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CPM 2009

Service Level Agreements with Penalty Clause

In 1983 the Division of Information Resource Management (DIRM) was born. The DIRM was created to promote efficiency in the management of information technology (IT) in South Carolina. In 1984, the DIRM purchased a mainframe computer that was capable of providing service to multiple agencies. In 1989, with the flip of a switch, South Carolina's first data network was enabled. The network was designed to meet the connectivity needs of all state agencies. As technology changed over the years, so did the business of running South Carolina's government. In 2009, what was once the DIRM became the Division of State Information Technology (DSIT).

Today, the DSIT provides IT services to a diverse customer base comprised of state agencies and local governments in South Carolina. The DSIT is tasked with supporting and protecting the technology that helps to deliver the services that many citizens, and employees rely on. In theory, the DSIT is accountable to citizens, the legislature and customers for the products and services that it provides. In actuality, the lack of real, tangible, accountability has been a long-standing customer concern. My challenge is to create a viable, data-driven, process that provides the DSIT customers with the accountability for which they have asked.

Information Technology (IT) can be very boring if not overly confusing. I've chosen to use a typical restaurant experience to better illustrate the premise of the service level agreement with penalty clause. Accountability, quality, and value are factors that most of us consider or demand on a daily basis. As a customer of a local pizzeria, you might expect that the pizza tastes good, is delivered hot, and that the price is reasonable. These are basic customer expectations. If the pizza arrives cold or tastes bad you probably question the quality of the product. Perhaps the large-sized pizza was not big enough to feed the entire table and the price was astronomical. Maybe you get a better value by going to the pizzeria down the street. You know that the other pizzeria has a larger pizza that would feed the entire table and it wouldn't cost you an arm and a leg. Many would agree that the restaurant should be

held accountable for the bad experience. As a customer, you're faced with a number of options that might help to resolve the problem. Since the pizza was kind of small and the price was not competitive with the pizzeria down the street, you may choose to talk with your wallet by taking your business elsewhere. In this instance, a manager might choose to better understand the marketplace and his or her competitors in an effort to provide a more valuable product (pizza) to the customer. You might choose to complain about the quality of the pizza. Faced with a complaint, the manager of the pizzeria might refund the cost of the pizza. In either case the customer is holding the restaurant accountable for the service or product it provides. The pizzeria is also challenged with providing the customer with a product that the customer derives value from. The business of delivering IT services, in principle, is no different than the restaurant business. IT customers demand accountability for critical systems and seek the best possible value for the money that they spend.

The DSIT's customers have long asked for a level of accountability in service delivery. More specifically, they have asked for penalty clauses to be included with service level agreements (SLA). A SLA, simply defined, is an agreement between the service provider and the customer that details the features of the service, how it should perform, and how much it will cost (ITIL). The SLA should set expectations for quality, value, and include some level of accountability that the customer can rely upon. During the SLA negotiation, metrics to be reported, frequency of reporting, method of reporting and any associated penalty for non-compliance may be discussed. In this instance, the DSIT customers have requested that the SLA contain a monetary penalty for non-compliance. In essence, the DSIT must deliver the agreed upon level of service or provide a service credit.

SLA's are quite common in private industry. For example, large-scale network providers and their customers typically agree on what constitutes acceptable service for the agreed upon price. In most cases, the network service provider will establish standards for performance based on industry-

wide metrics. For many services including network, availability is a common measure. Availability, simply translated, is a measure of service uptime. You may hear someone say that they expect "five nines" of availability. That would mean that the network must be up and available 99.999% of the time. As shown in **Appendix (A)**, 99.999 percent availability translates into a little over five minutes of downtime per year. Higher expectations for availability translate into higher costs due to the need for redundant equipment. The issue of availability is an important point for any SLA discussion between a service provider and a customer because it directly impacts cost. So going back to the pizza example, availability is really telling the customer what level of service they should expect for the price they are agreeing to pay. In **Appendix (B)** you'll see that this particular network provider uses an automated monitoring system to track network performance against a set of predetermined criteria. The criteria are simply a set of statements entered into a database that allows software to determine compliance based on customer expectations. This is the SLA with penalty clause in action.

The public sector in the United States has not wholly embraced penalty clauses in SLA's. Though private industry standards for penalty clauses exist, I was unable to find any standards that apply to the public sector's (or the DSIT's) unique environment. In an effort to bolster my research, I contacted Gartner Group Consulting, which provides consultation for public and private industry. Though a few examples of public sector penalty clauses were referenced, none of them were completely relevant to this initiative. Nevertheless, I was able to get a better sense for what works well and what typically fails in the realm of delivering a SLA with penalty clause. Based on Gartner's research, some of the most important factors in constructing a penalty include using a flat penalty percentage that increases exponentially for repeat penalty breaches, starting with a pilot instead of a full scale rollout, picking measurements that are repeatable and easily accessible, and starting with an easily achievable goal for performance. Another noteworthy suggestion was to have the resources needed to effectively deliver consistency in monitoring and communication to customers. With these suggestions in mind I felt that it

was important to devise a draft process for DSIT. When I began to think about the process, it was evident that a number of constraints would have to be navigated to successfully launch a SLA with penalty clause at DSIT.

The first constraint was a big one: it was not known if penalty clauses were legally permissible in the State of South Carolina. The DSIT's legal counsel provided feedback that essentially ruled out the possibility of exchanging actual money. However, according to the DSIT's legal counsel, service credits are completely within the boundaries of South Carolina law. The second constraint was nearly as daunting: the culture of the DSIT was not accustomed to a regimented process for delivering hard accountability to its customers. Fortunately, a new agency leadership provided support for the initiative from the top down, which immediately removed a number of previously impassable obstacles. Another important constraint was the DSIT's limited capacity to deliver a reliable SLA process given limited human resources, no budget, and technical systems that were less than cutting edge and non-integrated. While the technology supporting robust monitoring, reporting and integration was not yet within reach at DSIT, it was important to focus on what *could* be done rather than what *couldn't*. Our current monitoring tool set is capable of reporting basic information for a given set of devices that contributed to the delivery of a given service. Though the DSIT is not yet capable of delivering a detailed SLA report like the one referenced in **Appendix (B)**, it can produce a report that provides an availability percentage for each device that contributes to a given service, therefore showing an aggregate measure of availability for the service as a whole. For example, email service is relatively common and seems simple enough. But to deliver the email service to an end user, networking, data storage, web servers, application servers and firewalls must be accounted for by DSIT. As a result, the email service seems simple to the end user, but a number of DSIT teams support a variety of devices and applications to make it work. A working example of DSIT's current monitoring capability can be referenced in **Appendix (C).**

With support from the DSIT's leadership and a reasonable level of consensus from the DSIT service delivery teams, it was evident that a process for collecting and reporting SLA penalty information was needed. One of the process methodologies commonly used in IT is called Information Technology Infrastructure Library (ITIL). ITIL is essentially describes how typical IT service delivery processes interact with one another. If you look at an IT organization from the top down, there are commonalities. ITIL is a collection of IT service delivery and support best practices that outline opportunities for efficiency. Service Level Management (SLM), which includes creating SLA's and managing customer expectations, is built into the overall ITIL framework. In 2006, Keane Consulting provided a template to the DSIT that helped to define SLM for the organization. The DSIT, as an IT service provider, employs a number of processes that help to execute daily tasks and long range goals. Based on ITIL's framework, Baldrige criteria, customer feedback and the expertise of the Gartner Consulting Group, I created a repeatable process, which can be referenced in **Appendix (D).** This process, though not perfect, is the production process for penalty clauses at the DSIT.

Heeding the advice of The Gartner Group, DSIT decided to make the initial set of penalty clauses a pilot and defer a widespread rollout until the process had been tweaked. The first penalty clause went into effect on October 1, 2008. **Appendix (E)** is a working example of that penalty clause. It looks pretty simple, which is exactly what I intended. The amount of work that goes on behind the scenes may be immense, but the DSIT customers should not be subjected to complexity. As you'll notice, the guaranteed availability on the penalty clause is 98 percent, which gives the DSIT considerable headroom for the pilot implementation. A flat penalty of 10 percent is also included in the penalty clause. Given the cost of the service, not meeting the 98 percent uptime over a three month span will result in a 10 percent penalty of the total cost. For example, if the total cost of the service is 100.00 dollars per year, the DSIT will provide a 10.00 dollar credit for each quarter that it does not meet 98 percent availability for the given service. You may also notice that standard maintenance times are also listed. The DSIT

has standard maintenance times (typically nights and weekends) that are used to perform upgrades and repair ailing systems. Maintenance windows are not counted against the total availability of a given system. The DSIT also has a change management process (ITIL) that is intended to track and communicate changes to internal and external customers. Since many technologies rely on one another, a change to one device or application may impact many. The SLA with penalty clause also takes into account that changes may be critical and that customers should be notified of critical changes prior to any system modifications. The DSIT added a statement that pledges a 48 hour lead time prior to a given device or system change. This essentially becomes an agreed upon maintenance or change, which does not count against overall availability. The entire SLM process, which includes managing SLA's and penalty clauses, is based on communication and managing customer expectations (ITIL)

Many would argue that few processes can be completely perfect and that there is always room for improvement. Many of the management frameworks that exist today, such as the Baldrige methodology, focus on continuous process improvement (Baldrige, P.63). The Baldrige framework measures processes in at least four ways; approach, deployment, integration, and learning. The approach deals with the effectiveness of the approach as a means to an end. Deployment looks at how well the given process is propagated to the work groups of a given business. Integration is a measure of how well the given process is integrated into the daily business of an organization. Lastly, learning is the degree to which a given organization learns from the processes that it implements. Baldrige also emphasizes results and the use of results to make management decisions. Results are derived from the output of organizational processes and may serve as the basis for key performance indicators.

Based on the aforementioned Baldrige criteria, the DSIT has designed the SLA with penalty clause process to integrate with daily work activities where possible. All aspects of the process represent tasks that are either standard operating procedure or additional work to existing work units.

Much of the work that was done prior to implementing the SLA with penalty clause process involved overlaying the process and its touch points with existing work units to achieve a high level of integration. Deployment is also a key element for any process. It is important for all involved staff to have a stake in the success of the SLA penalty clause. All involved staff members are well aware of their role in the process, though its deployment is limited in scope due to the immaturity of the process. The approach to the SLA with penalty clause process was developed by using input from customers, the DSIT leadership and line staff, Baldrige criteria, ITIL best practices, and Gartner Consulting. While an effective approach may not be evident without analyzing results, the current approach combines stakeholder input, subject matter expertise, and multiple management and process best practice frameworks. Through this information gathering exercise, the DSIT was able to proceed with a reasonable level of confidence. Organizational learning can occur in a number of ways (Baldrige, P.49). One way for organizations to learn is to benchmark performance, analyze results and assess the processes for flaws.

Both ITIL and Baldrige attempt to communicate the importance of measuring and monitoring processes. Some of the metrics provided by the ITIL framework for service level management **(Appendix F)** include percentage of customer agreements containing a SLA with a penalty clause, percentage of SLA's meeting their stated target, and number of customer meetings held within the agreed upon interval. Though there are many additional metrics, the Gartner Group stated that it was important to start with a defined set that would be easily measurable and achievable. These metrics will not communicate the entire picture, but will provide a starting point. The ultimate goal will be to capture metrics that show qualitative and quantitative measures and make decisions based on meaningful information. If the pilot SLA with penalty clause initiative continues to go well, efforts to apply a penalty clause to all new and renewed service contracts will begin. At that time, the aforementioned performance metrics should be considered.

The initial results analysis for this process is inconclusive. The DSIT has not yet violated its stated service performance expectations. In theory, the process is valid and infused with best practices from a variety of sources. Major concerns involve the dependency of human interaction in the process. Ideally, the SLA with penalty clause process would be completely automated. There is a need to interact with the customer to define expectations in the beginning of the process and to communicate results at the end of the process. However, most of the monitoring, analysis, and tracking could be accomplished with little need for human intervention. The process that the DSIT has created is scalable to a certain extent, but the need for staff dedicated to monitoring, analysis, and tracking grows as the process grows. The DSIT has hundreds of customer facing services and hundreds of active contracts, which means that this process has the potential to grow exponentially. Based on the ITIL framework and Baldrige criteria, a process should be beneficial on multiple levels. The established process is beneficial and represents progress, but it must evolve with the expectations of the DSIT's customers. The DSIT's customers expect accountability and great value for their IT expenditures. My recommendation to organizational leadership is that we take the existing SLA with penalty clause process and integrate it into ongoing and future technology enhancements for DSIT.

The initial results for imaging service availability (provides paperless scanning and storage of documents) is 99.98 percent, which is quite a bit better than the 98 percent that we pledged to deliver. For the three month pilot, the DSIT exceeded the service level to which the customer agreed. There are a total of five active SLA penalty clauses currently being monitored by the Service center and customer relations teams at DSIT. To date, the DSIT has not yet violated an agreed upon SLA or had to issue any service credit. This is based on the performance of three SLA reports for the imaging service, all of which, return nearly four nine's of service uptime (99.99%) Based on this positive feedback, the DSIT will add two additional penalty clauses in March.

Establishing SLA's with a penalty clause for the first time in the twenty-five year history of an organization is a positive accomplishment. Though the process is not optimal, it has resolved a long-standing customer request. This activity has produced a viable process that was created based on the current capabilities of the DSIT and the expectations of its customers. While I don't expect that the current process will stand the test of time, it is a catalyst to operational and cultural change within DSIT. Someday someone will reflect on the history of the DSIT, as I have done, and recognize the SLA with penalty clause as part of a significant turning point for the organization and perhaps the State of South Carolina as a whole.

1. **Baldrige National Quality Program, Criteria for Performance Excellence. 2008.**

2. Information Technology Infrastructure Library. http://www.itil-officialsite.com/home/home.asp

Appendix A

Availability %	Downtime per year	Downtime per month*	Downtime per week
90%	36.5 days	72 hours	16.8 hours
95%	18.25 days	36 hours	8.4 hours
98%	7.30 days	14.4 hours	3.36 hours
99%	3.65 days	7.20 hours	1.68 hours
99.50%	1.83 days	3.60 hours	50.4 min
99.80%	17.52 hours	86.23 min	20.16 min
99.9% ("three nines")	8.76 hours	43.2 min	10.1 min
99.95%	4.38 hours	21.56 min	5.04 min
99.99% ("four nines")	52.6 min	4.32 min	1.01 min
99.999% ("five nines")	5.26 min	25.9 s	6.05 s
99.9999% ("six nines")	31.5 s	2.59 s	0.605 s

Appendix B

SCG SLA Detail Report for NOVEMBER 2008

Department of XXXXXXX

Date Generated: 12/30/2008

Total Charges: $35,353.00 Total MRC: $35,353.00 Total Installation Charges: $0.00

Total Credits: $0.00 Total Sites: 78

Product Description: Point to Point 1.536 Mbps Standard Unmanaged

Total Credits: $0.00

Total Charges: $399.00 Total MRC: $399.00 Total Installation Charges: $0.00

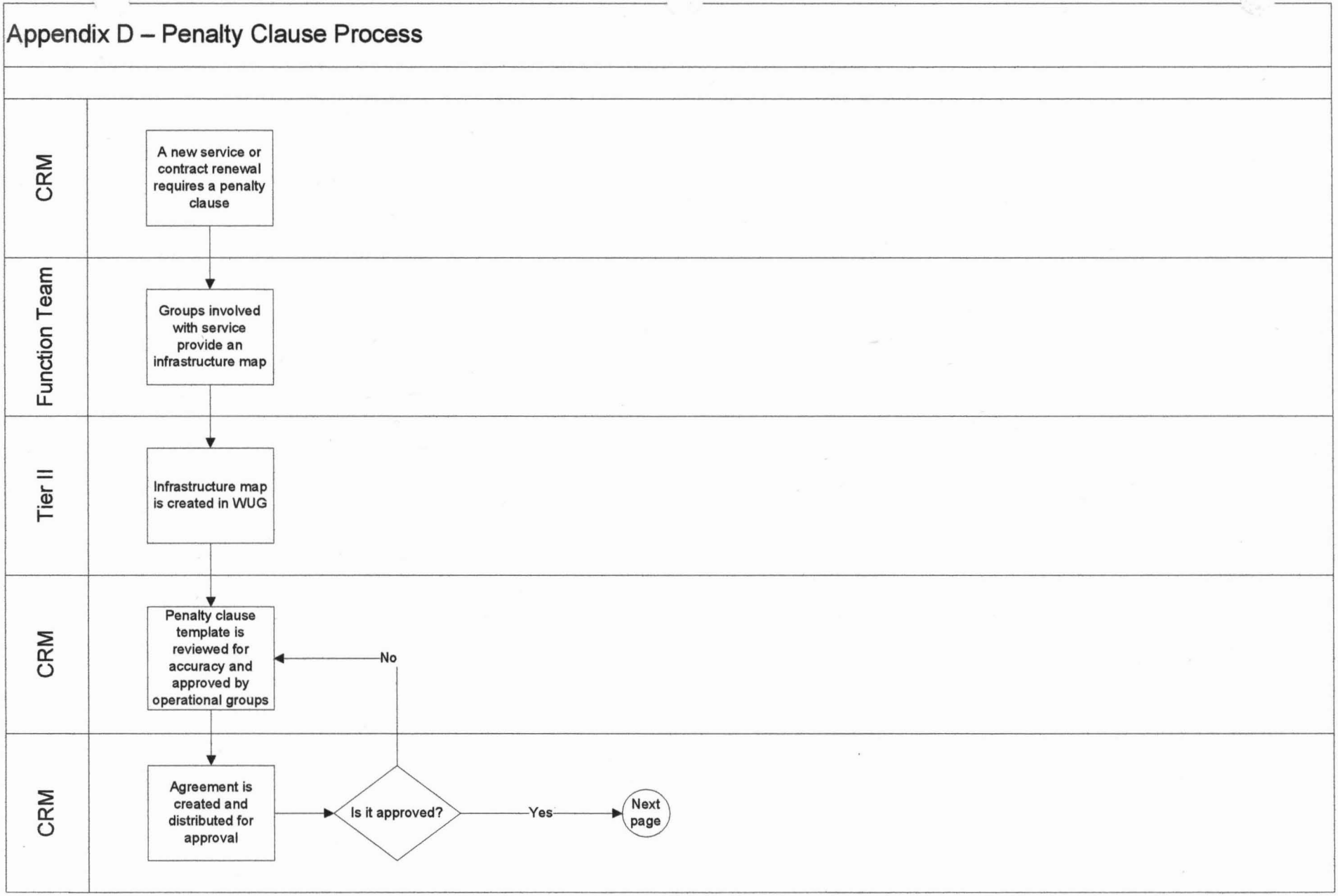
Site Name: SCGDMHX1004

Core Availability 99.999 100.000 SLA MET $0.00
Access Availability 99.000 100.000 SLA MET $0.00
Access MTTR 6.0 0.0 SLA MET $0.00
Core Latency BE 60.00 20.35 SLA MET $0.00
Core Packet Delivery BE 99.50 99.88 SLA MET $0.00

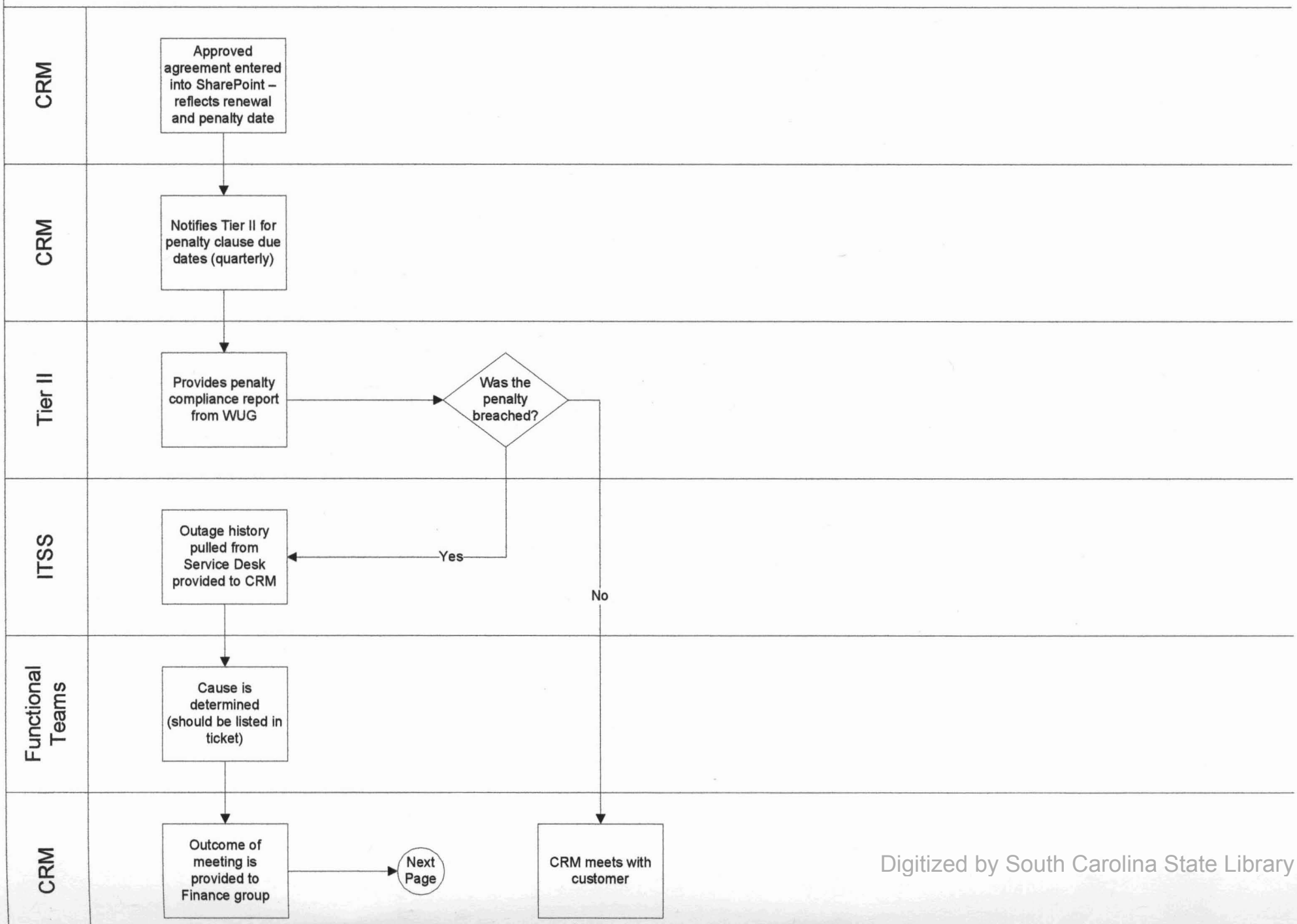
Total Credits: $0.00

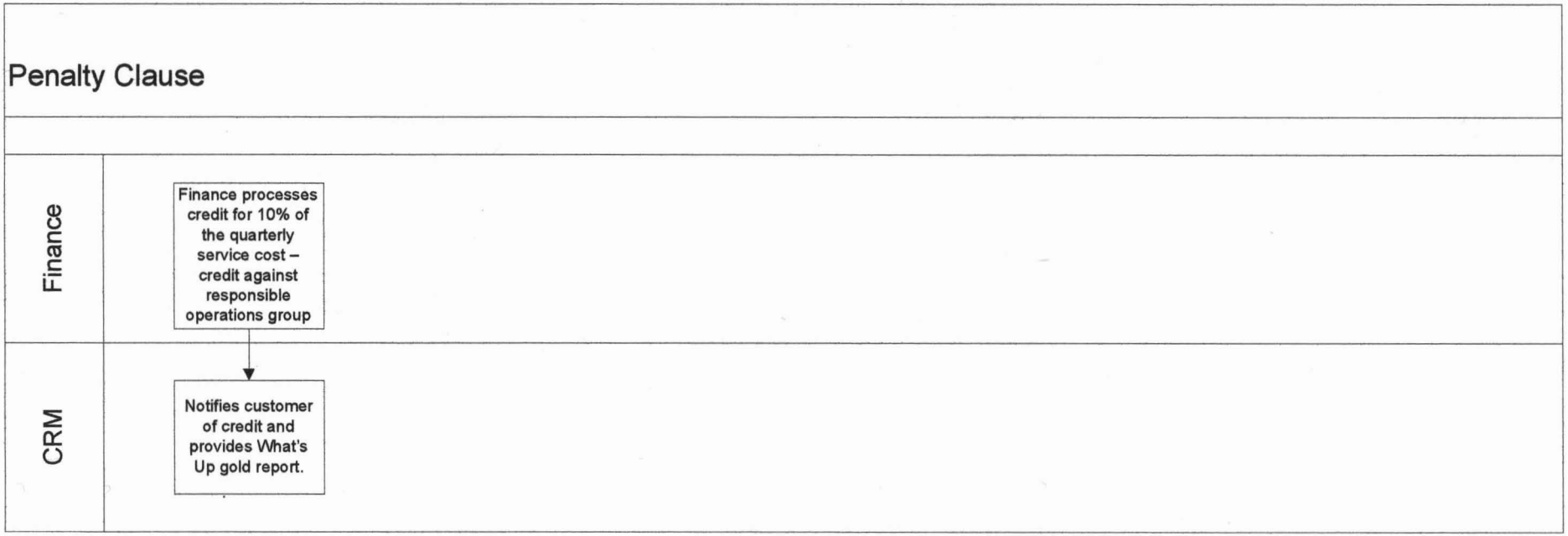
Ping Availibility Appendix C							
CG - Saturday, November 01, 2008 12:00:00 AM - Friday, January 23, 2009 12:00:00 AM							
Device	Interface	Packets Sent	Packets Lost	Percent Packet Loss	Total Poll Time (minutes)	Time Unavailable (minutes)	Percent Available
Brr2	192.168.250.33	27354	58	0.212034803	91113.4539	20.02	99.97803245
BRR6513	192.168.250.25	10755	1	0.009298001	35755.78203	0	100
CIO_FWSM ISA Context	172.30.8.82	31635	2	0.006322112	105694.7774	0	100
CIOIMAGECACHE	172.30.5.9	23892	362	1.515151515	79588.15311	120	99.84922262
DC6513	192.168.200.10	19998	0	0	66569.60809	0	100
Mills3550	192.168.251.28	18663	0	0	62119.59481	0	100
MS-Net	172.30.8.50	25092	0	0	83851.81586	0	100
SS6513	192.168.250.21	13431	1	0.007445462	44738.24271	0	100
WHB4006	192.168.251.2	10575	0	0	35151.33256	0	100

Appendix D – Penalty Clause Process



Penalty C[illegible]se





Appendix E - Example Penalty Clause

Penalty

For the duration of the three months specified in this pilot, the DSIT commits to an overall uptime of 98 percent. The DSIT will provide a 10 percent EDMS service credit to the XXX if quarterly uptime is not met. Uptime is defined by the availability of the DSIT EDMS service to the customer firewall and will be based on availability of 7:00 a.m. to 7:00 p.m. seven (7) days per week.

Availability excludes the maintenance window's, agreed upon maintenance time and takes into account any manufacturer's response time for equipment delivery. To achieve 98 percent uptime, the EDMS service will be down for no more than 58.4 hours per quarter.

Reporting

Uptime reporting on all systems supporting the EDMS will be provided to the XXX on a quarterly basis. The DSIT is unable to manage or report on an infrastructure that is housed within the XXX firewall. Root cause for any outage will be provided to the XXX along with quarterly reports. The DSIT What' Up Gold monitoring system will be used to monitor all EDMS devices and produce the quarterly uptime report. The DSIT monitored systems and or infrastructure include:

Service Commitment Calculation and Dispersal

If the DSIT is not able to maintain 98 percent availability a 10 percent credit will be issued to the XXX for the quarterly EDMS cost. This credit will be applied on the invoice subsequent to the quarterly uptime analysis.

Scheduled Maintenance Times

During scheduled maintenance windows, the EDMS service may be unavailable. Any unscheduled maintenance will be communicated to and agreed upon with the XXX at least 48 hours prior to the event. Any service affecting maintenance beyond the DSIT's control will not count against the EDMS uptime commitment for the XXX.

- Firewall/Router – Sundays: 6:00 A.M.-10:00 A.M.
- Enterprise Computing Services – Saturdays: 8:00 A.M. 12:00 (Noon)

1. INTRODUCTION

Service Level Management (SLM) is essential in any organization so that,

- The level of IT Services needed to support the business can be determined,
- Monitoring can be initiated to identify whether the required service levels are being achieved or not.

Service Level Agreements (SLA),–which are managed through the SLM Process, provide specific targets against which the performance of the IT organization can be judged.

2. OBJECTIVE

The goal for SLM is to maintain and improve the quality of Network and related IT services, through a constant cycle of agreeing, monitoring and reporting upon IT Service (Network domain) achievements and instigation of actions to eradicate poor service - in line with business or Cost justification. Through these methods, a better relationship between IT and its Customers can be developed.

3. SCOPE

SLAs should be established for all IT Services being provided. Underpinning contracts and Operational Level Agreements (OLAs) should also be in place with those suppliers (external and internal) upon who the delivery of service is dependent.

Current scope of coverage for SLM process is

- IT Operations

4. TARGET AUDIENCE

This process has the following audience in <CLIENT NAME>:

- IT Operations support team (Service Owners)
- Service Level Management team
- Service desk team
- Change Management Team,
- Release Management team
- Incident Management team
- Problem Management team
- Configuration Management team
- Management System Tool Owners (Admins.) / Vendors
- <CLIENT NAME> quality/process team
- Vendors, Partners
- End Users

5. BASIC ASSUMPTIONS

- There is a Service level Manager for all the IT services provided by SC CIO.
- Each service has an identified service owner- responsible for delivery of that service to the users.
- The customer for these services has been identified with whom the service level agreement can be signed off.
- A Service Management tool is available capable of automating the workflow requirements of the process as defined in the document
- Tool should have the capability of integrating with other management products used for proactive monitoring of network availability and performance.
- Clearly defined roles and responsibilities

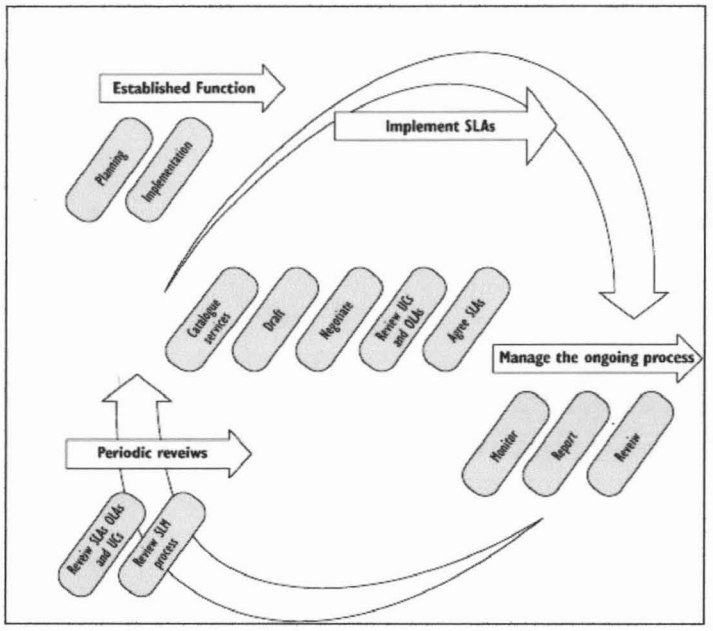
6. CRITERIA

Entry Criteria	– Identification of Services offered, Work assignment/contracts Inputs – Services Offered
Exit Criteria	– Service Level Agreement formulation and Updation Outputs – Service Level Agreement, service catalogue, Service Level Metrics report

Measurements (Key Performance Indicators / Key Measures)	– What number or percentage of Services is covered by SLAs? – Are Underpinning contracts and OLAs in place for all SLAs and for what percentage? – Are SLAs being monitored and are regular reports being produced? – Are review meetings being held on time and correctly minuted? – is there documentary evidence that issues raised at reviews are being followed up and resolved (e.g. via an SIP) – Are SLAs, OLAs and underpinning contracts current and what percentage is in need of review and update? – What number or percentage of Service targets are being met and what is the number and severity of service breaches? – Are service breaches being followed up effectively? – Are service level achievements improving – Are Customer perception statistics improving? – Are IT costs decreasing for services with stable (acceptable but not improving) service level achievements? The Key Measures or Performance Indicators are subjected to change. Depending on the maturity level of process at different stages, the Key Measures are identified from the list of measures available in the section-12 (reporting) of this doc. It is the Service Level Manager, who decides what measures should be considered as Key Measure, depending on the Management & Quality requirements.
Critical Success Factors	PI refer to Appendix 1

7. SERVICE LEVEL MANAGEMENT PROCESS

7.1 Service Level Management Process



8. PROCESS FLOW DESCRIPTION

Step	Input	Activity / Task Description	Output	Responsibility
1	Request for new Services, Service Catalogue , SLRs	**Implementation Phase:** • Prepare **Service Catalogue** based on identified services. A service catalogue is a list of services broken into various components in a single document Establish Requirements from the Customer • Customer decides on the services which he desires from the service catalogue. These are captured in a document known as the **Service Level Requirements (SLRs)** which are collected from the customer. Conduct Techno-commercial Feasibility Study • The Service provider maps the SLRs with the existing SLAs , OLAs and UPCs to see if he can provide the services and meet the SLA targets as desired by the customer. A cost –benefit analysis is done and analyzed whether any additional procurements or enhancements need to be made in the existing infrastructure to meet the SLRs. • Accordingly the OLA and UPC will be aligned in line with the customer requirements Prepare a Draft SLA and negotiate with the customer. • Agree and Publish the SLA so that both IT Operations	Service Catalogue SLA	Service Level Manager

		and the customer (Internal) have a clear understanding of the service offerings and their quality depending on the cost (if applicable).		
2	Incident Management Reports	**Monitor and report SLA & OLA performance for services:** • Once the SLA, OLA and vendor contracts are in place and communicated, measures should be put in place to monitor the service performance. • The owner of network service (Network domain specialists) will ensure that the services are monitored and reported against the service levels	Service Level Metric Reports	Service Owner – Network Domain Specialists
3	Service Level Metric Reports	**Service Reviews :** • Conduct Service Review meetings periodically to evaluate effectiveness of the SLAs • Conduct Service Improvement Program (SIP) with User on periodic basis to ensure customer satisfaction and to identify improvement opportunities. • Update SLAs, OLAs & Contracts based upon the evaluation done	SLA Reviews	Service Level Manager, Service Owner – Network Domain Specialists
4		**Business Relationship Management** This process aims to act as a liaison between IT operations and customers, providing the contact points for service-level administration, customer satisfaction, and ongoing customer communications All complaints are entered and tracked by the complaint Log maintained by Enterprise **Performing Regular Customer Satisfaction Reviews** -Perform Customer Satisfaction Survey at least once in 6 months -Review feedback of the survey with the customers -Make an Action Plan for improvement based on the survey **Conduct Periodic Meetings with the Customer** -Record the minutes of the meetings conducted -Implement Action Plan as per the minutes of the meeting recorded		Service Level Manager

9. SERVICE LEVEL MANAGEMENT BENEFITS

- IT Services are designed to meet Service Level Requirements
- Improved relationships with satisfied Customers
- There are specific targets to aim for and against which service quality can be measured, monitored and reported
- IT effort is focused on those areas that the business thinks are key
- IT and Customers have a clear and consistent expectation of the level of service required (i.e. everyone understands and agrees what constitutes a 'Priority One' Incident, and everyone has a consistent understanding of what response and fix times are associated with something called 'Priority One')

- Service monitoring allows weak areas to be identified, so that remedial action can be taken (if there is a justifiable business case), thus improving future service quality
- Service monitoring also shows where Customer or User actions are causing the fault and so identify where working efficiency and/or training can be improved
- SLM underpins supplier management (and vice versa) - in cases where services are outsourced the SLAs are a key part of managing the relationship with the third-party - in other cases service monitoring allows the performance of suppliers (internal and external) to be evaluated and managed
- SLA can be used as a basis for Charging - and helps demonstrate what value Customers are receiving for their money.

10. ROLES AND RESPONSIBILITIES

Roles	Responsibilities
Service Level Manager/ Service Level Management Team	- Creates and maintains a catalogue of existing Services offered by the organisation - Formulates, agrees and maintains an appropriate SLM structure for the organisation, to include - SLA structure (e.g. Service based, Customer based or multi-level) - OLAs within the IT Provider organisation - Third Party Supplier/Contract Management relationships to the SLM Process - Accommodating any existing Service Improvement Plans/Programmes within the SLM process - Negotiates, agrees and maintains the Service Level Agreements with the Customer - Negotiates, agrees and maintains the Operational Level Agreements with the IT provider - Negotiates and agrees with both the Customer and IT Provider any Service Level Requirements for any proposed new/developing services - Analyses and reviews service performance against the SLAs and OLAs - Produces regular reports on service performance and achievement to the Customer and IT provider at an appropriate level - Organizes and maintains the regular Service Level review process with both the IT Customer and IT provider which covers - Reviewing outstanding actions from previous reviews - Current performance - Reviewing Service Levels and targets (where necessary) - Reviewing underpinning agreements and OLAs as necessary - Agreeing appropriate actions to maintain/improve service levels - Initiates any actions required to maintain or improve service levels - Conducts annual (as appropriate) reviews of the entire Service Level process and negotiates, agrees and controls any amendments necessary - Acts as co-ordination point for any temporary Changes to service levels required (i.e. extra support hours required by the Customer, reduced Levels of Service over a period of maintenance required by the IT provider etc.)
Service Owners (Network Domain Specialists)	Monitor and report SLA & OLA performance for services: - Once the SLA, OLA and vendor contracts and in place and communicated, measures should be put in place to monitor the service performance. - The owner of each service will ensure that the services are monitored and reported against the service levels Identify & implement service improvements: - The services and service levels should go through the continuous improvement cycle to achieve and maintain the customer satisfaction.

11. REPORTING

Below given is the list of reports for this process. Based on the Key Measures selected, the required reports need to be generated monthly. It is the SLM Manager, who decides which metric, should be considered depending on the Management & Quality requirements.

- Number of services listed in the service catalog
- % of services covered through SLA
- Number of instances of SLA violations
- Number of repeated SLA violations
- % of Service level parameters monitored and reported
- % of OLA parameters monitored and reported
- Number of OLA violations
- Number of repeated OLA violations

- % of SLA violations caused by OLA violations
- % of SLA violations caused by vendor contract violations
- % adherence to reporting timelines
- % adherence to review timelines
- No. of process improvements initiated
- No. of process improvements implemented

12. IMPROVEMENT SCOPE

- SLM Manager will conduct meetings on a defined frequency with the SLM team to discuss on the performance of the team and to find out any improvement opportunity in.
- Based on the meeting action items will be identified and tracked to closure.
- If any action will trigger any change in any of the Configuration Item then it will be done through appropriate channel and all relevant stakeholders will be communicated about that.

13. APPENDICES

Appendix 1 – Critical Success Factors:

- Ensuring targets are achievable before committing to them
- Verifying targets prior to agreement
- SLAs should not simply be based upon desires rather than achievable targets
- Ensure adequate focus, resources and
- Ensure enough seniority/authority given to Service Level Management to push through negotiations/improvements
- Ensure SLAs are always supported by adequate contracts or underpinning agreements
- SLAs should be concise and focused
- Ensure SLAs are communicated properly

Appendix 2 - ACRONYMS, ABBREVIATIONS AND DEFINITIONS

Term	Term Meaning / Description
Change Management	Process of controlling Changes to the infrastructure or any aspect of services, in a controlled manner, enabling approved Changes with minimum disruption.
Configuration Management	The process of identifying and defining Configuration Items in a system, recording and reporting the status of Configuration Items and Requests for Change, and verifying the completeness and correctness of Configuration Items.
Customer	Recipient of a service; usually the Customer management has responsibility for the cost of the service, either directly through charging or indirectly in terms of demonstrable business need.
Environment	A collection of hardware, software, network communications and procedures that work together to provide a discrete type of computer service. There may be one or more environments on a physical platform e.g. test, production. An environment has unique features and characteristics that dictate how they are administered in similar, yet diverse, manners.
Incident	Any event that is not part of the standard operation of a service and that causes, or may cause, an interruption to, or a reduction in, the quality of that service.
OLA (Operational Level Agreement)	Agreement between two internal departments involved in the delivery of one or more services- in order to meet the SLA requirements
Problem	Unknown underlying cause of one or more Incidents.
Process	A connected series of actions, activities, Changes etc. performed by agents with the intent of satisfying a purpose or achieving a goal.
Process Control	The process of planning and regulating, with the objective of performing a process in an effective and efficient way.
Request for Change (RFC)	Form, or screen, used to record details of a request for a Change to any CI within an infrastructure or to procedures and items associated with the infrastructure.
Role	A set of responsibilities, activities and authorizations.
Service	The deliverables of the IT department as perceived by the customer
Service Catalogue	The document listing all the services offered to the customer with all relevant details about each service
Service Level Agreement (SLA)	A written agreement between a service provider and Customer(s) that documents agreed service levels for a service.
Service Level Requirements (SLR)	Requirements, expressed by the customers that are inputs into negotiations towards SLA.
User / End User	The person who uses the services on a day-to-day basis.
Under Pinning Contracts (UPC) or Vendor Contract	Agreement with vendor to whom there is a dependency while delivering one or more services – in order to meet SLA and/or OLA requirements