NS2020 Transition Excellence: 12 Suggestions to Improve Velocity, Efficiency & Transparency

Networks & Telecommunications Shared Interest Group

NS2020 Working Group Program Development Goals & Metrics Committee

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This report provides suggestions to GSA and Agency users to improve the speed and accuracy of transitions from the current Networx contracts to the planned NS2020 portfolio. The report was prepared using industry and government observations and experiences from the FTS2001 – Networx transition, and provides 12 recommendations to facilitate the transition to NS2020.

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The ACT-IAC N&T SIG's mission is to provide clarity, impartial feedback, and points for consideration on networks and telecom issues identified in collaboration with the Government Advisory Panel (GAP) and industry. The N&T SIG provides a forum where government and industry executives are working together on key telecommunication issues such as interoperability, information sharing, communications architectures, wireless technologies, converged internet protocol based services, security, and continuity of service. The N&T SIG established a working group to facilitate collaboration between Government and industry on matters concerning the upcoming NS2020 effort – the replacement for the current Networx contracts. The NS2020 Working Group is comprised of four committees, each with government and industry co-chairs, which are engaged with GSA, agency users, and industry to create a body of knowledge to support the Government in the NS2020 effort:

- GSA Vendor Operations
- Program Development
- Business Growth and Collaboration
- Technology and Innovation

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Project Overview

This report was prepared by the ACT-IAC N&T SIG Network Services 2020 (NS2020) Working Group Program Development Goals & Metrics Committee to assist the Federal Government, and in particular the General Services Administration (GSA), in planning and execution efforts for the upcoming Networx-to-NS2020 contract transition. Participants in this effort were from across industry, and included representation from several interested federal agencies.

ACT-IAC was asked to address the question "how long should the transition from Networx to NS2020 take and what are the major issues that should be addressed to make it an effective and efficient transition?" For the purposes of this project the transition period was considered to begin when the NS2020 awards are made and end when the last service is successfully moved to the NS2020 contract structure.

This effort is not an attempt to define a transition timeline for moving all services from the Networx contracts to the NS2020 structure. Given the breadth of services and the broad range of agency missions, technical capabilities, geographic scopes, and operating environments, there is no single answer to the "how long will it take" question. The most recent transition from FTS2001 to Networx required approximately six years from contract award of Networx to the final services being disconnected on FTS2001.

This document is also not intended to be a comprehensive guide to every contract transition effort. Instead, this work is meant to provide perspective on major steps and functions included in a transition of this nature, and to identify risks and opportunities for the Government as NS2020 is implemented. This effort is specific to the transition of telecommunications and IT services from the current Networx contracts to the upcoming NS2020 contracts. Some of the recommendations provided apply to GSA as the contract holder and other recommendations are specific to agency users, but are meant to be managed by GSA as part of the transition exercise.

This work is also not intended to address the actual procurement activities – development of statements of work, management of the proposal process, evaluation and award – but each of these precedent activities has a tremendous bearing on the time required to effect a contract-level transition.

This report references a recent Government Accountability Office (GAO) report on the FTS2001-to-Networx transition released in late 2013. The report, *GSA Needs to Share and Prioritize Lessons Learned to Avoid Future Transition Delays* (GAO-14-63: Published: Dec 5, 2013. Publicly Released: Jan 6, 2014) may be downloaded at http://www.gao.gov/products/GAO-14-63**.**

The following IAC member companies provided specific input to this effort:

- American Systems
- AT&T
- CenturyLink
- Hughes Network Systems
- Noblis
- Sprint
- Verizon

Comments and questions may be directed to NS2020 Working Group Program Development Goals & Metrics Committee Industry Co-chair Jeff Mohan at jm2341@att.com or Government Co-chair Timothy Quinn at timothy_quinn@doi.gov.

Executive Summary

The Networx contracts end in March and May of 2017, requiring agency users to move to a new contract vehicle. History indicates these contract migrations are complex and time consuming – the FTS2001-to-Networx transition exercise lasted six years and consumed a great deal of government and industry resources. GSA is preparing the successor strategy to Networx and is seeking advice and a strategy to accomplish a more speedy and cost-effective move to the new NS2020 contracts.

The ACT-IAC N&T SIG has developed a series of recommendations that identify risks in a large scale contract transition. Most of these recommendations, if acted upon, will positively affect the transition from the Networx contracts to the NS2020 contracts at a broad contract level. In addition, most of these items are also applicable to transition efforts at an individual agency.

Proactive, up-front, iterative planning, adequate resource commitment, and transparent, enforceable accountability are keys to a successful transition.

The major items covered in this report include:

1. Learn from the last transition. The findings in the recent GAO transition report are well defined and well presented.
2. Share lessons learned across all stakeholders.
3. Establish a well-defined governance structure for transition activities that ensures transparency and accountability. This structure should include real, enforceable incentives and disincentives to keep activities on track.
4. Start now. Work on better inventories. Identify transition project experts. Determine how to get those experts to the agencies. Identify the OSS/BSS requirements and include those requirements in award decisions. Publish data interchange specifications.
5. Standardize the transition planning process. Identify transition owners in each agency and provide these owners with standardized tools and process to allow preparations to begin.
6. Improve the procurement process used in Networx by increasing standardization in the NS2020 program. Redefine/redesign the SOW process to include a repeatable process for specifying customization, allow unique contract line-item numbers (CLINs) for specific agencies, allow spot discounts, and define a rigorous evaluation and debrief process.
7. Allow agencies the flexibility to use the contract as best suits their particular need if they want – use a Delegation of Procurement Authority (DPA) to streamline the award and contract modification process. Recognize that all transitions are not the same.
8. Plan for a long contract overlap – perhaps five years where Networx and NS2020 co-exist – to allow agencies to transition as their needs require, and at the same time, make new technologies and better cost structures available to agencies when they need them.
9. Change the transition reimbursement process to give agencies an incentive to start, not just to finish.
10. Measure progress according to all stakeholders' perspectives.
11. Establish stakeholder communications standards to provide transparency for reporting progress on all aspects of the contract transition.

12. Manage risks according to recognized industry standards. Institute a rigorous approach to identification and mitigation of any items that could negatively impact transition.

What the Government Can Do to Accelerate Transition

Opportunities for improvements in transition efficiency and speed fall into several major categories:

1. **Learn from the past. Follow the actions listed in the GAO Report.** Create working-level teams responsible for implementing the recommendations at the end of the report (note that this is probably underway). Make progress transparent and encourage agency and industry comment as the recommendations are implemented. Many of the items identified in the GAO report were related to the lack of qualified government personnel to plan and conduct transition projects. Experience has demonstrated that the expertise needed to successfully plan and execute telecom transitions is NOT directly comparable to that required for typical IT projects.

   Recommendation: **identify the inventory of qualified project and telecommunications managers** in the Government or available through support contractors and develop "certification" programs to create a cadre of qualified telecom transition project managers with a commonly-defined skill set.

   Recommendation: **create an ongoing training program to develop government expertise in telecommunications contract management.**

2. **Share lessons learned and best (and worst) practices.** GAO identified the need for a central repository of "lessons learned" available to all agency stakeholders.

   Recommendation**: establish and maintain a central database of procurement case studies and transition efforts**, including those that were troubled, so stakeholders in future activities can learn from the experiences of others.

3. **Establish a well-defined governance structure.** Establish a governance structure for transition activities that ensures transparency and accountability. This structure should include real, enforceable incentives and disincentives to keep activities on track.

   Recommendation**: establish and maintain a governance structure that motivates and rewards all stakeholders to achieve a successful transition**, with incentives that are easy to implement and measure.

4. **Start now.** Better inventory management, planning for support of new mission requirements, evolutions in technology, and impacts in budgeting are all items that could and should be considered now.

   Recommendation: **GSA should develop a planning template that assists agencies in preparing for contract transition events that may not occur for several years.** This template should include collection of inventory, analysis of traditional inventory changes, upcoming mission

or scope changes, and projections on the impact of new regulations and mandates. It should be reviewed and updated on a regular basis (every six months).

5. **Standardize transition planning**. One of the major opportunities for improvement in transition is in the initiation and planning phases. Federal procurement practices, as implemented on Networx, make this more difficult by not allowing contractors and agency customers to interact during the proposal development phase. Instead, agencies develop requirements based on their unique perspective and send the requirements to contractors to bid. When an award is made, contractors are usually expected to begin implementation immediately, even though the information from the agency is dated, at best.

   Recommendation: **define a standard planning phase at the beginning of each transition.** Each transition effort should include a specific, standard planning process to allow agency customers and contractors to review and agree all aspects of the transition, including specific timeframes, impact to current agency mission(s), and related risks, and should specifically identify new mission objectives and technologies that may have been introduced since the original requirements were developed by the agency. The process should contain a checklist of common items needing review, should define a standard timeframe for post-award planning, and should include a standardized set of planning deliverables. This process should be complete before any transition orders are issued.

   Other items that should be standardized are the identification of stakeholders, executive project sponsor(s), the project manager (the single person responsible for success of the project at the agency level), a change control process, creation of a work breakdown structure, and creation of a risk breakdown structure. The planning phase is also where the overall project schedule is developed, reviewed, and agreed upon by all stakeholders, and a change control process ensures that project documents are updated in a controlled and efficient manner, and always reflect the actual intent and progress of the transition activities.

   Recommendation: **ensure executive (agency) buy-in by presenting a standard agency-level transition plan for all agencies to follow.** This standard plan would also allow monitoring by oversight agencies, and most importantly, allow the use of “transition experts” across all agencies since each transition would be planned, measured, and conducted in a consistent manner. The standard plan should be based on the Project Management Institute’s (PMI) *Project Management Body of Knowledge* (PMBOK) and processes and procedures from the *Information Technology Infrastructure Library* (ITILv3). The standard plan, processes, and procedures should be reviewed and updated on a periodic basis, and should be available as a shared resource (preferably web-accessible) to all stakeholders. The plan should also include components for verification and testing criteria, transition costs, and risk management.

   Recommendation**: continuously gather inventory**. Collection and validation of information related to the services to be transitioned is a key next step. “What needs to be moved and when?” are critical components to any transition plan. The Networx inventory requirements are a positive step towards a complete agency inventory, but should not be expected to generate the “be-all,

end-all" list of items. Gathering of inventory is also not a one-time event, but should be a continuous exercise as agency requirements and implementations change.

***Recommendation*: inventory should be captured and presented in a standard functional format.** The Networx contract requirements make headway towards improving inventory, but standardization and timing can still be improved. GSA should define standards for inventory from the perspective of the end-user agencies, not from the lowest identifiable individual component.

***Recommendation*: GSA should manage the inventory using a common inventory portal.** GSA should develop a standard system that allows real-time or near-real-time centralized capture of inventory information. This information can be used for many purposes – billing validation, disaster recovery, cost optimization, and moving to a new provider.

***Recommendation*: GSA should develop a process to reconcile inventory differences – industry should provide examples of causes and potential remedies**. Instead of forcing industry to change inventory systems, nomenclature, and process to create a new, contract-based (instead of service-based) standard, a process should be developed to reconcile inventory provided by one provider so that it may be understood by agencies and other providers. This could assist agencies in maintaining the accuracy of their reference inventory.

***Recommendation*: GSA should develop a value-driven (cost/benefit) approach to measure impact of inventory-related transition delays on a project-by-project basis.** Not all transitions have the same cost/benefit. Some provide an extreme positive change in cost and benefit, and have a much more defined payback, meaning they should potentially take priority. Others are not as critical and may be accomplished in a less critical manner. Likewise, some services such as VPNs must, by definition, operate as part of a larger group, while others such as traditional long-distance may operate independently from other like-services in the same agency. The former requires a very structured transition plan with system acceptance, while the latter may be done on an individual basis with little or no impact on other similar services in the agency. *By defining an approach and developing guidelines, GSA and the agencies can better prioritize transition sequencing and startup activities as well as corrective actions in response to schedule slips.*

6. **Improve the procurement process**. Use industry-best standard practices to manage all aspects of the procurement and resulting transition processes. Minimize the potential for protests by removing references to brand-name products and by defining requirements at a functional level, allowing providers to determine their best solution to solve the problem. Consider "compartmentalized" procurements instead of "mega task orders" with all services included. Try to anticipate scope creep in awards and provide a mechanism for post-award adjustments.

   ***Recommendation*: revisit the CLIN structure, in particular the requirement for unique CLINs for every service element. Allow providers to create "solutions" by bundling groups of in-scope services.**

***Recommendation*: create a process and guidelines to allow agencies to accommodate post-award changes in regulations, new mandates, and new mission requirements without compromising the original award.**

***Recommendation*: create a standard award debriefing template.** GSA should create a standard template for agencies to use in post-award debriefings to industry. The template should be referenced as agencies make award decisions. Stating the award criteria, following the criteria, and explaining the evaluation in a consistent and rigorous manner should decrease the number of transition-impacting protests.

7. **Allow agencies to make their own decisions if desired.** The Networx transition process was slowed by the need to convert agency-accepted solutions into (sometimes multiple) contract modifications, and to reconcile differences between GSA and agency viewpoints, e.g., prices acceptable to agencies that were deemed unsatisfactory to GSA. Lessons learned from this should be reflected in NS2020 processes that grant greater autonomy and accountability to agencies that desire it. Agencies have varied capabilities – some are able to conduct every aspect of procurement, while others rely extensively on the value-added services provided by GSA. The NS2020 processes should accommodate both to minimize the impact of transition schedules.

   ***Recommendation*: provide a limited DPA to agencies who wish to use the contracts with minimal or no additional assistance from GSA.** For agencies that want to "just use the contract" without assistance from GSA, clear guidelines should be provided on how to do so, including clear guidelines to planning, executing, tracking, and reporting transition progress.

   Recommendation: recognize different types of transitions and plan accordingly. One opportunity for improvement involves providing transition processes and tools tailored to the types of products and services to be transitioned. Not all transition efforts are the same, but there was no explicit recognition of this in the Networx transition. Some products and services are certainly more critical to an agency than others. Some agencies don't want or don't need to make technology adjustments; they just need to move to a new contract because the existing contract is expiring. In some cases, a "solution" must be transitioned as a whole, since the component parts of the solution must be able to interconnect with each other. Examples of this are VPNs or integrated solutions where many different components must interconnect in a consistent manner. This is a much more complex transition than transitioning services that don't necessarily need to interact with each other. For example, traditional telephone services can sometimes be transitioned individually – phone service at a remote agency location does not necessarily need to be transitioned at the same time as phone services at a different location for the same agency. A key point: transition to the new NS2020 contract should not be used as a forcing mechanism to change technology.

   ***Recommendation:* simplify/improve like-for-like transitions.** A potential area of improvement is to better facilitate the transition from one contract to another with the same inventory and the same technical and service delivery requirements, in cases where that meets the agency needs. Networx required all services to be different than services on the prior FTS2001 contracts. GSA should create a transition capability that allows an agency to move services to the new contract

without an extensive SOW process. If the incumbent retains the services, these transitions could be a true "paper transition", and could benefit from automation in the order creation and submission processes.

8. **Plan for an extended contract overlap**. The transition from FTS2001 to Networx was planned to be completed in two years. However, this plan was the result of the overlap in time between the award of Networx and the expiration of the FTS2001 contracts, not as the result of an agency and product level transition plan. In some cases, agencies had already transitioned to newer technology under FTS2001 and had already been the beneficiaries of reduced prices. They had little incentive to move. In other cases, agencies saw huge cost advantages by moving to Networx, so they were motivated to move quickly. And some agencies were planning technology overhauls and were forced to try to complete these overhauls in less than 2 years.

   ***Recommendation*: plan for a significant overlap of the Networx and NS2020 contracts to allow agencies to properly plan for transitions when it suits the needs of the agency.** Presuming the NS2020 contracts present newer technologies with better prices, some agencies will be motivated to move quickly to realize the lower costs. Other agencies may not be ready to go through the procurement process for recently installed complex solutions at the outset of the contract, but may benefit from a transition at the end of the overlap. In addition, support personnel may not be available to plan and manage the transition of the Networx inventory in a relatively short timeframe. Note that this recommendation does not mean that industry advocates the delay of NS2020. In fact, in modifying the current Networx contracts to create the designed overlap, GSA could also add terms and conditions or requirements to facilitate effective transition and provide disincentives for delays.

   ***Recommendation:* make it easier to add new products and services to the NS2020 contracts, and allow vendors to change prices on the (old) Networx contracts to reflect the cost of maintaining two separate contract operations.** GSA could offer a series of strategic modifications that soften some of the Networx requirements that made it difficult to add new products and services to Networx. This could motivate agencies to transition to NS2020. Also, vendors may want to offer different prices during the extension/bridge period on the Networx Contracts. This could also motivate users to move to the new NS2020 structure.

9. **Change the Reimbursement Process: Agencies should be motivated to begin the planning process, and GSA should be prepared to assist by providing expertise and standards-based procedures.**

   ***Recommendation*: implement a staged approach to transition fund reimbursements, or alternatively, provide a transition "block grant" to agencies at the outset of their project.** GSA has collected a certain percentage (rumored to be 1.5% of the Networx agency bill) to offset transition costs. For the FTS2001-Networx transition, a "taxonomy document" described the process for agency use of this money – ostensibly to recover one-time costs for overlapping operations and/or hardware upgrades. The credits were paid upon billing of the new (Networx) service, an event that sometimes occurred years after the original award was made by the agency. GSA should consider changing the funding process to reimburse the agencies for various critical stages during transition - as they plan for transition and need to engage outside

consultants, for example, or as they need additional resources to place transition orders. Project completion should be the event for the final payment.

***Recommendation*: make sure transition reimbursement funding actually benefits the agency.** Networx reimbursement funds were reported to be single year funding, meaning that an agency could not use the funding in subsequent years and were forced to return the reimbursement funds to the Treasury. GSA should change the structure of the reimbursement funds to "multi-year" or "no-year" funding to allow agencies to receive the full benefit of reimbursement funds.

10. **Implement common goals and measurements.** Agreement on and use of common terminology and methods to measure the scope of work to be done, and to measure progress as the work commences. Note that these goals and measurements should reflect all stakeholders' requirements.

    ***Recommendation*: develop a standard set of metrics and measurements to gauge progress on transitions.** The standard measurements should serve all stakeholders – operations personnel may want to know how many "units of service" have been transitioned, finance may want to know how much of the monthly bill has moved, agency executives may want to understand what percentage of citizen calls are served by the new system, etc. All users may want to know a projected completion date. Measures of overall program transition progress towards completion should be based on/reflect the value or "criticality" of what has been transitioned, e.g., percentage of Networx revenue discontinued, or percentage of core capabilities transitioned. Note that this might necessitate simultaneous use of more than one measure to provide a more robust view that can serve as an effective basis for monitoring and corrective actions.

    ***Recommendation*: develop a standard plan for execution of all transitions.** Use an industry standard structure such as the PMI project methodology. Make sure agencies have access to standardized templates for various types of transitions (like-for-like vs. technology upgrades, "network projects" vs. "individual projects").

11. **Implement a communication plan**. A consistent and common method of communicating intent and progress to all stakeholders is critical to planning and executing transitions and providing constant status and feedback to all stakeholders.

    ***Recommendation*: develop a standard method for providing measurements to all stakeholders.** A common dashboard and common definitions of progress should provide a much higher level of transparency. The information should be easy to access and easy to analyze.

    ***Recommendation*: proactively engage the oversight bodies, OMB and Congress, in the process**. Identify and measure expected levels of progress *from their respective perspectives*. As mentioned previously, this might require a multi-faceted tracking approach.

12. **Develop and implement a risk management plan**. Identification of potential areas that may cause disruptions in the effort, along with mitigating strategies for each is critical to successful project management. This category also includes the identification of practices that may accelerate the work, along with any trade-offs related to these practices.

    ***Recommendation*: develop a "risk register" to identify known risks and related mitigation strategies.** The risk register should include risks encountered in similar transition efforts (see "lessons learned" above), and should also include agency-specific risks – calendar-related moratoriums, large numbers of remote sites, the need for significant hardware upgrades, agency technology initiatives, new mandates, etc.

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