DATE: March 30, 2011

SUBJECT: NSG Nortel Router Replacement Project Minutes

LOCATION: JSC, Regents Park III

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INTRODUCTION

Mr. Chris Spinolo convened the March 30, 2011, Network Support Group (NSG) Nortel Router Replacement Project meeting to provide a project status and schedules (refer to the presentation, *Nortel Router Replacement Project [NRRP] Status*).

MEETING

A. The replacement addresses router and protocol obsolescence issue in the IP multicast segment of the IONet. The Nortel routers and Multicast open Shortest Path First (MOSPF) multicast protocol will no longer be supported after June 1, 2012. The NASA Integrated Services Network (NISN) will migrate to an alternate multicast routing protocol in the MOSPF portion of the NISN Closed IONet. NISN will replace the existing Nortel routers, 3 comm hubs, and Fiber Distributed Data Interfaces (FDDI) on the Closed IONet. NRRP is a wholly Commercial Off the Shelf (COTS) implementation requiring no software development.

B. The Critical Design Review (CDR) was conducted in December 2010. Documentation is in place. The next major document delivery is the Implementation Plan. The project is now in the procurement phase. The first grant of funding has been received. This is a 2.7M dollar project. NISN has been informed that the entire project has been funded. The end of the implementation phase is 2012. A Transition Readiness Review will be conducted in 2011. The Operational Readiness Review (ORR) is scheduled for May 2012. The old routers will then be decommissioned.

C. Mr. Bob Marriott asked if the plans have been distributed for review. Mr. Spinolo replied that the plans have not yet been distributed. The implementation plan is in the DRAFT stage. Each site will have a section in the implementation plan. NISN is working with the sites. A good requirements document is in place. A transition and acceptance testing plan has been proposed. The implementation strategy was presented at the CDR. There were no Review Item Dispositions (RID) and there are no open action items.

D. The procurement and implementation are based on the technical data package.

E. Mr. Spinolo reviewed the operational limits and constraints. Programmatic limits and constraints include mission support schedules (e.g., Human Spaceflight [HSF] and Expendable Launch Vehicle [ELV]) and mission freeze periods. Host center support will be required to assist in implementation and transition activities. Some sites will require Engineering Changes (EC). NRRP will use industry standard best practices for design and implementation which should be transparent to the user.

F. Mr. Spinolo reviewed the risks. The highest risk (number 4) has been closed. NISN has received funding. The funds were transferred from the Office of Chief Information Officer (OCIO) to NISN. Risk 1 is on Host Center Support. Risk 2 is NASA Integrated Communications Services (NICS) contract transition incumbent capture and Risk 3 is on the Continuing Resolution (CR).

G. Host Center support will be required for Pre-Implementation and Implementation. The Host Centers will need to allocate floor space, rack space, and power as needed and ready network cables to support the NRRP parallel network during the Pre-Implementation phase. The Host Centers will need to receive and house equipment, install equipment, cable equipment, turn up equipment, facilitate NRRP member access to local facilities, and support implement testing during the Implementation phase.

H. Mr. Spinolo reviewed an updated high-level schedule. NISN is in the pre-implementation planning phase and the implementation phase will begin once all entities have agreed to the plan.
I. Equipment will be configured and staged at the Goddard Space Flight Center (GSFC). GSFC will ship the equipment to the remote sites and the Host Center support personnel will receive the equipment.
J. The Systems and Subsystem Certification Plans and Requirements data is based on the 7120. Each requirement was tested against each candidate vendor device. CISCO and Juniper participated.
K. In conclusion, Mr. Spinolo reviewed the upcoming major dates. Mr. Scott Greatorex asked if the NRRP equipment will be smaller. Mr. Spinolo stated that it will be much smaller and have greater capabilities. The current routers were designed in the 1980s and the platform is nearly 20 years old. The GCC engineering team is working with the site representatives. Mr. Spinolo stated that he has brought detailed design drawings which he would make available for the NSG web site. Mr. Greatorex stated that it was his understanding that no equipment would be shipped to the HSF sites until after STS-135 (if funded).

ACTION ITEM REVIEW

No action items were assigned at the March 30, 2011, NSG NRRP meeting.

(Original Approved By)
Chris Spinolo
NRRP Project Manager
GSFC/NASA/NISN