End of Contract Deliverables

- Develop and provide IDRP code for Gated

  A complete copy of the Gated source code release with the IDRP implementation has been sent to FAA in two forms: (1) source code release on diskettes formatted in DOS, and (2) the full Gated release with IDRP implementation on tape using the Unix 'tar' utility.

  This software is also available for anonymous ftp on merit.edu:/pub/iso/idrp/faa/gated.tar.Z.

- Standards

  Staff from Merit attended two ANSI meetings held in November 1992 and January 1993 to participate in IDRP standards discussions.

- Training

  A course was held April 20, 1993 to instruct the ATN router group on IDRP code. Thirty people attended this half-day seminar.

  On June 30 and July 1, 1993, we held a 2-day course with one day of hands on lab on IDRP code. Fifteen technical staff people attended this session.

- End of Contract Report

  Documentation for the first release of Gated:

  1. Gated syntax document (90 pages)
  2. IDRP Design Document (138 pages)
  3. Configuration Index Document
  4. Accomplishment Summary
  5. Software Configuration Management Plan
  6. Software Quality Assurance Plan
  7. Training materials from seminars
  8. Interim Progress Reports (5 reports)

Executive Summary: Description of First Year Progress

Deliverables During 1992-1993

This portion of the report covers the first 12 months of Merit Network Inc.'s project funded under FAA Grant No. 92-G-0018 which was awarded to support development of an implementation of IDRP in the routing protocol, Gated with attention given to meeting ISO standards. Following is a summary of the status of both interim and end-of-contract deliverables.

- IDRP Syntax Document was delivered to MITRE and FAA on 9/20/92. A preliminary version of this document had been presented to MITRE for review.

- Basic code for IDRP: Estimated delivery 9/15/93.

  Gated code is 90% written and 75% debugged. Considerable development time has been consumed in trying to get a working operating system that the ATN project and Merit can both use to jointly test IDRP.

- Basic Code plus Configuration and MIB support: Estimated delivery 10/30/93.

  Five percent of the work has been done on the additional configurations. MIB variable support has been encoded into Basic code plus in IDRP. The IDRP code reads in the Configuration and configuration variables from the Gated MIB support configuration file. A "kill -INT" will cause IDRP to dump the MIB, LOC_RIB, and ADJ_RIBs.

- Bi-Monthly Progress Reports have been provided to the FAA and MITRE throughout the project.

Description of Progress
May 20 - July 20, 1993

Training and Professional Consulting

- Sue Hares, John Scudder, and Craig Labovitz provided a two day tutorial and "hands-on" lab for the ATN project group on June 30th and July 1st in Ann Arbor.

- On June 29th, Sue Hares and Craig Labovitz discussed the IDRP implementation with Greg Oliveau and Abdel Nabti from SITA, a European ATN group working on the IDRP implementation.

IDRP Code

Along with MITRE, we have continued to try to obtain a shared operating system which can be used to run Gated over CLNP on PCs.

- We have continued testing the IDRP BASIC functionality. Known bugs are listed in the directory /gated/docs/idrp/bugs.

- We have continued to work on IDRP socket support.

Issues

The MITRE build of ATN router (based on BSDI 0.9) did not work with the 3.0.beta release of Gated which Merit is using as a base set of code. As a result, we built Gated on the BSDI 1.0. Sue Hares began work to port network ISO (netiso) support to the BSDI 1.0 platform. In the meantime, Craig Labovitz and John Scudder have continued to debug the IDRP implementation by passing IDRP packets over IP.

MITRE is making progress on getting the ATN router working with the 3.0.beta release of Gated, so joining their work and our kernel work may be required in the future. We will be working with MITRE on this during August.

Progress Report

Summary of Progress for the last two months

FAA has awarded Merit supplemental funding under this grant through November 19, 1994 to continue research being done on advanced features of the IDRP in GateD. This funding will allow the cooperative effort between FAA, Merit and MITRE to continue providing solutions to FAA.

The last two months of the first year of the original grant period have been spent debugging basic IDRP support, porting BSD code to obtain a useful PC based operating system for CLNP, and presenting the end of the contract training courses to MITRE and other ATN router group members.

We have:

- Performed additional testing of IDRP code.
- Worked on porting the BSD ISO kernel code to the BSDI platform. The porting of the ISO kernel required a significant learning curve. The ISO kernel still is not working.
- Led a 2 day training course on IDRP for the ATN project router group (6/30/93 - 7/1/93).

We estimate our first release date for Gated with basic IDRP functionality to be September 15.