



**(SAMPLE)Performance
Service Level Agreement**

Name of Application: CMS Net system

**Date Updated: July 6, 2011
Document Version: 4.3**

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1 Document Control

This section lists the details of the reviews for this document.

VERSION NO.	NAME OF REVIEWER	ROLE	DATE
1.0	Julie Rundall	Lead Systems Analyst	September 08 2006
4.2	Siva Parameswaran	Technical Lead	July 6, 2011

1.1 Change History

This section details the changes this document has undergone.

VERSION NO.	DETAILS OF CHANGE	CHANGED SECTIONS	PREPARED BY	DATE
1.0	Initial draft	All	Siva Parameswaran	August 28 2006
2.0	Updates based on Julie's review comments	4.1.1 ; 4.1.2 ; 4.2.1 ; 4.2.3 ; 4.3.1 ; 4.4.1 ; 4.4.2 ; 4.4.3 ; 6 ; 9	Siva Parameswaran	September 08 2006
3.0	Number of Counties converted, Contact Information changes	2.1 ; 9.0	Siva Parameswaran	June 19, 2007
4.0	Updates to support new contract	2.1, 3, 4,	Julie Rundall	May 27, 2011
4.1	Updates to support new contract	All	Julie Rundall	June 8, 2011
4.2	Reviewed and revised contract	All	Siva Parmeswaran	June 24, 2011
4.2	Reviewed and revised contract	All	Julie Rundall	June 24, 2011

2 Purpose

The purpose of this document is to ensure the prime contractor, TBD, hereafter known as the contractor, is adhering to the terms of the contract in providing the requested services/products. This document is intended to provide details regarding the services performed. This SLA is an evolving document, with additional client requirements, introduction of new enhancements, applications and services provided to State Staff by the contractor.

This document is a supporting document to the Contract itself which details the some important arrangements between Contractor and SCD.

2.1 Application Overview

CMS Net is a secured, public domain system that serves primarily the California Children Services and provides online access to health care professionals, case managers, and administrators in regional and county offices. These users manage a variety of information for medical case management, including patient eligibility and records, service provider authorizations, and system reporting. CMS Net currently caters to three regional offices, counties, and more than 2,500 users.

CMS Net also serves the Genetically Handicapped Persons Program (GHPP) which covers Californians who have genetic diseases such as cystic fibrosis, hemophilia, sickle cell disease, and specific metabolic diseases.

PEDI – Provider Electronic Data Interchange is an application tool that enables approved CCS/GHPP providers, Medi-Cal Managed Care Plans and Healthy Family Plans to electronically access the status of Requests for Service Authorizations. These users may also run corporate reports, print authorizations, denials and notice of action letters.

3 Acronyms

AD	Application Development
SLA	Service Level Agreement
CMS	Children's Medical Services
DHCS	Department of Health Care Services
SMCR	Software Maintenance Change Request
IR	Incident Report
DTS	Department of Technology Services
RMP	Release Management Plan
SCD	Systems of Care Division
SLA	Service Level Agreement

4 Target Audience

The primary audience of this document will be the Application Development (AD) team, which comprises of the following:

- SCD Assistance Chief – Steve Halley
- SCD Information Technology Section Chief - Brian Kentera
- SCD Information Technology Unit Chief – Traci McCarley
- GHPP Unit Chief – Gloria Padre
- Contractor. Technical Lead – Siva Parameswaran
- System Analysts – Molly Phomsopha, Sanjeev Gorhe and Alyssa Gutierrez
- Development Team – Karthik Doppala, Ashutosh Tengshe, Denver Braughler and Angeline Figallo
- Change Management Coordinator – Julie Rundall
- Infrastructure Support Team – Scott Schmolke, Lisa Wataji and Seth Phomsopha

5 Scope of Coverage

The following applications are covered under this agreement:

- CMS Net (Legacy)
- CMS Web
- Provider Electronic Data Interchange(PEDI)

Service level objectives are achieved with conformance to the policies and procedures in effect and also may depend on various external factors (State resources).

Any where in this document when the CMS Net system is mentioned PEDI may also included.

The following are the services that will fall under this SLA:

5.1 System Availability

5.1.1 Application Monitoring

- Daily monitoring of the database, web application servers, system performance, licenses usage, external interfaces, batch jobs, data backup, server capacity and the application will be conducted on the production and test environments to ensure the system availability.
- Daily Monitor Report will be created daily and provided to the SCD Management Team via email as needed.
- Monitor performance and suggest changes to remove bottlenecks for increased performance.
- Response times are predicated on the system being available to the user from 6 a.m. to 8 p.m. daily. These hours are defined as the CMS Net system production hours which represent CMS Net System normal business days and hours, excluding CMS Net designated holidays.
- Continuous approaches to improve the monitoring aspects will be explored during the lifetime of the contract.

- Extended access to the production systems when requested by a County/Regional Office user will be made available as required if requested 48 hours in advance and the situation permits.
- The development, training and test environments will be made available for use during the above mentioned time frame as and when needed.
- Any issues with the interfaces and network will be coordinated with the appropriate agencies in order to be resolved.

5.1.2 Application Coding and Procedures

Create a CMS Net System standardization guide. Formalization of this standard guide in combination with other technical specification will be used by the development team for any system modifications and development. The guide will be used to define CMS Net system best practices for web or legacy development. The initial guide and any future changes to the standards document will be reviewed and approved by State staff.

Identify and recommend a source code/version control tool to track all code changes (including Caché) made to both the CMS Net legacy and web systems. The suggested tool must be reviewed, tested and approved prior to implementation.

Document all source code changes to CMS Net applications and maintain current version control system within all CMS Net environments. Maintain an accurate history of change cycle release notes. Maintain existing CMS Net reference and user manuals to reflect system changes under the contract.

During the development stage of the life cycle, any additional impacts which are not identified, communicated and approved per the specification requirements will not be implemented unless the approval protocol is followed.

Recommend system changes to improve the maintainability of the legacy software components or improve system performance using structured MUMPS/Caché programming techniques and implementing industry best practices.

In the event unanticipated or additional work must be performed that is not identified in Weekly Status Report but in State's opinion is necessary to successfully accomplish the project goals the State Staff will initiate IR, DR or SMCR to accomplish the work.

When a new or modified application is ready to be transitioned into production, planning and coordination of the necessary activities between the State staff and development team will be conducted. The period taken for the transition will be according to the estimates and schedules as determined and agreed upon for the Change Cycle.

Any changes to the system without State approval and/or does not comply with methods described in the Service Level Agreement will be evaluated.

Update and maintain system documentation.

5.1.3 Application Downtime

- All application downtime will be tracked and reported. All outages and file transfer issues will be thoroughly documented and measured to ensure adherence to specified system requirements. A baseline will be established to effectively measure increases or decreased in downtime to address accordingly.
- The application downtime in the production servers will be limited to a total of 18 hours during any calendar month and to a total of 40 hours during any consecutive rolling 12 calendar month period, whenever the issues could be controlled and not influenced by external factors to the application.
- Scheduled downtime to the production system will be communicated to the users via email by means of Incident Reports beforehand as required for maintenance or enhancement rollout purposes.
- The State Staff will be notified in advance if the development, training or test environment will be down for a period of time. If the downtime is for maintenance, the Change Management Coordinator will be notified in advance and they will determine what time works best for the analyst testing cycle and will approve or request another time for maintenance.

5.1.4 Application Staff Support

Work on-site during the regular business week between the hours of 7:00 AM to 5:00PM unless an exemption applies.

Be available by cell phone or pager during non-business hours: Monday through Friday, 5:01 PM to 6:59 AM and all day Saturdays, Sundays and State holidays.

Always use the DHCS resources assigned to you appropriately, such as remote access, email, Internet access, etc. and abide by the Department's computer use agreements and information security policies.

Attend, on State paid time, required training by Information Security Officer, Office of Civil Rights, and Office of HIPAA Compliance.

Comply with all other DHCS policies and standards.

In the event of staff departures, transition or temporarily leaves from CMS Net system support project, the technical lead will be responsible for ensuring any pending work is transferred to remaining staff members timely and there is no disruption of service. When possible staff will perform job shadowing before a staff is transitioned.

The developer and analyst will be available the weekend of the release to provide support on their SMCR, IR or DR. Turnover of the system change is fully communicated to a backup and the dedicated developer/analyst is available by phone and/or email for questions and answers.

Some team members may be given remote access to perform critical project functions.

In the event of the software and hardware systems being unavailable, the team lead coordinate with the concerned or involved agencies for faster disaster recovery to avoid any delays.

Attendance policy will be developed and administered to ensure optimum support is provided by the team.

Provide CMS Net help desk support for counties, service providers and SCD Staff between the hours of 7:00 AM to 5:00 PM, responding to questions, providing system navigation assistance and documenting system problems. As first line of contact the Contractor shall: identify, analyze, document and communicate system problems using SCD approved call action request software, Remedy.

5.2 System Response Times

5.2.1 Emergency Response

- Be available to work extended hours or possibly off-site in the event of a disaster within the State of California.
- Any critical emergency issues that render the system inoperable will be responded to the County Users and State staff within 1 hour of the issue during the production hours and 4 hours during the non-production hours.
- Any issue that is of minor emergency will be responded to the County Users, Regional Office Users and the Children's Medical Services staff within 4 hours of the issue during the production hours and a day after during the non-production hours.
- Respond to any disasters according to the State's Disaster Recovery Plan
- Any issues related to any external transactions will be communicated and responded to, based on the above mentioned hours appropriately.
- Analysis of the root cause of any downtime will be documented, reviewed, measured, and tracked for historical reference. Create and maintain an issue log to provide communication to state staff on every occurrence.

5.2.2 Transaction

The State's target response time where 95% of database transactions within 2 seconds and no transaction is greater than 5 seconds for an insert/update transaction. Other queries for retrieval, including reports, may take up to 5 minutes. These guidelines will be adhered to, except when the necessary critical network and infrastructure are unavailable. Transaction within the CMS Net system is referred to as the database transaction, the time taken to insert or update or retrieve records. Periodic benchmarking of the timings would be undertaken by the development team and the statistics would be updated. Various factors including the network configuration, workstation processor, RAM can affect the system response times and can vary from one workstation to another. Contractor will work closely with State staff and other agencies ensure optimal performance at the earliest possible when the response is critically low.

5.2.3 Infrastructure

The web server, application server and the database will be monitored for its I/O response times, bandwidth, utilization to meet the target response times.

5.3 System Capacity

5.3.1 Capacity Planning

- Database sizes will be monitored on a daily basis and will be reported in the weekly status report accordingly.
- File System sizes will be monitored on a weekly basis and will be reported when the threshold of 90% exceeds.
- Future systems growth would be estimated and reported.
- Any storage related issues or capacity related issues will be communicated to the SCD Infrastructure team appropriately on time for action. Suggestions on acquiring new storage space, performance tuning, etc to revamp the existing capacity would be provided, as and when needed.
- The database license usage will be tracked on a daily basis and reported on a weekly basis using the weekly status report. Any increase or need for extra licenses would be promptly reported to the SCD management.

5.3.2 Performance Monitoring

The system capacity will be monitored by means of some performance monitoring of all the SCD systems frequently and manage them as necessary.

Restructure large complex program units into smaller, less complex units using external tables for easier maintenance and performance. Convert legacy data structures to new Caché database object classes. Design and implement SQL statements to access data elements within the new architecture.

Identify problems with existing code and recommend improvements. No changes will be worked on or implemented unless fully documented, communicated and approved via DR, IR or SMCR.

5.3.3 Change Management Process

5.3.3.1 Weekly System Maintenance and Operations Status Meeting

Participate in a weekly status meeting to discuss and track work priorities, task sequences for completions, request approval or clarifications on projects, IRs, SMCRs or other activities. This weekly change management meeting may include county staff.

If an IR, DR, OR or SMCR does not pass testing requirements and prevents the package from moving to the next testing phase, State staff has the authority to request an individual change be removed from the release package. A technical solution will be developed to allow for this occurrence.

The weekly status report will be provided which includes but not limited to the following:

Project title

Report period
Current date
Contract number
Technical lead
Conference #
Summary of Change Release Cycle
High Priority Items
Announcements
Monitor status
Planned out of office time for contract staff
License and Concurrent Usage
Database Capacity
Current usage on databases
Production and shadow server growth
Change Request
Change Cycle Request (what will be included next release)
Change Cycle Release – Test Status
Data Repairs
Pending Requests
Ongoing Requests

The weekly status report will be modified to also include:

Database configurations changes
System tuning and database parameter settings
Changes in database organization and file locations
Performance anomalies
Batch job monitoring
Environment synchronizations
Problems and proposed solutions

5.4 System Maintenance

5.4.1 Causal Analysis

The root cause of any CMS Net systems problem will be analyzed, measured and action taken to resolve them. Reports will be provided to communicate to the analysts and SCD management for historical tracking and documentation.

5.4.2 System Fixes

System maintenance includes fixes, improvements and system maintenance activities. All changes regardless of the type will be supported through the Change Management process. The different types of fixes are: Incident Reports (IRs), System Maintenance Change Request (SMCRs) Data Repairs (DRs) and Ongoing Requests (ORs).

IR: An Incident Report is issued by one or more designated analyst and approved by a State staff in response to a software problem. IRs typically included, but not limited to, business rule changes or added and removing fields.

SMCR: A SMCR is a specification issued by the State for programming changes which will exceed 30 hours of programming time. This is a much more complex process than an IR. For each SMCR, the Contractor shall use the following procedures:

Meet with State staff to discuss and agree on the work to be performed, the approach and methods to be used and estimate of the hours required to complete the SMCR.

Prepare a clearly written description of the problem, the proposed solution, and the estimate of hours to implement the solution, and submit both to the State staff for approval.

Upon approval of the written work estimate, meet with State staff and present a functional walkthrough of the solution, technical specifications and test scenarios, data flow, for approval.

Upon approval of the technical specifications including Scope checklist, proceed with coding, unit and integration testing, user acceptance testing, and updating of system documentation, including training materials and user manuals. The technical specification must be written in language which can be easily understood by the analyst.

Test scripts will be written for all IR, DR and SMCR at all phases of testing.

Include progress on SMCR updates in the weekly status meeting with State staff.

Following the SMCR final testing and implementation, State staff will review the results to ascertain whether the work is complete, and will approve the completed work accordingly.

As part of the monthly change cycle process the primary lead Contractor shall develop, maintain, and execute a Release Management Plan (RMP) to control the introduction of new or modified system updates into the production environment. Any software released outside this schedule will be an exception release. The RMP will be approved by the State staff and shall describe in detail how the development team will meet the change cycle requirements.

Develop a method to isolate and remove code (if necessary) from a release package when an IR or SMCR does not pass testing results. The remainder of the release package will be tested and continue to be moved through the System Life Cycle.

DR: A Data Repair is issued by one or more designated analyst and approved by a State staff in response erroneous data. DRs are data corrections and are analyzed for

preventative maintenance to the system. In some cases it may be necessary to run the data repair through a test environment(s) before implementation into production.

OR: An ongoing request is used for known system defects which subsequently create ongoing data repairs, report requests or other maintenance activities.

Fixing the data repairs, defects or bugs of any system operation that does not comply with the current signed and approved system specification. This includes system errors, "hung" or halted screens, or unexpected results within the system that render it unusable for the purpose for which it was designed. The fixes will be done by means of change cycles or emergency releases as approved by the SCD Information Technology Unit Chief.

5.4.3 Monthly Change Cycle

The developer and analyst will be available the weekend of the release to provide support on their SMCR, IR or DR. Unless turnover of the system change is fully communicated to a backup and the dedicated developer/analyst is available by phone and/or email for questions and answers.

As part of the monthly change cycle Contractor shall develop, maintain, and execute a Release Management Plan (RMP) to control the introduction of new or modified system updates into the production environment. Any software released outside this schedule will be an exception release. The RMP will be approved by the State staff and shall describe in detail how the development team will meet the change cycle requirements.

5.5 Testing Requirements:

5.5.1 Unit Testing:

Unit testing and peer review of all program code modifications and development will be performed. This applies to program code, operating scripts, database definition scripts, and distributions and installation scripts. Each test must be documented and the requirements traceability to the source must be established.

Integration testing following unit testing will be performed.

All unit testing, peer review and integration testing must be completed before system testing can be commenced.

All unit and integration test material shall be developed and delivered to the State staff. Testing material includes but not limited to:

- Unit test scripts and results reports

- Peer Review

- Requirements traceability matrices

5.5.2 System Testing:

The individual whom documented the system change requirements are responsible for system testing the code changes developed by the Contractor to support the requirements of the SMCR or IR.

The System Tests must be successful before user can approve code to be moved to Acceptance Test environment.

Test scripts will be created and used to assist with ensuring successful tests results.

5.5.3 Load and Stress Testing: (Optional)

Evaluate and recommend new software tools to perform load and stress testing.

Load and stress testing will be performed to verify the ability of the CMS Net system to handle increased user and/or transaction load.

The events that will necessitate load and stress testing shall include the following, but not be limited to:

Increased complexity and frequency of business transactions

A load and stress test plan shall be developed by Contractor, and approved by the State staff. The objective of the plan will be to ensure that the system can maintain performance requirements.

Once the plan is approved, the plan may be executed and the results reported back to the State staff.

5.5.4 User Acceptance Testing:

User Acceptance testing will be required for all software changes that have been developed or modified by the Contractor to satisfy the requirements.

Based on the scope and nature of the changes, scripts will be created for State staff review and approval.

Any and all tools must be provided in order to execute User Acceptance Testing including use of scripts for extract and batch functionality.

County users may participate in User Acceptance Testing to verify that the application is functioning as required to all State-wide users.

Prior to user acceptance testing, contractor shall establish, in conjunction with the State, binding pass-fail criteria.

5.5.5 Contractor's Performance Evaluation

The Contractor performance under this Agreement shall be evaluated at the conclusion of each Release. The evaluation shall include, but not be limited to:

- Whether Contractor's work or services were completed as specified in the Agreement, and reasons for an amount of any cost overruns or failures.
- Whether the Contractor's work or services met the quality standards specified in the Agreement.
- Whether the contractor's fulfilled all requirements of the Agreement. *Factors outside the control of Contractor which caused difficulties in performance shall not include a Subcontractor's poor performance.*
- Each failure will be measured, tracked, documented and communicated to determine recourse.

The evaluation of the contractor shall not be a public record.

5.5.6 Knowledge Management

- Support CCS/GHPP program policy by researching policy documentation and maintain familiarity with program policies updates (*if it applies to the change*), resources and contacts. Analyze and refer users to appropriate numbered program letters or other relevant policy documentation.
- Contract staff is required to obtain the required training or education to support CMS Net system. (e.g. conferences, seminars, required to support CMS Net system)
- Record, store and retrieve of information to assist in the resolution of problems will be established and maintained via the help desk database and to maintain the quality of the work products.
- The Contract Technical Manager shall prepare and submit written Weekly Status reports that address the overall status with respect to the System Maintenance and System Operations activities and shall provide progress information on all completed, ongoing, and planned Contract activities.

5.5.7 Preventative Maintenance

The Contractor will document any necessary preventative maintenance and gain State approval prior to modification to the CMS Net system. When corrective maintenance activities are low, work will be conducted up to the level of effort identified, to analyze and take steps to prevent potential problems.

6 Metrics

The following metrics will be identified and reported on:

METRICS	REPORTED ON
Database Configuration Changes	Release Notes
System Tuning Changes	Release Notes
Concurrent Users Count	Weekly Status Report
Caché License Usage	Weekly Status Report
Issues and Enhancements	Weekly Status Report
Application Downtime	Weekly Status Report / System Incident Reports
System Response Time	As needed
Resource Utilization (CPU)	Weekly Status Report
Batch Monitoring	Weekly Status Report / Daily System Performance Report
Database Capacity Growth	Weekly Status Report
Release Scope Check list	Release Notes

7 Out of Scope

The following are out of scope of this agreement:

- Impact due to delay in response from dependent agencies such as HP, Delta Dental, OTECH and other DHCS agencies that are not part of SCD.
- Issues due to network outages and calamities influenced by external factors

8 Revisions

8.1 Amendments

Any amendment to this agreement would require the approval of SCD management and Contractor management who signed the Statement of Work / Contract.

There will be an opportunity on a need basis to make adjustments to this SLA. SCD Management and Contractor. should work together to make changes at that time.

8.2 Period of SLA

This SLA will remain in effect until terminated by SCD Management or Contractor Management based on the contractual terms.

8.3 Termination of SLA

This SLA will be automatically terminated when the contractual agreement between Contractor. and SCD is terminated. A termination of this agreement may also be requested by the SCD management or the Contractor. management at any time during the contract.

9 References

- Original Statement of Work (Contract)
- SCD Contract Management Plan

10 Contacts

CMS Net: Performance System Level Agreement

WHEN	ROLE	WHOM TO CONTACT
CMS NET/PEDI APPLICATION DOWN	<ul style="list-style-type: none"> • SCD Assistance Chief • SCD Information Technology Section Chief • SCD Information Technology Unit Chief • GHPP Unit Chief • Contractor. Technical Lead • System Analysts • Development Team • Change Management Coordinator • Infrastructure Support Team 	Steve Halley Brian Kentera Traci McCarley Gloria Padre Siva Parameswaran Molly Phomsopha , Sanjeev Gorhe and Alyssa Gutierrez Karthik Doppala, Ashutosh Tengshe, Denver Braugher and Angeline Figallo Julie Rundall Scott Schmolke Lisa Wataji Seth Phomsopha County Administrators SCD staff Providers Medical Managed Care plans HF Plans
PRINTER AND/OR NETWORK ISSUES	<ul style="list-style-type: none"> • Infrastructure Support Team 	SETH PHOMSOPHA / LISA WATAJI
INTERFACE ISSUES	<ul style="list-style-type: none"> • Infrastructure Support Team 	SETH PHOMSOPHA
DESKTOP SUPPORT	<ul style="list-style-type: none"> • Infrastructure Support Team 	SCOTT SCHMOLKE