



**Attachment to Data Center Services
to Multisourcing Service Integrator
Master Services Agreement**

DIR Contract No. DIR-DCS-MSI-MSA-001

Between

**The State of Texas, acting by and through
the Texas Department of Information Resources**

and

Capgemini America, Inc.

**Attachment 3-D
Service Level Examples**

December 28, 2011

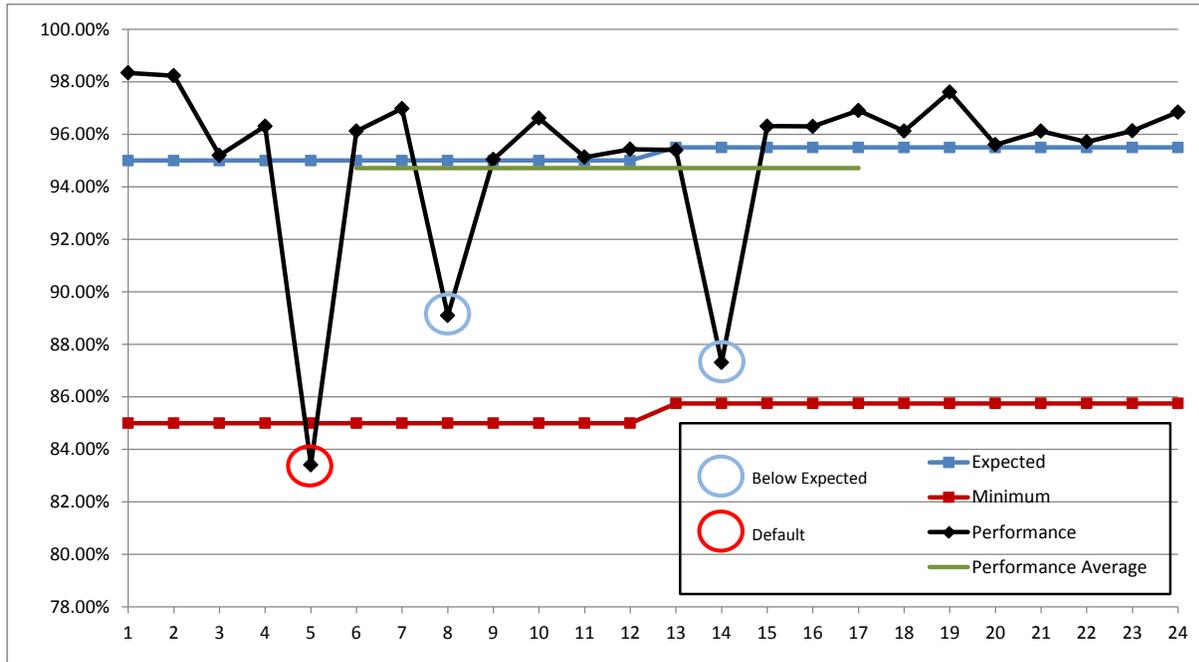
Overview

This workbook contains reference examples to clarify the Service Level methodology described in **Exhibit 3**.

Table of Contents

- 1 - Minimum Default; No Earnback
- 2 - Minimum Default; With Earnback
- 3 - Expected Default, No Earnback
- 4 - Expected Default, With Earnback
- 5 - Below Expected; No Default
- 6 - Continuous Improvement - High Performance
- 7 - Continuous Improvement - Medium Performance
- 8 - Continuous Improvement - Low Performance
- 9 - Baseline Performance for New Service Levels
- R - Type R (Related)
- S - Type S (Shared)
- SampleData - Data used in calculations and charts

Minimum Default; No Earnback



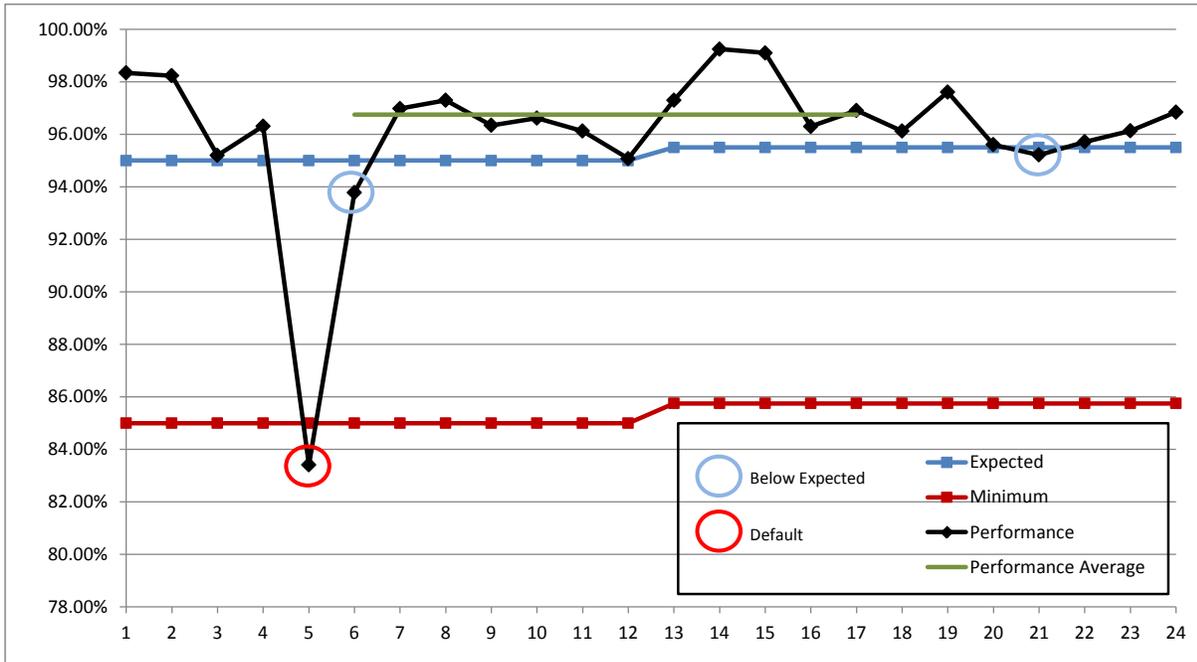
Scenario Notes

- 1.) Initial Minimum Service Level Default occurs in Month 5.
- 2.) Rolling twelve-month period for purposes of identifying possible Earnback is Month 6 through Month 17.
- 3.) There is no repeated Service Level Default (either Expected or Minimum) in this scenario; therefore the calculated performance average applies.
- 4.) Because the calculated 12-month performance average is below the Expected Service Level, Earnback is not achieved.

Scenario Data Points and Calculations

Rolling twelve month performance average:	94.72%
---	--------

Minimum Default; With Earnback



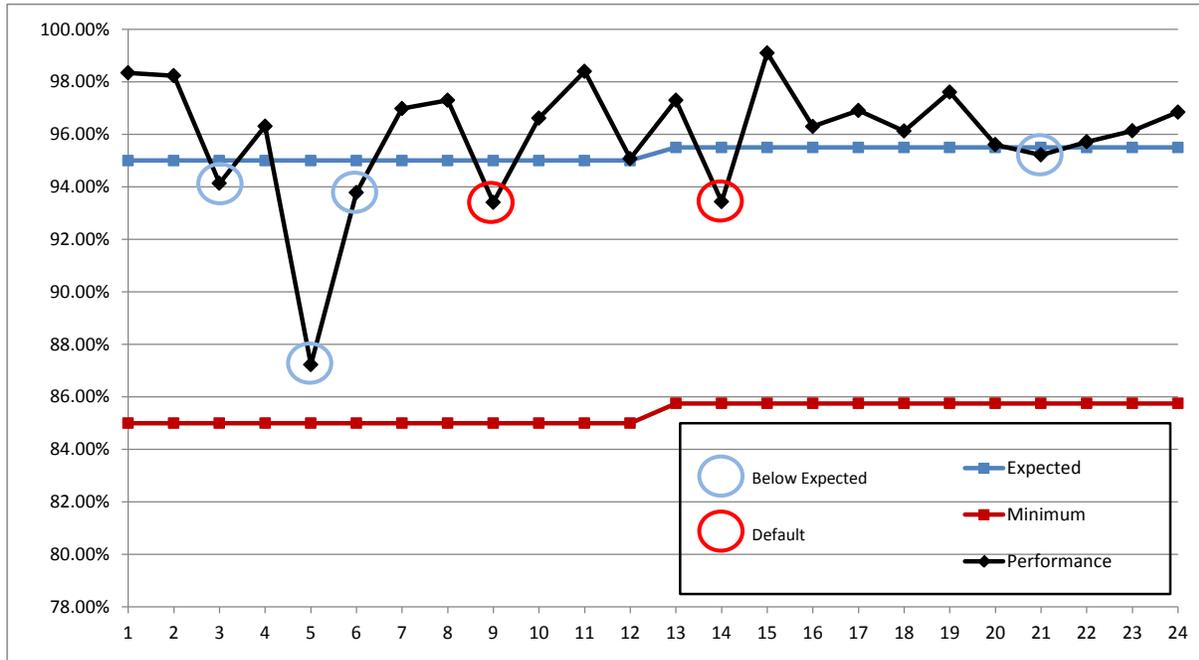
Scenario Notes

- 1.) Initial Minimum Service Level Default occurs in Month 5.
- 2.) Rolling twelve-month period for purposes of identifying possible Earnback is Month 6 through Month 17.
- 3.) There is no repeated Service Level Default (either Expected or Minimum) in this scenario; therefore the calculated performance average applies.
- 4.) Because the calculated 12-month performance average is above the Expected Service Level, Earnback is achieved.

Scenario Data Points and Calculations

Rolling twelve month performance average:	96.75%
---	--------

Expected Default; No Earnback



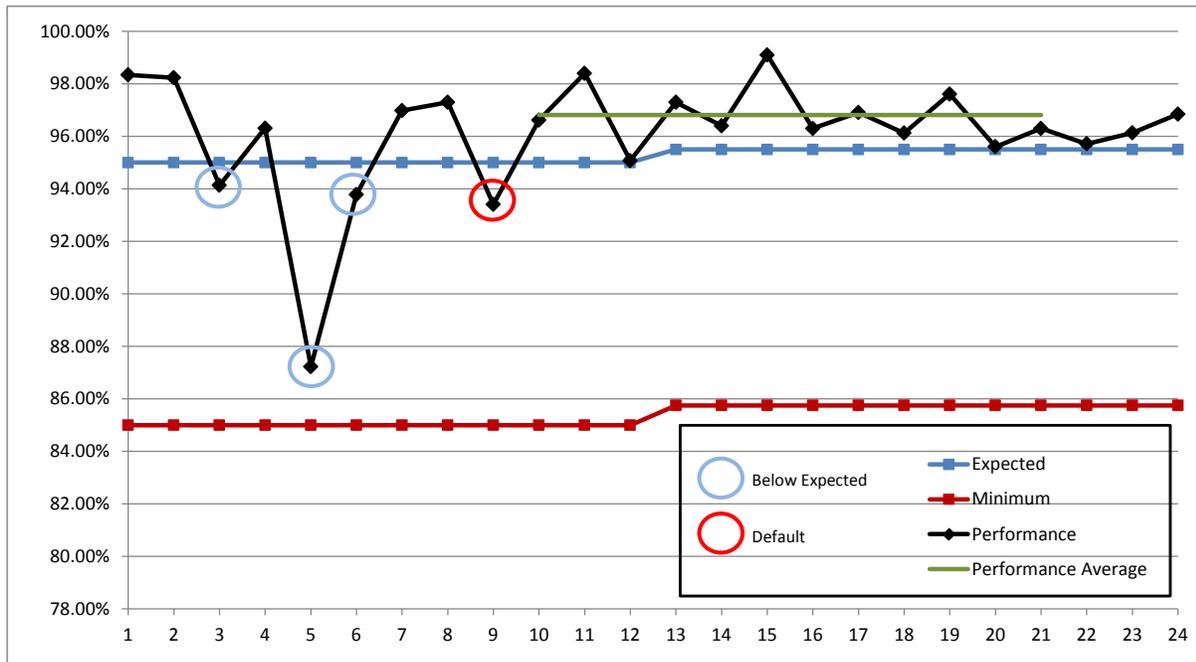
Scenario Notes

- 1.) Initial Expected Service Level Default occurs in Month 9 (fourth occurrence of performance below Expected within a twelve-month period).
- 2.) Rolling twelve-month period for purposes of identifying possible Earnback is Month 10 through Month 21.
- 3.) Because a second Expected Service Level Default occurs in Month 14, Earnback is not achieved.
- 4.) Although Earnback has not been achieved for the first Service Level Default (Month 9) in this example, Earnback could be achieved for the second Service Level Default (Month 14) depending on the Service Provider's performance in the subsequent twelve months.
- 5.) Although the performance in Month 21 is below Expected, this is not an Expected Service Level Default because there has only been one occurrence of performance below Expected in the prior eleven months.

Scenario Data Points and Calculations

Not applicable

Expected Default; With Earnback



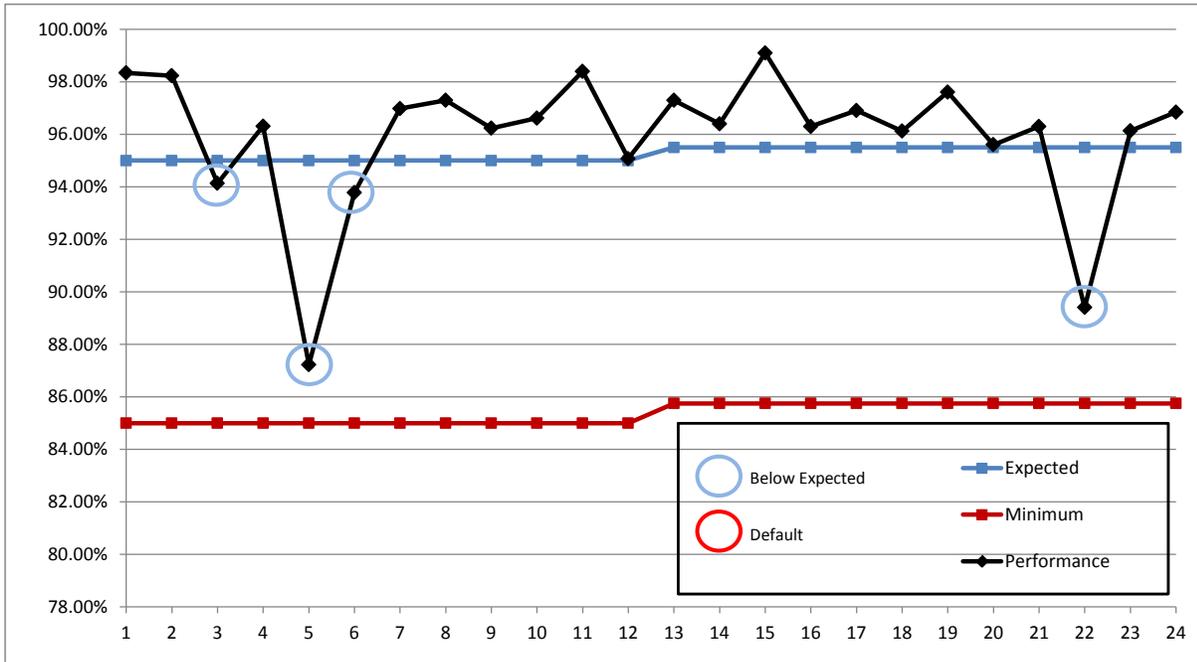
Scenario Notes

- 1.) Initial Expected Service Level Default occurs in Month 9 (fourth occurrence of performance below Expected within a twelve-month period).
- 2.) Rolling twelve-month period for purposes of identifying possible Earnback is Month 10 through Month 21.
- 3.) There is no repeated Service Level Default (either Expected or Minimum) in this scenario; therefore the calculated performance average applies.
- 4.) Because the calculated 12-month performance average is above the Expected Service Level, Earnback is achieved.

Scenario Data Points and Calculations

Rolling twelve month performance average:	96.81%
---	--------

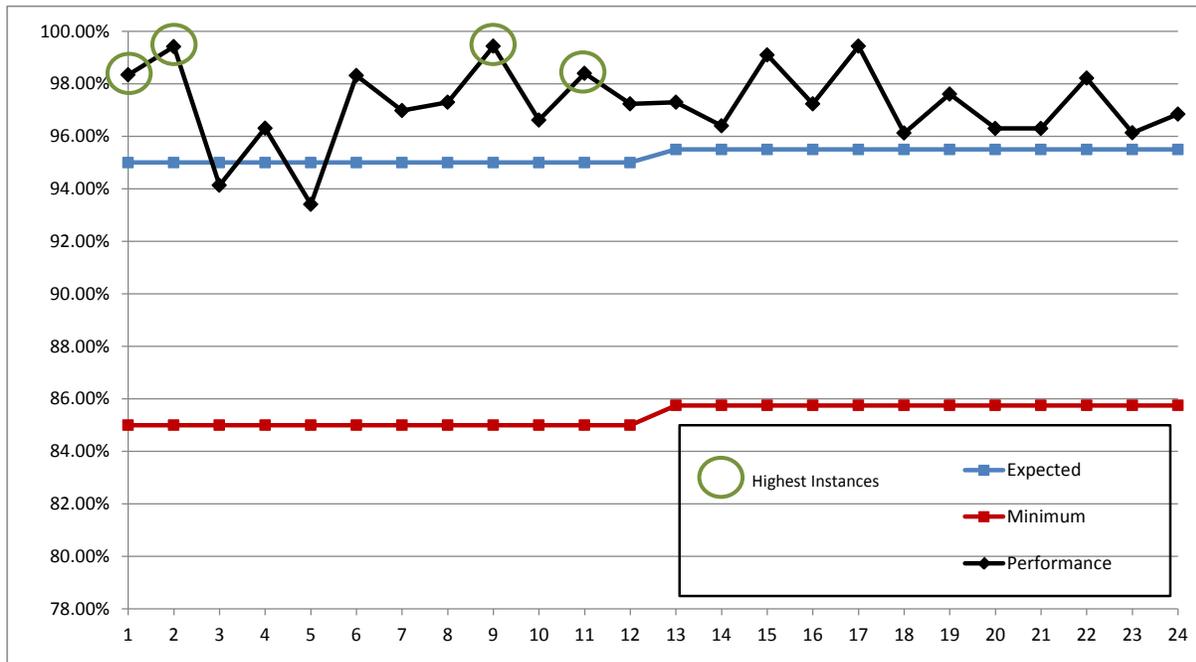
Below Expected; No Default



Scenario Notes
 1.) There are four occurrences of performance below Expected; however, because they do not occur within a twelve-month period, there is no Service Level Default.

Scenario Data Points and Calculations
 Not applicable

Continuous Improvement - High Performance



Scenario Notes

- 1.) At the end of the first twelve months, the following calculation is performed to adjust Expected:
 - (a) Average of four highest measurements
 - (b) The Year 1 Expected (Y1E) plus 10% of the difference between 100% and the Year 1 Expected

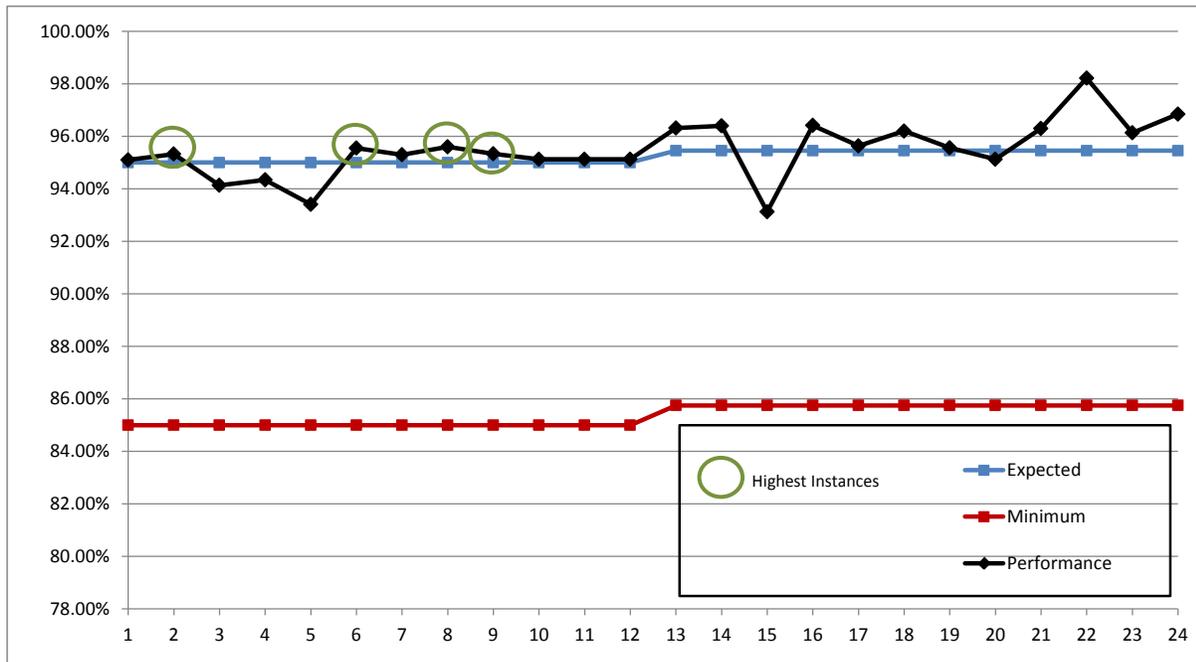
$$Y1E + (1-Y1E) \cdot 0.1$$
- 2.) Because item (a) is higher than item (b), item (b) is used to set the Year 2 Expected
- 3.) The calculation to adjust Minimum is the Year 1 Minimum (Y1M) plus 5% of the difference between 100% and the Year 1 Minimum

$$Y1M + (1-Y1M) \cdot 0.05$$

Scenario Data Points and Calculations

Year 1 Minimum	85.00%
Year 1 Expected	95.00%
(a) Average of four highest measurements in Year 1	98.90%
(b) The Year 1 Expected (Y1E) plus 10% of the difference between 100% and the Year 1 Expected	95.50%
Year 2 Minimum	85.75%
Year 2 Expected	95.50%

Continuous Improvement - Medium Performance



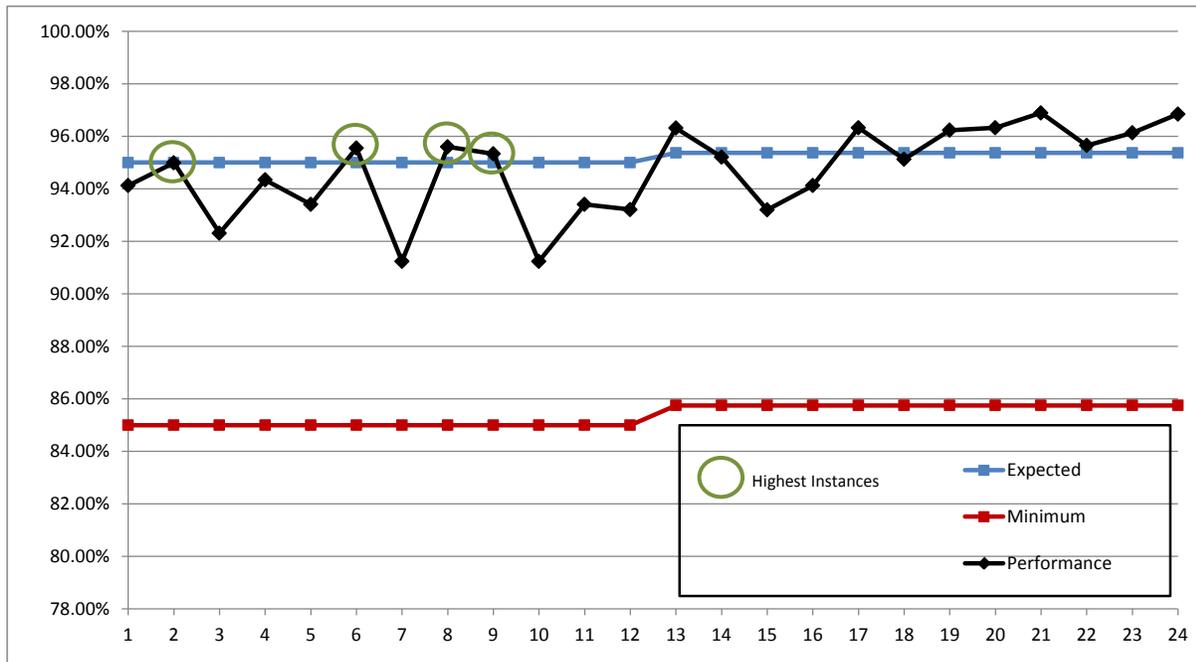
Scenario Notes

- 1.) At the end of the first twelve months, the following calculation is performed to adjust Expected:
 - (a) Average of four highest measurements
 - (b) The Year 1 Expected (Y1E) plus 10% of the difference between 100% and the Year 1 Expected
 $Y1E + (1-Y1E)*.1$
- 2.) Because item (a) is lower than item (b), item (a) is used to set the Year 2 Expected
- 3.) The calculation to adjust Minimum is the Year 1 Minimum (Y1M) plus 5% of the difference between 100% and the Year 1 Minimum
 $Y1M + (1-Y1M)*.05$

Scenario Data Points and Calculations

Year 1 Minimum	85.00%
Year 1 Expected	95.00%
(a) Average of four highest measurements in Year 1	95.45%
(b) The Year 1 Expected (Y1E) plus 10% of the difference between 100% and the Year 1 Expected	95.50%
Year 2 Minimum	85.75%
Year 2 Expected	95.45%

Continuous Improvement - Low Performance



Scenario Notes

- 1.) At the end of the first twelve months, the following calculation is performed to adjust Expected:
 - (a) Average of four highest measurements; in this scenario, because there are only three measurements above Expected, the fourth-highest measurement is replaced with the actual Year 1 Expected target for purposes of the average calculation.
 - (b) The Year 1 Expected (Y1E) plus 10% of the difference between 100% and the Year 1 Expected

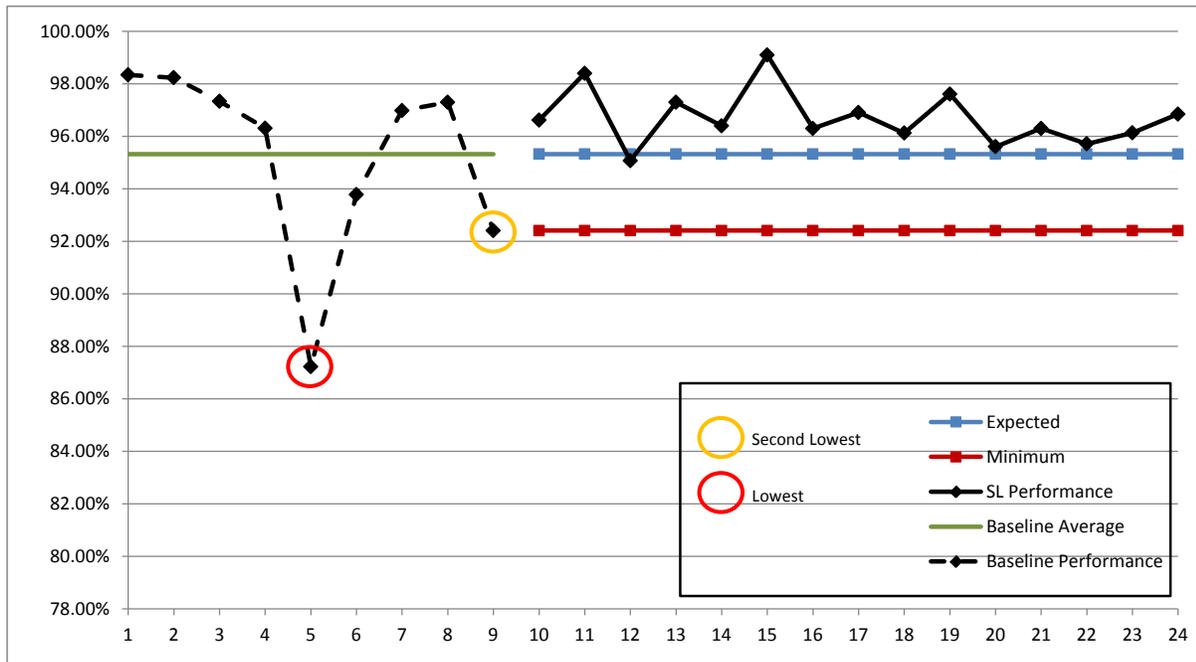
$$Y1E + (1-Y1E) \cdot 0.1$$
- 2.) Because item (a) is lower than item (b), item (a) is used to set the Year 2 Expected
- 3.) The calculation to adjust Minimum is the Year 1 Minimum (Y1M) plus 5% of the difference between 100% and the Year 1 Minimum

$$Y1M + (1-Y1M) \cdot 0.05$$

Scenario Data Points and Calculations

Year 1 Minimum	85.00%
Year 1 Expected	95.00%
(a) Average of four highest measurements in Year 1	95.37%
(b) The Year 1 Expected (Y1E) plus 10% of the difference between 100% and the Year 1 Expected	95.50%
Year 2 Minimum	85.75%
Year 2 Expected	95.37%

Baselining Performance for New Service Levels



Scenario Notes

- 1.) Measurements are made for a 9-month baselining period
- 2.) The Expected Service Level is set at the average of the nine monthly measurements
- 3.) To identify the Minimum Service Level, the following data points are used:
 - (a) Lowest measurement
 - (b) Second lowest measurement
 - (c) Standard deviation of the measurements
- 4.) In this scenario, because the lowest measurement is more than the equivalent of one standard deviation below the second lowest measurement, the Minimum Service Level is set at the second lowest measurement

Scenario Data Points and Calculations

Average of performance during baselining period	95.32%
Lowest measurement during baselining period	87.23%
Second lowest measurement during baselining period	92.41%
One standard deviation of the measurements	3.42%
Calculated Expected Service Level	95.32%
Calculated Minimum Service Level	92.41%

Type R (Related)

Scenario Notes

- 1.) Example performance data is provided for illustration only and is not based on actual historical data, nor does it represent performance expectation.
- 2.) In the Example Data table below, the MSI and each Service Component is represented with its own subset of the total population of Incidents.
- 3.) The sum of the MSI's Incidents and each Service Component's Incidents equals the Enterprise Incidents.
- 4.) The MSI is measured on the Enterprise volume, while each Service Component is measured on individual Service Component volume.

Example Data - Incident Resolution Time

	MSI	Server	Data Center	Network	Mainframe	Print-Mail	Enterprise
Severity 1							
Pass	500	15000	100	7840	900	160	24500
Fail	18	200	3	322	35	2	580
Total	518	15200	103	8162	935	162	25080
Severity 2							
Pass	600	91240	140	8030	1200	200	101410
Fail	22	240	4	386	42	2	696
Total	622	91480	144	8416	1242	202	102106
Severity 3							
Pass	890	22000	150	11200	1350	240	35830
Fail	26	288	5	463	50	2	834
Total	916	22288	155	11663	1400	242	36664
Severity 4							
Pass	800	25400	200	14200	1600	285	42485
Fail	31	346	6	556	60	2	1001
Total	831	25746	206	14756	1660	287	43486

Performance Calculations

Color Codes

Meets Expected	
Below Expected	
Below Minimum	

MSI		Expected	Minimum	Performance
R1.2.1E	Resolution Time - Sev 1 - Enterprise	97.50%	96.00%	97.69%
R1.2.2E	Resolution Time - Sev 2 - Enterprise	97.50%	96.00%	99.32%
R1.2.3E	Resolution Time - Sev 3 / 4 - Enterprise	97.50%	96.00%	97.71%

Server		Expected	Minimum	Performance
R1.2.1S	Resolution Time - Sev 1 - Server	97.50%	96.00%	98.68%
R1.2.2S	Resolution Time - Sev 2 - Server	97.50%	96.00%	99.74%
R1.2.3S	Resolution Time - Sev 3 / 4 - Server	97.50%	96.00%	98.68%

Data Center		Expected	Minimum	Performance
R1.2.4D	Resolution Time - Sev 1/2/3/4 - Data Center	97.50%	96.00%	97.04%

Network		Expected	Minimum	Performance
R1.2.4N	Resolution Time - Sev 1/2/3/4 - Network	97.50%	96.00%	95.98%

Mainframe		Expected	Minimum	Performance
R1.2.4M	Resolution Time - Sev 1/2/3/4 - Mainframe	97.50%	96.00%	96.43%

Print-Mail		Expected	Minimum	Performance
R1.2.4P	Resolution Time - Sev 1/2/3/4 - Print-Mail	97.50%	96.00%	99.10%

Type S (Shared)

Scenario Notes

- 1.) Example performance data is provided for illustration only and is not based on actual historical data, nor does it represent performance expectation.
- 2.) In the examples below, the MSI and the SCPs share a single Type S metric, which is measured once using the same pool of events.
- 3.) Expected and Minimum targets are equivalent, and therefore if a Service Level Default occurs, both Parties are affected.

Ref	Service Level Categories	Expected	Minimum	MSI	Mainframe	Server	Print & Mail	Data Center	Network
Example									
								Color Codes	
									= Meets Expected
									= Below Expected
									= Below Minimum
Example 1 - Server Availability									
S1.1.2	Servers - Gold Tier Availability - Consolidated	99.90%	99.80%	X		X			
Example Performance									
Month 1	Servers - Gold Tier Availability - Consolidated	99.91%		N/A		99.91%	N/A	N/A	N/A
		No Default		N/A		No Default	N/A	N/A	N/A
Month 2	Servers - Gold Tier Availability - Consolidated	99.82%		N/A		99.82%	N/A	N/A	N/A
		Default on 4th		N/A		Default on 4th	N/A	N/A	N/A
Month 3	Servers - Gold Tier Availability - Consolidated	99.73%		N/A		99.73%	N/A	N/A	N/A
		Default		N/A		Default	N/A	N/A	N/A
Example 2 - Network Availability									
S1.1.10	Network Availability	99.99%	99.95%	X					X
Example Performance									
Month 1	Network Availability	99.84%		N/A		N/A	N/A	N/A	99.84%
		Default		N/A		N/A	N/A	N/A	Default
Month 2	Network Availability	99.98%		N/A		N/A	N/A	N/A	99.98%
		Default on 4th		N/A		N/A	N/A	N/A	Default on 4th
Month 3	Network Availability	99.99%		N/A		N/A	N/A	N/A	99.99%
		No Default		N/A		N/A	N/A	N/A	No Default

		Mo											
	Month	1	2	3	4	5	6	7	8	9	10	11	12
Targets	Minimum	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
	Expected	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
Examples	1												
	Performance	98.34%	98.23%	95.20%	96.31%	83.41%	96.12%	96.98%	89.10%	95.04%	96.61%	95.13%	95.43%
	12-month average						94.72%	94.72%	94.72%	94.72%	94.72%	94.72%	94.72%
	2												
	Performance	98.34%	98.23%	95.20%	96.31%	83.41%	93.78%	96.98%	97.30%	96.34%	96.61%	96.12%	95.07%
	12-month average						96.75%	96.75%	96.75%	96.75%	96.75%	96.75%	96.75%
	3												
	Performance	98.34%	98.23%	94.13%	96.31%	87.23%	93.78%	96.98%	97.30%	93.41%	96.61%	98.40%	95.07%
	4												
	Performance	98.34%	98.23%	94.13%	96.31%	87.23%	93.78%	96.98%	97.30%	93.41%	96.61%	98.40%	95.07%
	12-month average									96.81%	96.81%	96.81%	
	5												
	Performance	98.34%	98.23%	94.13%	96.31%	87.23%	93.78%	96.98%	97.30%	96.23%	96.61%	98.40%	95.07%
	6	4	2							1		3	
	Performance	98.34%	99.41%	94.13%	96.31%	93.41%	98.31%	96.98%	97.30%	99.43%	96.61%	98.40%	97.23%
	Average of 4 Highest	98.90%											
	7		4				1		2	3			
	Performance	95.10%	95.32%	94.13%	94.34%	93.41%	95.55%	95.30%	95.60%	95.33%	95.12%	95.12%	95.12%
	Average of 4 Highest	95.45%											
	Expected	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
	8		4				1		2	3			
	Performance	94.12%	94.99%	92.31%	94.34%	93.41%	95.55%	91.23%	95.60%	95.33%	91.23%	93.41%	93.21%
	Average of 4 Highest	95.37%											
	Expected	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
	9												
	9-month performance	98.34%	98.23%	97.33%	96.31%	87.23%	93.78%	96.98%	97.30%	92.41%			
	9-month average	95.32%	95.32%	95.32%	95.32%	95.32%	95.32%	95.32%	95.32%	95.32%			

	Mo											
Month	1	2	3	4	5	6	7	8	9	10	11	12
Service Level performance										96.61%	98.40%	95.07%
Lowest measurement	87.23%											
Second Lowest	92.41%											
1 Standard Deviation	3.42%											
Expected										95.32%	95.32%	95.32%
Minimum										92.41%	92.41%	92.41%

