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**Quality Excellence for Suppliers of  
Telecommunications Forum  
(QuEST Forum)**

**TL 9000  
Quality Management System  
Measurements Handbook  
MTRS Example**

## 6.4 MTRS Examples

### 6.4.1 MTRS Philosophy

When considering the TL 9000 MTRS measurement, it is important to remember that the intent of the measurement is to drive improvement in the restoration of service impacting events. MTRS results are reported in Service Product Categories. In Product Category Table Release 5.0, the only product category requiring MTRS reporting is 7.3.2, Network Operations Center.

### 6.4.2 Mean Time to Restore Service

TL Communications experienced 5 critical events in their voice switches during a specific 30-day month (the reporting period) impacting customers for a total of 649 minutes.

- The first event lasted 63 minutes.
- The second event lasted 426 minutes.
- The third event wasn't customer service impacting, incurring 0 minutes of customer impact.
- The fourth event lasted 123 minutes.
- The fifth event lasted for 37 minutes.

TL Communications also experienced 26 non-critical outages during the same 30-day month (the reporting period) lasting a total of 13,126 minutes.

Table 6.4.2-1 illustrates the computation of the MTRS measurements from the above example.

**Table 6.4.2-1 Mean Time to Restore Service (MTRS) For April**

	<b>Outage Minutes</b>	<b>Number of Events</b>	<b>MTRS Result = <math>TM_x / TE_x</math></b>
Critical	$TM_c = 63 + 426 + 0 + 123 + 37$		$MTRSc = TM_c / TE_c$
	<b><math>TM_c = 649</math></b>	<b><math>TE_c = 5</math></b>	$MTRSc = 649 / 5$
			<b><math>MTRSc = 129.80</math> minutes per event</b>
Non-Critical			$MTRScnc = TMnc / TEnc$
	<b><math>TMnc = 13,126</math></b>	<b><math>TEnc = 26</math></b>	$MTRScnc = 13,126 / 26$
			<b><math>MTRScnc = 452.62</math> minutes per event</b>

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The data reported for the above examples are shown in Table 6.4.2-2.

**Table 6.4.2-2 Example 6.4.2 – MTRS Data Table Report**

<b>Identifier</b>	<b>Value</b>
MeasurementID	MTRS
TMc	649
TEc	5
TMnc	13126
TEnc	26

#### **6.4.4 Frequently asked questions**