

IT SERVICES MANAGEMENT Service Level Agreements

Sample Agreements, Reports, and Checklists

White Paper

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Service Level Agreement – Sample #1

This sample is a short form contract used to both document the SLA and report monthly on its status. One of these is produced for each service provided.

Between IT Department And ABC Department			Date: MM/YY		
Contacts: IT Department: _____ ABC Department: _____			Effective Dates: From MM/YY to MM/YY		
Approvals: IT Department: _____ ABC Department: _____					
CICS Service			Goal	Actual	Difference
	Availability	8 am - 5 pm Mon-Fri	98%	100%	2%
	Response	% of response within 2 seconds (internal)	90%	95%	5%
		% of response within 2 seconds (internal)	95%	95%	0%
	Load	Transactions/min during peak (9 am – 11 am)	300	250	-50
		Daily CPU hours	3.5	3.0	-.5
	Accuracy	Errors due to DC Problems	0	0	0
		Errors due to Applications	0	0	0
	Batch Service	Class S: % turnaround in 30 minutes	95%	85%	-10%
		Class T: % turnaround in 15 minutes	98%	100%	2%

SLA Criteria:

- 1) Availability based on CICS PROD up and files open.
- 2) Penalties for missed services:
 - a) 10% reduction in billing for 2% missed service unless miss caused by user.
- 3) Penalties for exceeded loads:
 - a) 10% increase in billing and no penalty for missed service.
- 4) Reporting: Data Center will provide this report by 8 am each day. Weekly report will summarize service for the week.
- 5) Changes to SLA's must be negotiated with contacts for IT and ABC department.
- 6) Priorities if full resources are unavailable: TSO users will be logged off to favor CICS.
- 7) Batch Services:
 - a) Turnaround is defined to be from job submission to job end (not including print time)



Service Level Agreement – Sample #2

This sample is a long form contract with a sample report following it. One of these is produced for each service provided.

Date: MM/DD/YYYY
To: Order Processing Department
From: Information Technology Department
Subject: Service Level Agreement

I. INTRODUCTION

The following Service Level Agreement (SLA) is between the Order Processing Department, referred to as the client and the Information Technology Department (IT). A SLA summary report will be distributed on the 15th workday of each month. A sample of this report is attached.

Ultimately the goal is to deliver 100% availability. This SLA is another step in the effort to achieve that objective. It is Information Technology's intention to continuously apply **ABC** Company quality standards to improve client service in all areas whenever possible.

This agreement shall be in effect for 1 year from MM/YY or until the SLA is renegotiated. Expired SLA's will continue to be reported upon until new SLA's are put in place.

II. IT SERVICES PROVIDED

A. SYSTEM AVAILABILITY

The Order Processing Department's system availability is a metric from a combination of various availability components. This metric is representative of mainframe hardware and system control programs (MVS, VM, etc.). IT will report availability for MVS, VM, EMAIL, the network and the ORDER system.

1. ORDER System

Description:

The ORDER System platform will be available as measured by IDMS production on a weekly basis and include specified service hours as documented below.

Scheduled Backups:

Tuesday and Friday	8:00 PM - 9:30 PM
During maintenance periods	5:30 PM - 7:00 PM

The ORDER System will be available in "inquiry" mode during backups.

Service Goals:

The ORDER System will be available not less than 97% of the agreed production hours. Unscheduled outages will not exceed 1% of the time.

Measurement Method:

The ORDER System availability reporting will include both unscheduled and scheduled outages. IDMS production will be measured on a weekly basis and reported upon weekly.

2. EMAIL

Description:

EMAIL availability reporting will include both unscheduled and scheduled outages. The EMAIL production system will be available a certain percentage of the time for unscheduled outages as documented below under Service Goals. EMAIL production will be measured on a weekly basis and reported upon weekly.

EMAIL Maintenance:

EMAIL will be unavailable during scheduled application maintenance periods. The maintenance schedule is currently as follows; 7:00PM to 10:00PM on alternate Tuesdays during the PM window and 9:00AM until 11:00AM Sundays for database maintenance.

Service Goals:

The EMAIL production system will be available not less than 97% of the time. Unscheduled outages will not exceed 1% of the time.

Measurement Method:

EMAIL availability reporting will include both unscheduled and scheduled outages. EMAIL production will be measured on a weekly basis and reported upon weekly.

3. MVS Systems

Description:

Information Technology (IT) will provide the client a level of MVS platform availability that is defined in this document. Availability metrics include both scheduled and unscheduled outages.

Systems Maintenance:

Computer Systems will be unavailable during the PM window. That maintenance schedule is currently as follows; 7:00PM to 10:00PM on alternate Tuesdays.

Service Goals:

Computer Systems will be available 98% of the time, as measured on a weekly basis including unscheduled outages and specified service outages as documented above.

Measurement Method:

Computer System availability reporting will include both unscheduled and scheduled outages. Production will be measured on a weekly basis and reported upon weekly.

4. VM System

Description:

The VM system will be available as measured on a weekly basis within specified service hours including maintenance as documented below.

Scheduled Maintenance:

Will be performed 12:00 Midnight Friday until 8:00 AM Saturday.

Service Goals:

The VM production system will be available not less than 94% of the time. Unscheduled outages will not exceed 1% of the time.

Measurement Method:

VM production will be measured on a weekly basis and reported upon monthly. Reporting will include both unscheduled and scheduled outages.

5. Network Availability

a) VTAM availability is included in MVS system availability. The objective for this area is 98%.

b) Hardware/Front End Processors

Description:

Front End Processors include communications controller equipment and equipment from other vendors which perform similar functions.

Service Goals:

Front End Processors will be available 99.5% of the time.

Method of Measurement:

Availability will be measured by IT through manual and automated methods. Reporting will be done on a monthly basis. Measurement is on a 24 hour by 7-day per week basis. Outages include scheduled, negotiated and unscheduled periods of unavailability. Unscheduled and scheduled outages will not exceed 0.5% of the time.

B. PERFORMANCE

The Order Processing Department's systems client response time will be maintained at mutually agreed upon levels.

1. ORDER System Performance

Description:

ORDER System Performance includes IDMS internal response time and dial-up network response time. IDMS internal response time will be measured for all ORDER System on-line transactions. Network response time includes all components of the dial-up teleprocessing network.

Service Goals:

IDMS internal response time:

- 91% of all ORDER System transactions will complete in less than 2 seconds
- 98% of all ORDER System transactions will complete in less than 5 seconds

Measurement Method:

ORDER System response time will be measured by IT Performance and Capacity Planning and by Applications. Measurement will be done on a weekly basis and reporting will be monthly.

2. Remote Network Response Time

Description:

Network Response Time includes network delay as a component of ORDER system performance.

Service Goals:

The average of all ORDER system dial-up transactions will complete within 6 seconds.

Measurement Method:

ORDER system IDMS performance will be measured via MVS host based monitoring technique for internal response time and by microcomputer based measuring for the network.

C. OPERATIONS & SERVICES**1. Computer Operations and Batch Services****Production Batch**Description:

Production services include scheduling and tracking to completion all scheduled batch workloads processed on host-based systems.

Service Goals:

All scheduled production ORDER System batch jobs will be completed on time 99% of the time according to the production documentation scheduling requirements.

Measurement Method:

Production batch performance metrics will be recorded, measured and reported by manual monitoring techniques (this can be automated).

a) Tape Service:

Batch submitted jobs which call for tape mounts on MVS systems will be provided an automated and manual mechanism to fulfill those tape mount requests. Tape mounts will be measured and reported as an average. Tape mounts will be satisfied within 2 minutes of operator/system notification. Saturday and Sunday, they will be satisfied within 5 minutes.

Service Goals:

IT will provide the above services within the service levels indicated 100% of the time.

Measurement:

Tape service measurement will take place through automated processes and will include average tape mount time for a given number of jobs per week.

2. DASD Managementa) **Dataset Restore from Archive**

Information Technology will provide the client a satisfactory level of dataset restores from archive. Dataset restores on MVS systems are included in this service. This service is in effect only when all supporting hardware and software systems are available.

Service Goals:

- Restores from on-line compressed DASD to client DASD: 35 seconds 99% of the time.
- Restores from tape cartridge to client DASD: 30 minutes 95% of the time.

b) **DASD Recovery**

IT will provide 4-hour turnaround on recovering data in cases of a single DASD volume failure. Off-shift turn-around may add two hours to the above commitment. Recoveries from an off-site source will be made within 48 hours. Recoveries requiring longer will



be communicated to the client and an appropriate schedule will be negotiated within eight hours.

Service Goal:

Services identified above will be fulfilled 100% of the time.

c) DASD Capital Acquisition

IT will provide Quarterly Capital Acquisition approved DASD within 5 weeks of procurement.

Service Goal:

Services identified above will be fulfilled 100% of the time.

DASD Measurement Method:

IT Storage Management will measure weekly and report monthly on the above objectives through manual and automated processes. To optimize manpower, in-depth reporting will occur on an exception basis. High-level pass/fail objectives will always be reported upon and detailed results will be reported upon only when objectives are not met.

3. Information Technology Support

a) Help Desk Support

Description:

Information Technology (IT) will provide the Order Processing Department with business oriented problem resolution and reporting. Help Desk functions include client assistance in technical matters pertaining to Computer Center availability, general information, problem resolution and performance issues.

Service Goals:

80% of all calls to the Help Desk will be resolved within one business day.

D. PROCEDURE FOR UNSATISFACTORY SERVICE

When service falls below the thresholds identified under paragraphs titled "Service Goals", IT will work to resolve service problems and report progress to the customer. In the event that service does not improve, a joint meeting between members of the Order Processing Department and IT will convene. This meeting will be used to discuss and resolve problems that have resulted in diminished service to the customer. A comprehensive report that documents the results and resolutions of these problems shall be published and distributed to management.

SERVICE LEVEL AGREEMENT REPORTING

Service Level Agreement Reporting will take place on a monthly basis with a weekly overview and event analysis report.

III. CLIENT RESPONSIBILITIES

The Order Processing Department will participate, when requested in all IT/Order Processing administrative, technical and process decisions that may affect the integrity of the customer applications and databases.

IV. ASSUMPTIONS

The commitments in this agreement are based upon the following assumptions:

- 1) Scheduled holidays will be included in the Service Level Agreement.
- 2) Periodic database and application maintenance will be negotiated with IT and the client in advance. These mutually agreed upon times will be subtracted from the scheduled availability.
- 3) All application enhancements must be communicated to Information Technology (IT) and will be incorporated into the system via procedures in place.
- 4) The ORDER System overall Service Level Agreement may be jointly renegotiated only by Order Processing Department and IT organizations. Either party may open negotiations. Renegotiated SLA's require both vice presidents signatures.
- 5) ORDER System service levels are based upon the maximum size of the ORDER database during the month of MMMM, 20XX, with no more than a 20% increase over a six month period. Proactive monitoring, analysis and projection will be performed by IT to prevent descending below established service levels.
- 6) ORDER System service levels are based on a maximum number of total transactions per day on the most active day in MMMM, 20XX. When transactions exceed a 30% increase over this level within a six-month period, the SLA metrics will be reviewed and renegotiated. Additionally, service is based on an average of transactions per hour on the most active day in MMMM, 20XX. Proactive monitoring, analysis and projection will be performed by IT to prevent descending below established service levels.
- 7) MVS DASD backups are performed on a daily basis. Certain critical datasets are backed up more frequently. TSO, Pool, Common packs are backed up on a daily incremental, weekly or monthly basis. ORDER databases are backed up on a daily basis.
- 8) Backup of client private DASD volumes is the responsibility of the client.

V. APPROVALS

Information Technology:

_____ Date _____

J. Smith - Director Applications Development

_____ Date _____

R. Jones - Director Operations/Technical/Communications

_____ Date _____

S. Johnson - Vice President Information Technology

Order Processing Department:

_____ Date _____

R. Wilson - Manager Order Entry

_____ Date _____

S. Nealis - Manager Order Processing

_____ Date _____

Y. Young - Vice President Order Processing

Service Level Agreement Report – Sample #1 (Based on previous SLA Sample)

Order Processing Department SLA Detail Report

	MAY 7	MAY 14	MAY 21	MAY 28	TARGET
Availability					
IDMS	97.5%	99.5%	95%	99.4%	97%
MVS	97.7%	99.45%	99.2%	100%	98%
EMAIL	96.75%	98.6%	98%	99%	97%
VM	100%	100%	94.9%	99.7%	94%
FEP	99.9%	99.9%	99.9%	99.9%	99.5%
Performance					
IDMS < 2 Sec	93%	94%	94%	94%	91%
IDMS < 5 Sec	98%	98%	98%	98%	98%
ORDER Dial-up (sec)	4.9	5.1	5.0	5.0	6.0
TSO < 5 Sec (All Shifts)	98%	98%	98%	98%	97%
TSO < 2 (1 & 2 Shifts)	94%	94%	94%	95%	92%
TSO < 2 (3rd Shift)	92%	92%	93%	93%	90%
Terminal Prob Resp (2hr)	100%	100%	100%	100%	100%
DASD Management	100%	100%	100%	100%	100%
Help Desk Calls	85%	90%	80%	90%	80%
Tape Mount Wait Avg. (min)	3.2	3.1	1.5	2.1	5.0
Batch Performance	98.6%	99.8%	100%	100%	99%

Service Level Agreement Checklist – Sample #1

This checklist is intended to assist in the development of a Service Level Agreement. Since Service Level Agreements can be used to describe a variety of services, the particular elements appropriate to a specific SLA will depend on the circumstances.

Service to be provided:

Purpose of the service _____

Location of the service _____

Type of service

- Application DP Services
 - Batch jobs
 - TSO development
 - IMS
 - DB2
 - CICS
- Communications Services
 - Terminals
 - Concentrators
 - Front-ends
 - Lines
 - Modems
 - Network Control
- Applications Development Services
 - Functional review
 - Design
 - Testing
 - Implementation
- Technical assistance
 - Computer Operations
 - Software Support
 - Hardware planning
 - Strategic planning
 - Contract Administration
 - Hardware Installation
- Problem Resolution
 - Coverage
 - Help Desk
- Maintenance
 - Hardware
 - Software
 - Outside Vendor
- Training
 - For DP
 - For customer
 - By DP Trainer
 - By outside Vendor
- Environmental Support
 - Facilities
 - Security



Volume Expectations

- Batch jobs
 - Weekly totals: min, max and average
 - Daily peaks: min, max and average
 - Distribution over prime, non-prime and weekend
 - Projected 2-year growth
- Interactive transactions
 - Daily totals: min, max and average
 - Hourly peaks: min, max and average
 - Hourly distribution over prime, non-prime and weekends
 - Projected 2-year growth
 - Terminal Count
 - Terminal Growth
- Communications network volumes
 - Daily totals: min, max and average
 - Hourly peak: min, max and average
 - Hourly distribution over prime, non-prime and weekends
 - Projected 2-year growth
 - Terminal count
 - Terminal growth
- Applications development
 - Functional specifications
 - Testing requirements
 - Documentation
 - Implementation schedules
- Technical assistance
 - Specify services to be provided
 - Reports
 - Forecasts
 - Planning documents
- Problem resolution
 - Support services to be provided
 - Volume of demand for services
 - Daily totals: min, max and avg.
 - Hourly peaks: min, max and avg.
 - Projected 2-year growth
- Maintenance services
 - Maintenance services to be provided
 - Expected volume/frequency
 - Scheduled/unscheduled maintenance
- Training
 - Type training to be provided
 - Training schedule
 - Class size/frequency
- Administrative support
 - Type service to be provided
 - Expected volume/frequency
- Environmental support
 - Type service to be provided
 - Scope/Volume/frequency

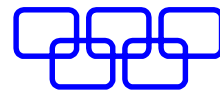


Timeliness Expectations

- Batch Jobs
 - Turnaround times
 - Elapsed job start to job stop
 - Input received to output delivered
 - Average times vs percentile distribution
 - Volume related ranges
 - Conformance to schedule
- Interactive transactions
 - Response times
 - Host processor times
 - Customer terminal times
 - Average times vs percentile
 - Volume related ranges
- Communications services
 - Network delay times
- Applications development
 - Conformance to schedule
 - Implementation dates
- Technical assistance
 - Conformance to schedule
 - Implementation dates
 - Response to crisis demands
- Problem resolution assistance
 - Wait time for service initiation
 - Time for problem resolution
- Maintenance
 - Conformance to maintenance schedule
 - Response to crises demands
- Training
 - Adherence to schedule
 - Training duration
- Administrative support
 - Wait time for service completion
 - Elapsed time for completion
- Environmental support
 - Adherence to schedule
 - Response to crises demands

Availability

- Commercial/Real time primary DP Service
 - Time period during which service is to be provided
- Application development
 - Project length
- Problem resolution/maintenance/Environmental support
 - Time period during which service is to be provided
- Technical assistance/administrative support
 - Normal office hours
- Training
 - Course schedule



Reliability

- Reliability = actual availability as a percentage of scheduled availability
- Conditions and exceptions
 - Perception of customer and provider may vary
- Periods of limited capability

Limitations

- Interdependencies
- Impact on other areas
 - Resource constraints
 - Conflict with shared resources
- Priority
 - With respect to providers other work
 - With respect to customers other work
- Backup requirements
- Security requirements
- Disaster Recovery policy and procedures

Compensation

- Definition of pricing units
 - Charge for service provided
 - Cost of service fixed by provider
 - Computer resources
 - Man-hours
 - Materials
 - Related services
- Relation of price to service
 - Premium price for premium (faster) service
 - Price adjustment for substandard service
 - Price discount for off-peak times
- Relation of price to volume
 - Decreasing scale to encourage volume (if desired)
 - Price penalties for excessive peak volumes (if desired)
- Non-monetary incentives/penalties
 - Wage and bonus incentives
 - May tie to MBO

Measurement

- Responsibility
 - Provider
 - Customer
 - Shared
- Appropriate metrics
- Source of information
- Measurement tools
- Analytical tools
- Definitions
- Assumptions
- Approximations
- Reporting vehicle
- Reporting audience
- Reporting frequency

Service Level Agreement – Sample #3

This sample is a short form contract with the same areas contained in Sample #2. One of these is produced for each service provided.

Reference Number

This document constitutes a formal contract between:

(Provider)

and

(Customer)

Implementation Date -

Review Date -

Provider's Location -

Providers Coordinator

Customer's Location -

Customers Coordinator

Description of Service -

Volume -

Timeliness -

Availability -

Reliability -

Compensation -

Measurement -

Provider Approval Date -

Customer Approval Date -