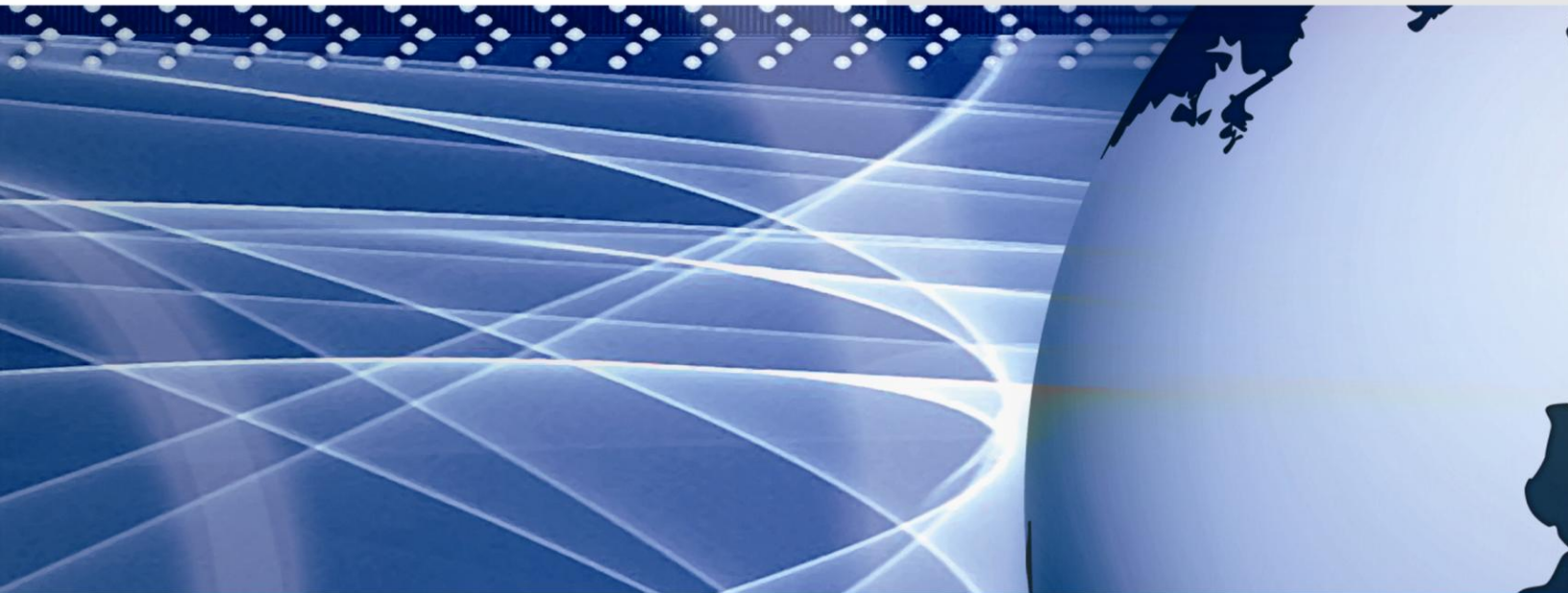
# *Service Desk Consolidation Team Recommendation*

OIT
Office of Information Technology



**Executive Summary**

The Service Desk Consolidation Team recommends that a single point of contact for all IT requests, incidents and problems be established beginning in 2011. This service desk will provide first call resolution for all state agencies for a predetermined set of common IT requests and incidents. It will serve as the escalation point for referring all Tier 2 and 3 issues to desk-side or appropriate technical staff. It will also refer agency specific Tier 1, 2 or 3 issues to key agency staff. All requests, incidents and problems will ultimately be tracked through a single integrated information technology service management solution. Based on the research and work conducted by the team during this project, the team recommends that an Implementation Team be formed to work closely with the Agency Services Director, Technical Services Director and the Enterprise Architect to methodically implement this significant service delivery change. This report describes the work conducted by the team and details its recommendation and some dependencies that must be addressed by the implementation team to ensure that IT service to state agencies continues to meet the needs of the agencies.

**Introduction**

The State of Colorado information technology environment will be managed efficiently using Information Technology Infrastructure Library(ITIL) best business practices with reduced duplication of efforts and a continuous improvement process allowing for ongoing modernization beginning with the creation of a single point of contact for all IT requests, incidents and problems in 2011. The single point of contact for all IT requests will be built on an ITIL service desk foundation with central management and distributed execution in order to meet the diverse and extensive needs of the State of Colorado.

**Background**

In 2008, shortly after *SB 08-155 Concerning the Centralization of the Management of State Agency Information Technology Resources in the Office of Information Technology* was signed, the Executive Leadership Team in the Governor's Office of Information Technology (OIT), created a cross-enterprise team to examine current service desk capabilities and produce a report detailing recommendations for creating a statewide centrally managed office within OIT. The core team met for the first time in November of 2008 and completed its charter in January 2009. The core team has representation from ten of the 18 total state agencies and coordinates closely with the remaining eight agencies regularly. The approved Charter can be found in Appendix 1 of this document.

The major deliverables outlined in the charter are:

1. Conduct a baseline survey and report on current service desk procedures
2. Standardize PDQs in coordination with the OIT/HR Director
3. Develop a recommended functional organization chart for Career Path development for service desk positions
4. Create a State of Colorado OIT Glossary of common terms
5. Develop a service catalog in coordination with the Agency Services Director for service desk services
6. Develop standard operating procedures for service consistency
7. Develop requirements documents and recommend standard software for tracking requests, incidents, problems and managing desktops.

SB 155 combined approximately 990 IT professionals into one organization. These employees are presently working in locations across the state and have very close working relationship with the agency they support. Additionally, these employees are providing IT services to over 25,000 state employees. It is not surprising that change cannot happen overnight. The Service Desk Consolidation Team is sensitive to employee concerns and has developed these guiding principles.

- Avoid creating new silos

- Reduce costs by leveraging what we currently have
- Where it *makes sense*, integrate current systems to enable data sharing
- Keep current (legacy) systems until such time they need to be replaced
- Accelerate implementation for departments with immediate needs

The guiding principles serve as a reminder to our team that change is coming and it will impact IT employees, our agencies and our customers differently. In some cases, it is envisioned that the recommendations in this report will be able to be implemented very quickly. In other cases, the change may come more slowly. The recommendations in this report are intended to meet the Service Desk Consolidation team objectives but will take into consideration implementation issues such as costs to individual agencies, potential impacts during mission critical times and recent investment decisions.

The Service Desk Consolidation team objectives include:

- Identification and elimination(where practical) redundant functions
- Combine existing IT resources to create economies of scale in purchasing and achieve greater negotiating advantages
- Create service partnerships across agencies to improve service
- Create collaboration opportunities by leveraging current IT skill set and realigning capable staff with appropriate job duties
- Through recognition that all workers, not just OIT workers are increasingly mobile and solutions must align with emerging trends for internet access and use
- Provide uniform quality and consistent levels of security across all agencies and state locations
- Identification of rogue desktop management and arrangement for its provision by the OIT single point of contact to expand consistency, thus allowing agencies to focus on their core business mission and not IT

**Deliverable 1**

*Conduct a baseline survey and report on current service desk procedures*

The team created a survey using the online survey tool, Survey Monkey. IT staff in each state agency were contacted in January 2009. The team received 21 total responses because a few agencies responded as a sub agency to better describe their baseline. The results were analyzed and a presentation was developed to be used at Town Hall meetings. A total of 5 Town Halls were held in various locations across the state to present the results. Additionally, several follow-up questions were developed and sent to agencies.

The presentation and survey responses are Appendix 3 & 4 of this document. A brief summary is included in the table below.

| ***IT Landscape*** | |
|---|---|
| IT staff | 994 |
| Agency staff | 25,000 |
| Service desk staff | 128 |
| Number of computers | 17,345 |
| Number of laptops | 7,010 |
| Help Desk software packages | 11 |
| Monthly average of request/incidents/problems | 22,000 |

The survey data, town hall interactive sessions and site visits to agency help desks provide a very clear picture of how IT services are being provided. The team felt honored to meet a large number of dedicated employees but recognizes that the lack of standard procedures and redundancies costs the state more than it should. Additionally, virtually every agency purchase for technology products occurs in a vacuum with little or no effort to partner with other agencies for purchasing or negotiating advantage. In an era of shrinking budgets it is essential that IT look for ways to provide services smarter and more cost effectively.

The recommendation proposing a single point of contact for request, incident and problem management in summary of this document was derived from this research. The economic downturn/slow recovery of the Colorado economy coupled with the delays affecting OIT consolidation allowed the team to propose strategies for moving forward that are realistic. The team believes that the unique business needs of the each agency pose significant challenges to service desk consolidation but that with a careful methodical approach these challenges can be overcome. The team also believes this approach is the most realistic given the budget issues facing the state.

**Deliverable 2**

*Standardize PDQs in coordination with* the OIT/HR Director

Deliverable 2 proposed reviewing and standardizing IT PDQs for staff working on service desk teams. The baseline survey identified significant differences in staffing for service desk. The team proposed reviewing existing PDQs from across the different agencies with the OIT/HR Director in conjunction with the planned transfer of staff to OIT by July 1, 2009.

The action to move state of Colorado IT staff to OIT was delayed during the FY2009/10 budget cycle. This decision item continues to progress but is not final at the writing of this report. The team recommends that this deliverable be deferred until the execution phase of consolidation. Once the transfer of state IT staff to OIT is complete the team will resume its work with the OIT/HR Director on the service desk support PDQs.

**Deliverable 3**

*Develop a recommended functional organization chart for Career Path development for service desk positions*

Deliverable 3 proposed creating a functional organization chart for career path development for service desk positions. The team planned to work on the development of the organization chart with the OIT/HR Director in conjunction with the planned transfer of staff to OIT by July 1, 2009.

The action to move IT staff to OIT was delayed during the FY2009/10 budget cycle. This decision item continues to progress but is not final at the writing of this report. The team recommends that this deliverable be deferred until the execution phase of consolidation. Once the transfer of state IT staff to OIT is complete the team will resume its work with the OIT/HR Director on the organization chart for career path development.

**Deliverable 4**

*Create a State of Colorado OIT Glossary of common terms*

The most glaring difference regarding service delivery that the team identified was the lack of a common vocabulary used to describe services. Even for common services such as requesting a new user account or new equipment, reporting an incident and tracking the incident through problem resolution the vocabulary was inconsistent. Although the State of Colorado is not the only IT organization to discover this, the team felt it very important that we drill down into the vocabulary differences and establish a clear set of definitions to will be used in the proposed model. This seemingly simple task proved to be one of the most challenging. There are terms of industry used inconsistently across the notable professional organizations.

The team spent several months working on common terminology. Additionally, terms used in the ITIL foundation documentation provided a guide, but did not adequately meet the needs of this consolidation project. In our case, it is not enough to say that Tier 2 is more complex than Tier 1 and not as complex at Tier 3. The Glossary of Common Terms can be found in Appendix 5 of this document.

The team recommends the Glossary be given to agency IT staff either thru agency CIOs or during the standard operating procedures development phase of the consolidation project. The Glossary provides the team with standard terminology that can be used to guide agency personnel through the identification of essential services for consolidation. The team also recommends the Glossary serve as a basis for development of terminology used with other functional OIT teams.

**Deliverable 5**

*Develop a service catalog in coordination with the Agency Services Director*

Establishment of a service strategy is a key ITIL concept. One vital component of a service strategy is identification of what services will be provided. The baseline survey provided the team with valuable information about what services are currently being provided by the distinct IT organizations across the state. Additionally, work done by several agencies, most notably OIT-Headquarters, Human Services and Department of Corrections during their agency IT consolidations provided lessons learned advice to the team. This deliverable identifies information technology requests, incidents and problems that are common to all agencies. This foundation document serves as a starting place for service desk consolidation.

A list of approximately seventy services was compiled and scrutinized by the team. The list was organized by functional service area and is in the appendix of this document. The team attempted to format the document in a user friendly manner that is understandable to our customers. In doing so, some common IT terminology has been replaced by terms the customers are familiar with. It is outside the scope of this project to establish costs associated with these services.

**Deliverable 6**

*Develop standard operating procedures for service consistency*

Deliverable 6 proposed creating standard operating procedures for service consistency. The team planned on working on this item in conjunction with the Agency Services Director, other consolidation teams and the End User Experience Policies & Standards Team. The team feels strongly that these procedures are essential for successful consolidation. The team believes the identification of services common to all agencies is the foundation for the Service catalog and provides a starting point for the development of these procedures. It is a key principal that these procedures will focus on service delivery, escalation and resolution targets for the essential services. This focus will ensure a consistent service expectation across all state agencies. For example, it is not necessary for service delivery to establish a standard tool for email, what is necessary is to establish standard procedures for handling requests for new accounts and resolving incidents and problems associated with email. During the implementation phase of consolidation, members of the team will be working with the Agency Services Director and agency IT offices to establish consistent methods for reporting, tracking and resolving these common issues.

The team produced, in Deliverable 5, a framework document for service desk services. The next step –, creation of standard procedures, is difficult during this phase of OIT Consolidation because of the current reporting structure. The team recommends that this deliverable be deferred until the implementation phase of service desk consolidation and that procedures be developed in an iterative process as agency service desk consolidate. It is the expectation of the team that this be one of the first action items of the implementation team. The team recommends a dedicated project team that consists of technical and business analysts. This team would work with each agency individually to evaluate the best process fit for an agencies business requirements and culture. This effort will result in standard procedures for service delivery and allow for the team to identify and meet the unique needs of the agencies.

**Deliverable 7**

*Develop requirements documents and recommend standard software for tracking requests, incidents, problems and managing desktops.*

The team discovered eleven products in use for tracking requests, incidents and problems. Not surprisingly these tools were implemented in varying degrees of completeness. Additionally, the team discovered that the agencies liked these tools to varying degrees. Prior to starting work on the requirements team members traveled to approximately ten state agencies help desks. The field trips proved very valuable to the team. Team members received a formal tour and spent another hour or so talking directly with IT staff at the agency. Another valuable activity the team undertook was to create a software demonstration day at OIT-HQ. Instead of inviting vendors into demonstrate their software, the team invited IT staff from the agencies who utilize the enterprise class software solutions such as Footprints, CA, Heat etc. The software administrators presented how their agencies utilize the software. The team learned of excellent functionality and customizations already in use at some agencies. The team completed work on a requirements document for Information Technology Service Management (ITSM). This document can be found as Appendix 7.

The requirements document has been incorporated into a Request for Proposal. This document is being prepared by OIT-HQ purchasing. Key features of the request included the ability to support incident and problem tracking across multiple agencies and departments, web-based administration and user interfaces and an opportunity for the vendors to propose hosting the solution (hardware/software) and most importantly the ability to implement the solution using a phased approach. Identification and selection of the tool prior to starting the service desk consolidation is desirable but not imperative. The team recommends that at least 3-4 team members be included on the bid evaluation team.

**Final Recommendation**

The Service Desk Consolidation Team recommends that a single point of contact for request, incident and problem management be established for the State of Colorado and that an Implementation Team be formed that can implement the recommendations in this report and further develop the procedures necessary to move forward in a systematic and methodical manner. The team feels strongly that a single point of contact for receiving and tracking requests for IT services and incidents is essential; in fact without it consolidation would be impossible. The team also recognizes that in addition to common services there are some very unique and specific business services that are provided by the talented staff assigned to the agencies. The team discovered that several agencies have very elaborate help desk set-ups complete with tracking system, formal escalation procedures and clear lines of responsibility for managing and closing out incidents and problems. These agencies will be the foundation for the model used for agencies that do not have formal service desk processes.

It is important to note that the State of Colorado is a collection of state agencies with different and sometime conflicting business needs. IT staff provide support to over a hundred locations across the state that house state workers, some provide IT services to county or municipal agencies, other agency IT staff support completely mobile workers either in the field conducting scientific or technical work, appraisals or assessments or support truly mobile computing in vehicles. These business needs are real and it is the goal of consolidation to continue to meet the service needs of these customers. It is the expectation of the team that because of this and some of the dependencies listed below the consolidation will take several years to complete. The major dependencies for success are described below.

The team proposes that the Implementation team consider a methodical process working with each agency one at a time to determine its readiness for consolidation. This team has a checklist template that includes the types of questions necessary to consider before consolidating any agency. The team envisions that the Implementation team will add members from each agency during the various phases of consolidation as appropriate. The team recommends that the first phase be the establishment of standard procedures for essential services in each agency. Using the Service catalog as a guide the Implementation team will work with each agency and assess their current procedures and then help the agency refine those procedures to mirror the standards as appropriate. Once the separate agencies have a baseline of services agreed to and standard procedures for service delivery it will be possible to consolidate the provision of these services.

A single ITSM solution remains a key objective but is not needed before the Implementation Team can start preliminary work. It is imperative that the solution be selected before consolidating the provision of IT services across all state agencies. Once the selection is made the Implementation team will work with the Agency Service Director and Agency CIOs to purchase and install the ITSM in agencies. Delays with the planned OIT consolidation of IT staff for July 2010 or significant budget reductions may impact this step.

The team believes that the project goals of eliminating redundant functions, creating economies of scale, creating service partnerships across the state and leveraging the current IT skill set are a few of the goals we are already showing progress toward meeting. The relationships built during this project are proving valuable already as we work within our own agencies to make improvements. The network and server improvements planned will enable the final step to service desk consolidation. The creation of a single state network with a domain or equivalent for each agency will enable all state employees to call a single number to request an IT service or to report an IT incident or problem, the ITSM ticket will then be transferred from the service desk where it is logged, to the appropriate service provider, possibly a desk-side technician or programmer in an the agency or to a senior network engineer or systems administrator either in the agency or at OIT-HQ. This will enable the team to provide uniform quality across all agencies and state locations and more importantly allow agencies to focus on their core business mission not IT.

## Appendix

1. **Project Charter**
2. **Service Desk Team and Sub-team Members**
3. **Baseline Survey Summary Sheets**
4. **Service Desk Definitions Common Terminology**
5. **Service Catalog Foundation Template**
6. **Service Desk Readiness Assessment Template (Suggested format)**
7. **ITSM Software Capability Questionnaire**