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NASA Shared Services Center Service Delivery Guide

NSSDG-2410-0002

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NSSC IT SERVICE ORDERING SERVICE DELIVERY GUIDE

Responsible Office: Information Technology

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May 4, 2012
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Introduction

One of the foundational components of the National Aeronautics and Space Administration (NASA)'s Information Technology (IT) Infrastructure Integration Program's (I3P) strategy for delivery of core IT infrastructure services is the Enterprise Service Request System (ESRS) to facilitate the ordering and fulfillment of I3P related services.

The ESRS is the primary system for NASA Shared Services Center (NSSC) IT service ordering and service status inquiries for NSSC Service Customers requesting NSSC Services (Tier 1) and I3P Services (Tier 2) from Agency Consolidated End-User Services (ACES); NASA Integrated Communications Services (NICS); NASA Enterprise Data Center (NEDC); and Web Enterprise Service Technologies (WEST).

The ESRS utilizes the same IT Service Management (ITSM) software as the NSSC Enterprise Service Desk (ESD) to support aligning to the Office of Government Commerce published service management framework, *Information Technology Infrastructure Library Version 3 (ITIL v3)* processes.

ITIL v3 – Request Fulfillment Process

The NSSC IT Service Ordering process is aligned with the Request Fulfillment process from the ITIL v3 Service Operations Lifecycle stage.

According to *the ITIL v3 Service Operation Manual*, Request Fulfillment is presented as:

Purpose/Goal/Objective

Request Fulfillment is the process of working with Service Requests from users.

The Objectives include:

- a. Providing a channel for users to request and receive standard services for which a pre-defined approval and qualification process exists.
- b. Providing information to users and customers about the availability of services and the procedure for obtaining the services.
- c. Sourcing and delivering the components of requested standard services, (e.g., licenses and software media).
- d. Assisting with general information, complaints, or comments.

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Policies/Principles/Basic Concepts

Many Service Requests will be frequently recurring, so a predefined process flow can be defined to fulfill the request, the individuals or support groups involved, target timescales, and escalation paths. The ownership of Service Requests resides with the Service Desk for monitoring, escalating, and dispatching requests for fulfillment.

The ITIL v3 Request Fulfillment process flow is shown in **Figure 1**.

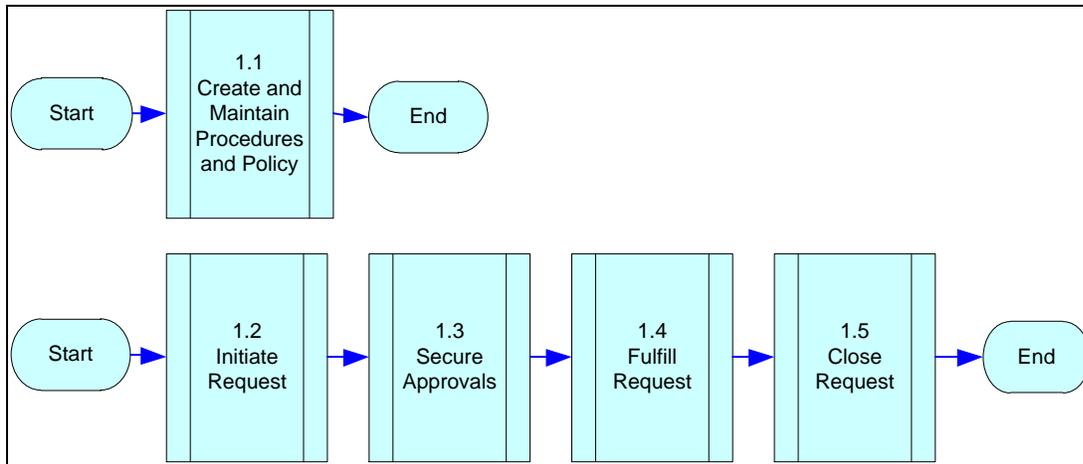


Figure 1, ITIL v3 Request Fulfillment Process Flow

Triggers

Requests will be triggered through a user completing some form of Self-Help web-based screen to make the request, involving a selection from a portfolio of available request types.

Information Management

Service Requests inputs will contain information about:

- What service is being requested
- Who requested and authorized the service
- Which process will be used to fulfill the request
- To whom it was assigned and what action was taken
- The date and time when the request was logged

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- f. Historical sequence of actions with date and time stamps
- g. Closure details

Critical Success Factors

Request Fulfillment depends on the following critical success factors:

- a. Agreement of what services will be standardized and who is authorized to request the services. The cost of the services must also be agreed upon, which may be accomplished as part of the Service Level Management (SLM) process. Variances of the services must also be defined.
- b. Publication of the services to users as part of the Service Catalog. It is important this part of the Service Catalog be easily accessed, perhaps on the Intranet, and should be recognized as the first source of information for users seeking access to a service.
- c. Definition of a standard fulfillment procedure for each of the services being requested, including procurement policies and the ability to generate purchase orders and work orders.
- d. A single Point of Contact (POC) which can be used to request the service. The POC is often provided by the Service Desk or through an Intranet request, but could be through an automated request directly into the Request Fulfillment or procurement system.
- e. Self-service tools needed to provide a front-end interface to the users. It is essential the self-service tools integrate with the back-end fulfillment tools, often managed through Incident or Change Management.

How NSSC IT Service Ordering Aligns with ITIL v3 Service Fulfillment

The ESRS provides a web based ordering and status system via the NSSC Tier 0 Web Portal. The self-service interface is presented to the customer in an easy-to-use self service format.

The ESRS follows designated service ordering workflows for routing service requests to the proper provider, NSSC or I3P Contractor, while enforcing designated approvals and financial constraints as provided by the Service Integration Management (SIM).

The software ESRS uses to facilitate the ordering and fulfillment process is the BMC Remedy suite. Specific capabilities are provided by the BMC Service Request Module

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(SRM) integrated with the Service Desk and Change Management modules. The modules are endorsed as ITIL v3 compliant by the Office of Government Commerce.

The service ordering and status inquiry processes both start by customers accessing the NSSC ESD Tier 0 Portal, where authentication takes place through NASA's e-Authentication capabilities. The authentication triggers the correct workflows for services available to the customer and proper approval routing.

Potential workflows could include Approval Queues (Org. Approver, IT Approver, Center Resource Approver) and whether the service being ordered is P-Card payable.

Services can also be ordered "on behalf of" another user. The person making the order on behalf of someone can also check the status of the particular order from the ESD Tier 0 Portal. For on behalf of orders, the person placing the order on behalf of another user is the "contact" and the person receiving the service is the "customer."

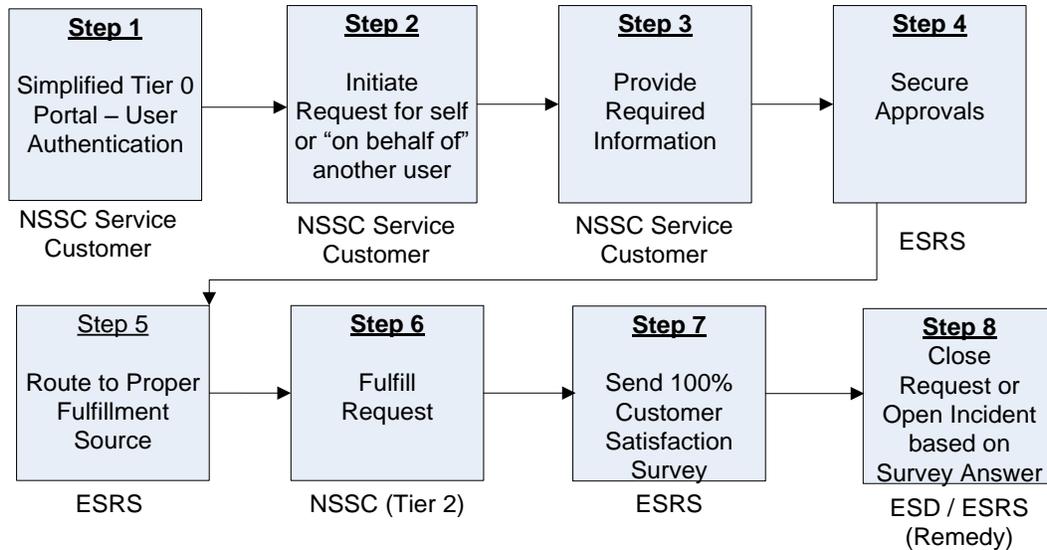
The ESD Tier 0 Portal can be accessed at <https://esd.nasa.gov>. The Tier 0 Portal will be available to users to authenticate 24 hours a day, 7 days a week, and 365 days a year. The Tier 0 Portal can be accessed from any internet connection within the NASA Domain or via NASA Virtual Private Network (VPN) connection. Information regarding any planned outages will be published to the Tier 0 Portal.

After a service is fulfilled the recipient of the service will receive a Customer Satisfaction Survey. If the survey is answered in the affirmative or the survey is not answered and expires after 96 hours, the subject service order will be closed. If the survey is answered with an issue regarding the service order, a ticket will be opened and sent to the fulfilling contractor.

Initial service information will be provided by Service Executives/Designees with details completed by the proper I3P Contractor. Details of the process can be found in the *NSSC Service Definition Repository Service Delivery Guide (NSSDG-2800-0001)*.

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PROCESS 1– IT SERVICE ORDERING



Roles & Responsibilities

Process 1 – IT SERVICE ORDERING		
Roles and Responsibilities	Action	Tips/Notes
Step 1 NSSC Service Customer Simplified Tier 0 Portal-User Authentication	A NSSC Service Customer wanting to place an order will log into Tier 0 Portal. Output: User authenticated into Tier 0 Portal.	Authentication takes place using e-Authentication.
Step 2 NSSC Service Customer Initiate Request for self or “on behalf of” another user	A NSSC Service Customer will choose proper service from provided list. If ordering on “behalf” of another user, the user will be selected from drop-down list. The initiator will become the “Contact” for the “on behalf of” request and the person receiving the service becomes the “customer”. Output: Desired service is selected. If ordering on “behalf” of another, the user will be selected as the	List of services are specific to what is available to user.

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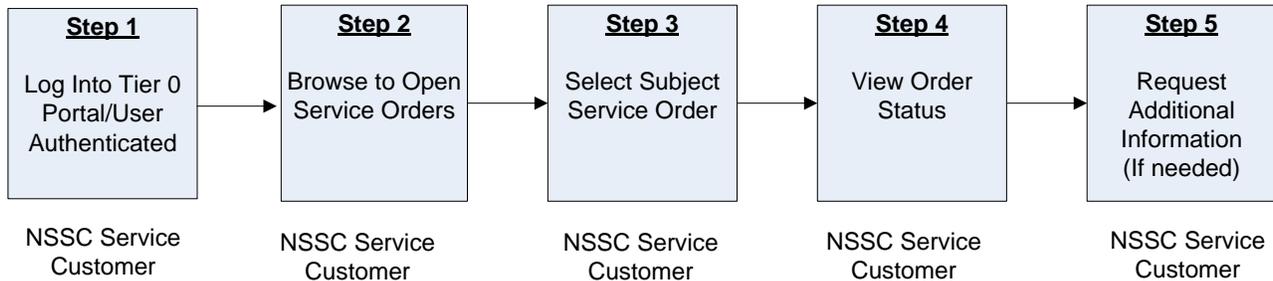
Process 1 – IT SERVICE ORDERING		
Roles and Responsibilities	Action	Tips/Notes
	customer.	
<u>Step 3</u> NSSC Service Customer Provide Required Information	Customer provides information required for service approval and/or fulfillment. Output: Additional information collected.	
<u>Step 4</u> ESRS Secure Approvals	Order routed to proper approver(s) based on the “customer” and requested service. Output: Approval request.	
<u>Step 5</u> ESRS Route to Proper Fulfillment Source	Order routed to proper source for fulfillment; NSSC for Tier 1 and I3P Contractor for Tier 2 services. Output: Service Order.	
<u>Step 6</u> NSSC (Tier 2) Fulfill Request	Order fulfilled by proper fulfillment source; Order ticket resolved. Output: Requested service; completed Order ticket.	I3P Providers make updates to ESRS via Web Services Interface.
<u>Step 7</u> ESRS Send 100% Customer Satisfaction Survey	Customer sent Customer Satisfaction Survey. Output: Customer Satisfaction Survey	

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Process 1 – IT SERVICE ORDERING		
Roles and Responsibilities	Action	Tips/Notes
<u>Step 8</u> ESD/ESRS Close Request or Open Incident based on Survey Answer	If Customer Survey results are affirmative, the Service Order is closed; if results are unsatisfactory the service order is closed and a ticket is opened and sent to fulfilling contractor. Output: Closed Order or Open Incident Ticket	

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PROCESS 2 - IT SERVICE ORDER STATUS INQUIRY



Roles & Responsibilities

Process 2 – IT SERVICE ORDER STATUS INQUIRY		
Roles and Responsibilities	Action	Tips/Notes
Step 1 NSSC Service Customer Log into Tier 0 Portal/User Authenticated	A NSSC Service Customer wanting to obtain an order status will log into Tier 0 Portal. Output: User authenticated into Tier 0 Portal.	Authentication takes place using e-Authentication.
Step 2 NSSC Service Customer Browse to Open Service Orders	A NSSC Service Customer browses to open Service Orders on Tier 0 Portal. Output: Listing of opened Service Orders.	
Step 3 NSSC Service Customer Select Subject Service Order	A NSSC Service Customer selects opened Service Order to make status inquiry. Output: Selected Service Order.	
Step 4 NSSC Service Customer View Order Status	A NSSC Service Customer views selected Service Order. Output: Selected Service Order status.	

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Process 2 – IT SERVICE ORDER STATUS INQUIRY		
Roles and Responsibilities	Action	Tips/Notes
<u>Step 5</u> NSSC Service Customer Request Additional Information (if needed)	If additional information is needed regarding order status, the NSSC Service Customer would contact ESD. Output: ESD Incident Ticket.	

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METRICS

There are no required metrics for the IT Service Ordering processes.

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PRIVACY DATA

All participants involved must ensure protection of all data covered by the Privacy Act.

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SYSTEM COMPONENTS

Existing Systems

IT System Title	IT System Description	Access Requirements	IT System Interfaces
BMC SRM	The module allows the NSSC to publish a defined set of NSSC and I3P services and automate the fulfillment of the services through NSSC and I3P back-office systems.	Read/write access for Tier 0; Web Services interface for I3Ps; Web Services interface to NASA Enterprise Architecture Repository (NEAR).	Web Services Interface.
Tier 0 Portal	Web Portal for user self help, knowledge articles, Frequently Asked Question (FAQ)s, Service Orders, and Service Inquiries.	User authentication via eAuthentication.	Interfaces to ESRS and ESD.
NAMS	NASA Account Management System (NAMS). The centralized system for requesting and maintaining accounts for NASA IT systems and applications.		
Remedy Incident Management	Remedy Incident Management provides the NSSC ESD IT Support Agent with the ability to create and monitor the status of and manage incidents. Remedy Incident Management will be used to report on key customer service metrics; such as, first call resolution, right-first time allocation, and time to escalate.	Read/write access for Tier 1 and Tier 2 (I3P Contractors).	Oracle database, web server for customer submits via Tier 0/ESD Portal.

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IT System Title	IT System Description	Access Requirements	IT System Interfaces
BMC Atrium Configuration Management Database (CMDB) – Asset Management	BMC Atrium is a service-enabling architecture managing business services, IT services, and processes assets.		
Remedy Knowledge Management	The framework for creating, publishing, reviewing, and searching IT knowledge articles.		
Remedy Dashboards and Analytics	Application for viewing business data provided by defined queries. Allows for reporting and analysis.		

New Systems

IT System Title	IT System Description	Access Requirements	IT System Interfaces
Service Definition Repository (SDR)	Interface and associated workflow to facilitate the publishing, modification, and/or deactivation of ESRS services. Will utilize NAMS roles/approvals.		Web services “push” to NEAR for monthly update. <i>(When NEAR interface is available)</i>

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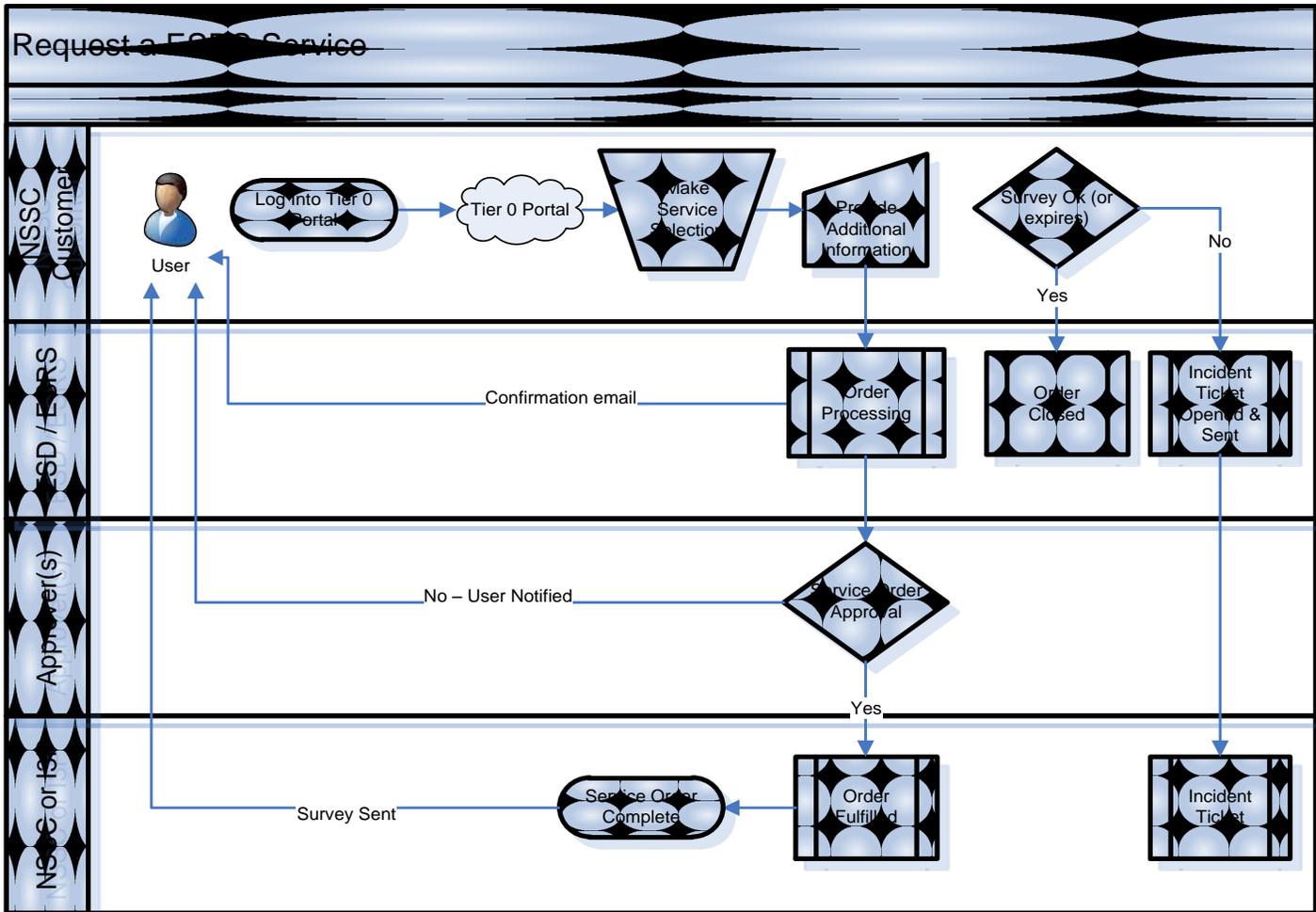
APPENDICES

Appendix A – Acronyms

ACES	Agency Consolidated End-User Services
CMDB	Configuration Management Database
ESD	Enterprise Service Center
ESRS	Enterprise Service Request System
FAQs	Frequently Asked Questions
I3P	IT Infrastructure Integration Program
IT	Information Technology
ITIL	Information Technology Infrastructure Library
ITSM	IT Service Management
NAMS	NASA Account Management System
NASA	National Aeronautics and Space Administration
NEAR	NASA Enterprise Architecture Repository
NEDC	NASA Enterprise Data Center
NICS	NASA Integrated Communications Services
NSSC	NASA Shared Services Center
POC	Point of Contact
SDR	Service Definition Repository
SLM	Service Level Management
SIM	Service Integration Management
SRM	BMC Service Request Management System
WEST	Web Enterprise Services Technologies
VPN	Virtual Private Network

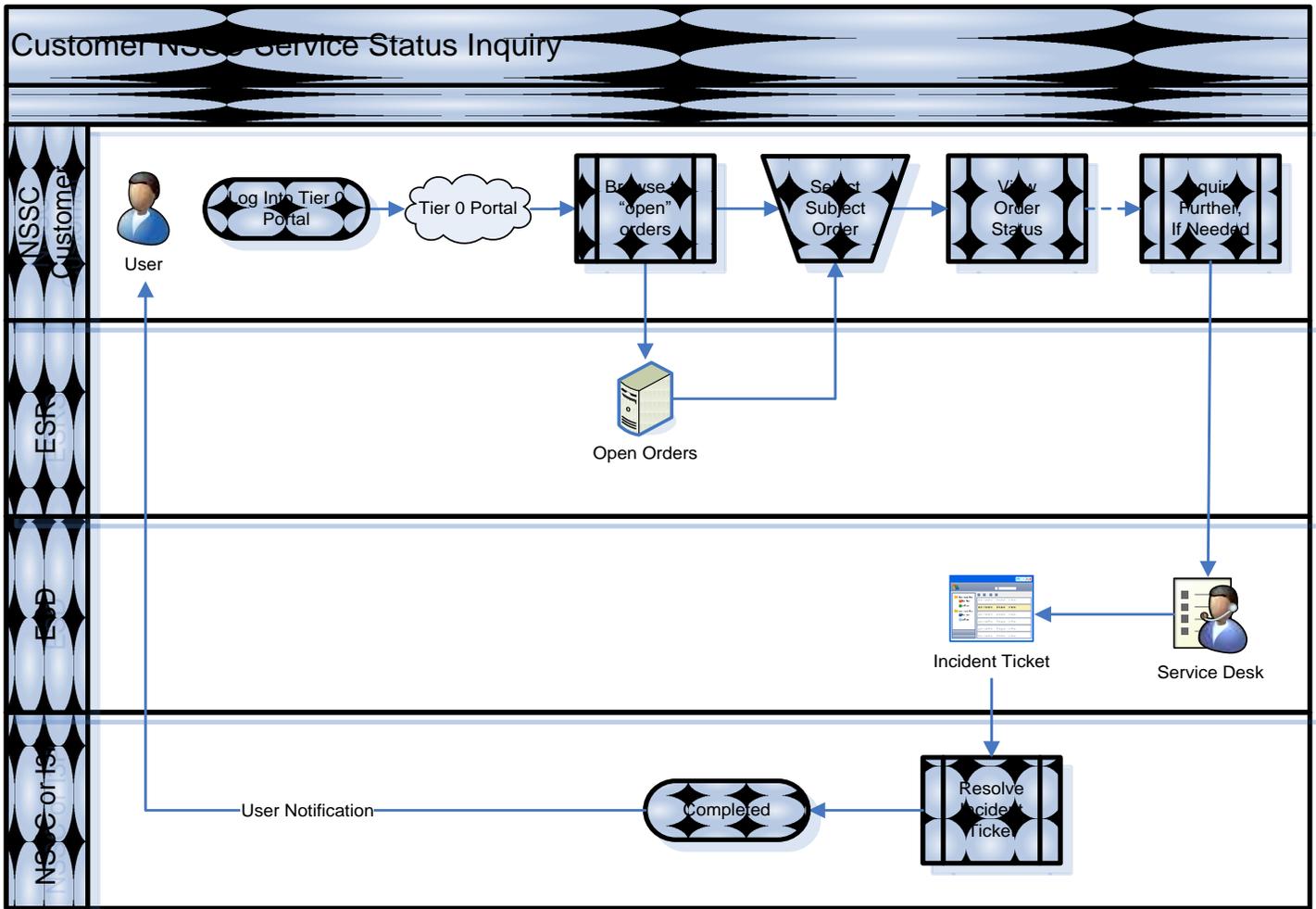
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Appendix B – Process Flow 1 – IT Service Ordering



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Appendix C – Process Flow 2 – IT Service Order Status Inquiry



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Appendix D – References

Reference	Document Title
1	Enterprise Service Desk and Enterprise Service Request System Performance Work Statement – March 1, 2010
2	NASA Shared Services Center (NSSC) Change Order #28 Incremental Submission #1 - March 19, 2010
3	NSSC-SP-01: DRD 3.8.3-1
4	NSSC ESD Service Delivery Guide
5	Process Documentation for Incident/Problem Information Exchange Between ESD and I3P Contractors
6	Effective Communication on “Status” to Authorized Users
7	Change Order #50 ESC NEAR Alternate Solution
8	NSSC Service Definition Repository Service Delivery Guide