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Network Marketing Center

REQUEST FOR PROPOSAL

HP3000 DDN SOFTWARE DEVELOPMENT

VALUE-ADDED CHANNEL: WOLLONGONG

**My Phan
Network Project Center**



19420 HOMESTEAD ROAD, CUPERTINO, CA 95014

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NOTE

This document is for negotiation between
Hewlett-Packard and Wollongong ONLY!

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This Request For Proposal (RFP) provides Wollongong with information to submit a proposal to develop Defense Data Network (DDN) software services for the HP 3000 computer family. This RFP just provides a guideline for discussion and future contract agreement.

The DDN services include:

- 1) TELNET - virtual terminal,
- 2) FTP - file transfer,
- 3) SMTP - electronic mail,

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Additional services required include the followings:

- 4) TELNET Extension - virtual terminal and block mode,
- 5) Domain Name Server - host name to IP address translation,

These services will use the Network Interprocess Communications (NETIPC) facility available on the HP 3000 as the only access method to DDN TCP/IP on the HP 3000 and any lower level services including the LAN.

HP'S DDN STRATEGY

SECTION

II

HP intends to satisfy increasing demands from major accounts and our installed DoD base to include HP 3000's in the Defense Data Network. Our strategy with respect to DDN is to work with a third party who will develop the HP 3000 DDN services and receive some initial help from HP such as technical consulting, technical documentation, hardware, and software.

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1.0 HP documentation

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With this RFP, HP provides Wollongong with the following documents:

- o The "C" compiler user manual from the CCS company,
- o The MPE Intrinsic manual,
- o The MPE Command manual,
- o The NS/3000 Network Manager Reference manual,
- o The NS/3000 User and Programmer Reference manual (provided),
- o An HP Virtual Terminal Service Standard.

2.0 Due date

A feasibility response providing cost and deliverable date estimates should be received before 5 p.m (PST) on June 24, 1986.

A final proposal to this RFP **MUST** be received before 5:00 p.m (PST) on July 22, 1986. The proposal must be sent to:

Mr. My Phan
Hewlett Packard Network Project Center
Mailstop: 43LR
19420 Homestead Road
Cupertino, Ca. 95014
(408) 725-8111 x2158

3.0 Components of the proposal

3.1 Product availability

The proposal will include a delivery time after receipt of order from HP. If a DDN service does not become available after a certain date, please note the expected availability. A firm delivery will be negotiated before any purchase orders are issued.

Software proposed in response to this RFP should be available for demonstration testing by December 1, 1986, and in production by January 31, 1987.

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3.2 Resource worksheets

The proposal should include a list of HP resources needed by the vendor to complete the purchase order. Example of the HP resources include HP 3000 hardware, software, technical documentation, and MPE technical consulting. My Phan of HP NPC will be available to answer any questions on any issues relating to this project.

3.3 DDN task description

The proposal must include a description for each task specified in the the HP 3000 DDN TASKS section. Each task description should be based on the acceptance criteria described in the next section, and include:

3.3.0 Deliverable date

The date which this task can be used in production environment.

3.2.1 Hardware specification

Hardware will be needed to complete this task such as HP 3000 series 37 or 4X, terminals, disk drives, tape drives, LAN cards, cables, etc...

3.2.2 Software specification

Software will be needed to complete this task such as NSLINK, LAN driver, compiler, tools, etc...

3.3.3 Test plan

A test plan specifying product testing, testing policies and procedures, testing document, and testing schedule.

3.3.4 Implementation schedule

An implementation schedule specifying a date for each phase described in the ACCEPTANCE CRITERIA section.

3.3.5 Plan for evidence of certification

A plan for providing HP with the evidence of certification.

3.3.6 Progress reporting plan

A plan for reporting progress.

3.3.7 Documentation

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Documentation for user manual, installation procedure, and field support.

3.4 Support

The proposal will include a description of software support which will be available to HP customers and the cost of this support.

3.5 Training

The proposal will include a description of the training which will be available, and the cost of this training.

3.5 Company resume

The proposal must include a copy of the vendor's most recent Annual Report. Also desirable is additional information regarding the vendor's DDN network experience, such as the length of time the company has been supplying the development of DDN software on other non-HP computer systems.

3.6 Company representatives

The proposal must include the names, titles, addresses, and phone numbers of the designated individuals with authority to negotiate contract terms for your company.

To ensure the quality of the development of the DDN software services for the HP 3000 computer family, the acceptance criteria will be phased. The result of the review will be returned in 10 working days.

1.0 Phase I

The vendor will provide a written description of software modules especially when they interact with the MPE operating system and the HP 3000 DDN TCP/IP software. HP will check for any incompatibility problems.

2.0 Phase II

The vendor will provide a preliminary user manual that describes user commands, programs to run, configuration, etc. HP 3000 users will refer to this manual to interact with hosts in a DDN.

3.0 Phase III

Phase III consists of porting, coding and testing of the software modules described in Phase I. The testing procedure must follow the test plan as negotiated in the formal proposal.

When Phase III is completed by the vendor, HP intends to have hands-on time with the DDN services based on the user manual described in Phase II. This will allow the vendor a chance to demonstrate their software quality, and will allow HP to 1) gain a good understanding of the implementation, 2) check for any unseen compatibility problems, and 3) gain experience with using the DDN services. A DDN network must be in place. This network consists of at least one HP 3000 and one non-HP 3000 computer system.

Phase III is NOT considered complete if severe problems are found. Severe problems are system crashes, or malfunctions which cause loss of the functionality.

4.0 Phase IV

Phase IV consists fixing bugs and finalizing the user manual described in Phase II.

5.0 Phase V

Phase V will take place at an HP 3000 customer's site. This customer will have the final say to whether the software is good enough for the production environment. HP will help the vendor to select this customer. Phase V is NOT considered as complete if severe problems are found. Severe problems are system crashes, or malfunctions which cause loss of functionality.

The following is a desirable schedule for each phase:

Phase	Proposed Completion Date
I	July 31, 1986
II	August 15, 1986
III	December 1, 1986
IV	December 31, 1986
V	January 31, 1986

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Hewlett-Packard is looking for software functionality on the HP3000 which will provide interoperability with non-HP3000 systems. The functionality which is desired consists of a virtual terminal protocol, a file transfer protocol, and an electronic mail transfer protocol. In general, these protocols should be compatible with the Arpanet or DoD protocol suite.

Specific Tasks

1.0 Virtual Terminal

The implementation shall provide a virtual terminal protocol which is compliant with the Telnet protocol as described in MIL-STD-1782. The proposal should be specific as to what functionality will be implemented and what functionality will not be implemented. In any case, the functionality shall at least be the minimum as specified in MIL-STD-1782.

1.1 Virtual Terminal plus block mode

In addition to the functionality specified by MIL-STD-1782 the virtual terminal protocol must also be capable of functioning as a pseudo terminal for VPLUS applications in such a way that no software modification is required for VPLUS or for applications which currently use VPLUS to perform terminal screen handling. While operating as a pseudo terminal for VPLUS applications, the virtual terminal protocol shall be able to act as a Server Telnet for User Telnet implementations on remote systems which have connected to them terminals which support the VPLUS subsystem and do not require a DC1/DC2/DC1 handshake. There shall be no special requirements for the User portion of Telnet.

2.0 File Transfer

The implementation shall provide a file transfer protocol which is compliant with the File Transfer Protocol which is described in MIL-STD-1780. The proposal should be specific as to what functionality will be implemented and what functionality will not be implemented. In any case, the functionality shall at least be the minimum as specified in MIL-STD-1780.

3.0 Electronic Mail

The implementation shall provide an electronic mail protocol which is compliant with the Simple Mail Transfer Protocol which is described in MIL-STD-1781. The implementation shall use HPDESK as

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the common user interface. The functionality shall at least be the minimum as specified in MIL-STD-1781.

4.0 Host Name to IP Address Translation

The implementation shall provide a method for generating requests for IP address information from designated name servers. The implementation shall be compliant with the Domain Name Protocol as specified in RFC 883. It is not required that the HP3000 be able to act as a name server as specified in the RFC, only that the HP3000 be able to send requests and receive replies as per the RFC.