALL PLUS PAGER DOESN'T WORK
MEMORYCALL PLUS DOESN'T TRANSFER ON "0"
MESSAGE DELIVERY SERVICE
BUSINESS FAX SERVICE
BUSINESS COMMUNITY MESSAGING SERVICE
BOCRIS Data Available for 9999495038 02:58 11:08:17
    
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02-25-00 Trouble Analysis Facilitation Interface BRTAFIYM BST R2000.1 SIM
TN 999 949 5038 NAME DUNCAN, JACK M 1AES
OOS N ADDRESS 867 RENEE DR , HAUGH
-
Does Memory Call accept password?
MCAL cant del msg
NOT GO MEMORYCALL
R DIAL TONE
STUTTER WITH NO MESSAGES
TOO FEW/TOO MANY RINGS
PASSWORD WON'T WORK
FORGOT PASSWORD
GETS GENERIC MESSAGE
CANNOT RETRIEVE MESSAGES
CANNOT DELETE MESSAGES
SURROGATE MEMORYCALL DOESN'T WORK
WON'T WORK WITH RINGMASTER
MEMORYCALL PLUS PAGER DOESN'T WORK
MEMORYCALL PLUS DOESN'T TRANSFER ON "0"
MESSAGE DELIVERY SERVICE
BUSINESS FAX SERVICE
BUSINESS COMMUNITY MESSAGING SERVICE
BOCRIS Data Available for 9999495038 03:33 11:08:52
    
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Additional dialogue in this example will identify that the customer did not fully understand how the feature worked and the TAFI user provided appropriate instruction.

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02-25-00 Trouble Analysis Facilitation Interface BRTAFIYM BST R2000.1 SIM
TN 999 949 5038 NAME DUNCAN, JACK M 1AES
OOS N ADDRESS 867 RENEE DR , HAUGH
-
Is Memory Call stuck on 1st message?
MCAL cant del msg
MemCall does accept pword
NOT GO MEMORYCALL
R DIAL TONE
| STUTTER WITH NO MESSAGES
| TOO FEW/TOO MANY RINGS
| PASSWORD WON'T WORK
| FORGOT PASSWORD
| GETS GENERIC MESSAGE
| CANNOT RETRIEVE MESSAGES
| CANNOT DELETE MESSAGES
| SURROGATE MEMORYCALL DOESN'T WORK
| WON'T WORK WITH RINGMASTER
| MEMORYCALL PLUS PAGER DOESN'T WORK
| MEMORYCALL PLUS DOESN'T TRANSFER ON "0"
| MESSAGE DELIVERY SERVICE
| BUSINESS FAX SERVICE
| BUSINESS COMMUNITY MESSAGING SERVICE
BOCRIS Data Available for 9999495038 04:33 11:09:52
    
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02-25-00 Trouble Analysis Facilitation Interface BRTAFIYM BST R2000.1 SIM
TN 999 949 5038 NAME DUNCAN, JACK M 1AES
OOS N ADDRESS 867 RENEE DR , HAUGH
-
Is the mailbox platform BTI?
MCAL cant del msg
MemCall does accept pword
MemCall stuck on 1st msg
NOT GO MEMORYCALL
R DIAL TONE
| STUTTER WITH NO MESSAGES
| TOO FEW/TOO MANY RINGS
| PASSWORD WON'T WORK
| FORGOT PASSWORD
| GETS GENERIC MESSAGE
| CANNOT RETRIEVE MESSAGES
| CANNOT DELETE MESSAGES
| SURROGATE MEMORYCALL DOESN'T WORK
| WON'T WORK WITH RINGMASTER
| MEMORYCALL PLUS PAGER DOESN'T WORK
| MEMORYCALL PLUS DOESN'T TRANSFER ON "0"
| MESSAGE DELIVERY SERVICE
| BUSINESS FAX SERVICE
| BUSINESS COMMUNITY MESSAGING SERVICE
BOCRIS Data Available for 9999495038 05:15 11:10:34
    
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The user knows that this customer has the BTI mailbox from the data supplied just under the customer information window ... so answer "Y" to the question.

02-25-00 Trouble Analysis Facilitation Interface BRTAFIYM BST R2000.1 SIM

TN 999 949 5038 NAME DUNCAN, JACK M 1AES  
 OOS N ADDRESS 867 RENEE DR , HAUGH

-  
 Advise customer to dial 6 to get to end of message and 1 to erase message

MemCall does accept pword MemCall stuck on 1st msg BTI	NOT GO MEMORYCALL R DIAL TONE WITH NO MESSAGES TOO FEW/TOO MANY RINGS PASSWORD WON'T WORK FORGOT PASSWORD GETS GENERIC MESSAGE CANNOT RETRIEVE MESSAGES <b>CANNOT DELETE MESSAGES</b> SURROGATE MEMORYCALL DOESN'T WORK WON'T WORK WITH RINGMASTER MEMORYCALL PLUS PAGER DOESN'T WORK MEMORYCALL PLUS DOESN'T TRANSFER ON "0" MESSAGE DELIVERY SERVICE BUSINESS FAX SERVICE BUSINESS COMMUNITY MESSAGING SERVICE
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BOCRIS Data Available for 9999495038 05:53 11:11:12

02-25-00 Trouble Analysis Facilitation Interface BRTAFIYM BST R2000.1 SIM

TN 999 949 5038 NAME DUNCAN, JACK M 1AES  
 OOS N ADDRESS 867 RENEE DR , HAUGH

-  
 Does customer agree to closeout?

MCAL cant del msg MemCall does accept pword MemCall stuck on 1st msg BTI	NOT GO MEMORYCALL R DIAL TONE STUTTER WITH NO MESSAGES TOO FEW/TOO MANY RINGS PASSWORD WON'T WORK FORGOT PASSWORD GETS GENERIC MESSAGE CANNOT RETRIEVE MESSAGES <b>CANNOT DELETE MESSAGES</b> SURROGATE MEMORYCALL DOESN'T WORK WON'T WORK WITH RINGMASTER MEMORYCALL PLUS PAGER DOESN'T WORK MEMORYCALL PLUS DOESN'T TRANSFER ON "0" MESSAGE DELIVERY SERVICE BUSINESS FAX SERVICE BUSINESS COMMUNITY MESSAGING SERVICE
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BOCRIS Data Available for 9999495038 06:28 11:11:47

Sending the following screen will generate and close the requisite LMOS report.

## INITIAL TROUBLE REPORT - CLOSE

TN	999 949 5038	REPEAT	N	EC	999	UNIT	47147200	
				LOC	IDG			
NAME	DUNCAN, JACK M	SUB	N	SO	N			
ADDRESS	867 RENEE DR , HAUGH							
REACH#	8005551234	ACCESS#		CALLED#				
REMARKS	CLEC#1234567890	OK/	Mr Duncan	REP BY	Gene			
TRBL DESC	MCAL ****			NOTE				
NARRATIVE	-cant del msg- / Resolved with Cust							
MTR:	LINK:							
NEW COMM	03-01-00 1100A	ACCESS:	A	B		OS	07-29-95 0600P	
CUS DT		CAT CD	IRATE	N	CC	N	AS	07-29-95 0600P
DT RECVD		SUB:	CLSALT		NI	N	BC	
TEST RES		HANDLE		MISC	C3,0			
RECOMMEND	CX CCS Instructions							
						BRTAFIYM		
							03:50 11:38:06	

## 3 OTHER FEATURES

Another objective in TAFI's design was to eliminate paper reference material traditionally found at a call receipt work position. Therefore TAFI contains an extensive library of reference material including:

- Detailed operating instructions for the various features provided
- Referral telephone numbers (including a listing of all CLEC contact numbers)
- Description of the various maintenance plans offered by BellSouth

Using TAFI, the user has all the information available to accurately process their customer's trouble report at their fingertips.