FORM CD-451 (REV 10/98)	. U.S. D	DEPARTMENT OF COMMERCE	GRANT Xco	OPERATIVE AGREEMENT
AMENDMENT TO FINANCIAL ASSISTANCE AWARD RECIPIENT NAME Network Solutions, incorporated			ACCOUNTING CODE	
			AWARD NUMBER NCR 92-18742	
			AMENDMENT NUMBER Eleven (11)	
STREET ADDRESS 505 Huntmar Park Drive			EFFECTIVE DATE October 7, 1998	
CITY, STATE, ZIP CODE Herndon, Virginia 22070			EXTEND WORK COMPLETION TO September 30, 2000	
Department of Commerce Operat National Telecommunications and	•			
COSTS ARE REVISED AS FOLLOWS: N/A	PREVIOUS ESTIMATED COST	ADD	DEDUCT	TOTAL ESTIMATED COST
FEDERAL SHARE OF COST	\$	\$	\$	\$
RECIPIENT SHARE OF COST	\$	\$	\$	\$
TOTAL ESTIMATED COST	\$	\$	\$	\$
This Amendment approved By signing the three docum attached, as well as previou Amendment documents shadened and Recipient. If not signed and may unilaterally terminate to	nents, the Recipient agr us provisions incorpora- nall be returned to the returned without modif this Amendment.	ees to comply with the A ted into the Award. Upon Grants Officer and the	Amendment provision acceptance by the third document sh	ons checked below and e Recipient, two signed hall be retained by the
X Special Award Condition	ons			
☐ Line Item Budget				
Other(s)				
SIGNATURE OF DEPARTMENT OF COMMERCE GRANTS OFFICER JOSEPH Levine Acting Grants Officer, Office of Executive Assistance Management				DATE 196/98
	SIGNATURE OF AUTHORIZ		 	DATE, /

Special Award Conditions NCR-9218742 Amendment No. 11

Parties:

Department of Commerce (USG), Network Solutions, Inc. (NSI)

Effective Date:

October 7, 1998

Purpose:

This agreement facilitates the stable evolution of the Internet domain name system (DNS) in accordance with the provisions of the Statement of Policy on DNS administration, "Management of Internet Names and Addresses," 63 Fed. Reg. 31741 (1998) (hereinafter "Statement of Policy" or "White Paper") by: (1) providing for recognition by NSI of NewCo when recognized by the USG in accordance with the provisions of the Statement of Policy; (2) amending the Cooperative Agreement No. NCR-9218742; (3) authorizing NSI's continued operation of the primary root server during the transition; and (4) providing for the development, deployment and licensing by NSI of a mechanism that allows multiple registrars to accept registrations for the generic top level domains (gTLDs) for which NSI acts as a registry.

Term and Transition:

This agreement extends the Cooperative Agreement through September 30, 2000; provided, however, that as the USG transitions DNS responsibilities to NewCo, corresponding obligations under the Cooperative Agreement as amended will be terminated and, as appropriate, covered in a contract between NSI and NewCo.

General
Definition of
NewCo:

For purposes of this agreement, NewCo is the not-for-profit corporation described in the Statement of Policy and recognized by the USG in accordance with the provisions of the Statement of Policy for so long as the USG continues its recognition of NewCo.

Competition

Shared Registry:

In order to create an environment conducive to the development of robust competition among domain name registrars, NSI will, either directly or by contract, develop a protocol and associated software supporting a system that permits multiple registrars to provide registration services within the gTLDs for which NSI now acts as a registry (Shared Registration System).

Development of the Shared Registration System shall reflect the following agreed upon time line, which assumes that the USG does not request changes in the specifications:

- 1. By November 1, 1998, NSI shall provide functional and interface specifications for the Shared Registration System and a milestone schedule for its development and implementation.
- 2. By December 1, 1998, NSI shall create a focused input technical advisory group consisting of not more than 10 individuals designated by NewCo to comment on the design of and participate in testing of the Shared Registration System.
- 3. By March 31, 1999, NSI will establish a test bed supporting actual registrations in .com, .net and .org by 5 registrars accredited by NewCo (Accredited Registrars). (Phase 1)
- 4. By June 1, 1999, the Shared Registration System will be deployed by NSI and available to support multiple licensed Accredited Registrars offering registration services within the gTLDs for which NSI now acts as a registry. (Phase 2)
- 5. By October 1, 1999, NSI will have completed reengineering of NSI's registry/registrar interface and back end systems so as to assure that NSI, acting as registry, shall give all licensed Accredited Registrars (including NSI acting as registrar) equivalent access ("equal access") to registry services through the Shared Registration System. (Phase 3)

The functional and interface specifications of the Shared Registration System shall describe a protocol and associated software able to: (1) provide security and authentication protocols and procedures for requests from registrars; and (2) permit second level domain name holders to change registrars within the same registry without changing domain names.

NSI agrees to license the Shared Registration System protocol, associated documentation, and reference implementation to Accredited Registrars, on reasonable terms and conditions approved by the USG, such approval not to be unreasonably withheld, that are designed to promote the development of robust competition for the provisions of registrar services.

Enhanced Searchable Database:

Not later than November 1, 1998, NSI shall provide the USG with a written description of its proposed enhancements to the existing WhoIs database(s).

Within 60 days after the publication by the World Intellectual Property Organization (WIPO) of recommended characteristics of an enhanced searchable database containing domain name registration data, NSI will provide a report to the USG regarding how and under what conditions such a database might be designed and implemented in the gTLDs for which NSI now acts as the registry.

Pricing:

Commencing upon the Phase 1 deployment of the Shared Registration System, and for the term of this agreement, NSI's prices for registry services through the Shared Registration System in the gTLDs for which NSI now acts as the registry, will be no more than a dollar amount per registration/year to be specified in a further amendment reflecting NSI's costs and a reasonable return on its investment. This price cap will be adjusted via an amendment to the Cooperative Agreement to reflect demonstrated changed costs of NSI arising from newly enacted legislation, NewCo fees, inflation, regulations, standards, costs of new litigation (including settlements and judgments) in excess of NSI's operating plan or changes in the operation of the registry, or to fund specific additional activities in the event such activities are reflected in an amendment to the Cooperative Agreement.

Existing NSI Customers:

Commencing upon the Phase 1 deployment of the Shared Registration System, and for a period of 18 months thereafter, NSI shall permit any customer with whom it has a contract pursuant to which NSI provides registration services that is either facially or effectively exclusive as to registration services, to terminate the registration provisions of such contract (following payment of all amounts due up through the time of such termination) and obtain registration services from other registrars; provided, however, that NSI may enter into agreements pursuant to which NSI's counterparty agrees not to utilize proprietary intellectual property or confidential proprietary information provided by NSI to the counterparty pursuant to their agreement.

New Contracts:

Commencing on the effective date of this agreement, and for a period of 18 months after the Phase 1 deployment of the Shared Registration System, NSI will not enter into an agreement with any other party that limits in any way that party's ability to serve as a registrar or to operate a registry; provided, however, that (1) NSI may enter into agreements pursuant to which NSI's counterparty agrees not to utilize proprietary intellectual property or confidential proprietary information provided by NSI to the counterparty pursuant to their agreement; and (2) the mere provision by NSI, on a nonexclusive basis, of registration services to a party shall not be deemed to limit that party's ability to serve as a registrar or operate a registry.

Separation of Registry/Registrar Services:

Following the Phase 1 deployment of the Shared Registration System, NSI shall make a certification to the USG every six months designed to demonstrate by means of objective criteria, which shall be agreed upon between USG and NSI, that NSI is providing all licensed Accredited Registrars with equal access to its registry services. NSI also will by February 1, 1999, employ appropriate safeguards, approved by the USG, to ensure that revenues and assets of the registry are not utilized to financially advantage NSI's registrar activities to the detriment of other registrars.

Data, Know How, Technical Assistance, etc.

Software and Data:

Not later than 30 days after the date of this agreement, NSI shall submit to the USG an electronic copy of all software and data generated under the Cooperative Agreement through September 30, 1998.

Not later than 60 days after the date of this agreement, NSI shall submit to the USG all existing documentation for such software and data generated through September 30, 1998.

The USG will take appropriate measures, including the development and execution of confidentiality agreements acceptable to NSI, to protect the confidentiality of such data, software and documentation so delivered. To the extent any such software, data or documentation need to be made available to any agent, contractor or project partner of the USG, the USG will promptly so notify NSI and will require such agent, contractor or project partner to comply with similar appropriate confidentiality

requirements; provided, however, that, except as otherwise expressly provided herein, nothing in this paragraph is intended to alter any intellectual property rights of the USG or NSI established in the Cooperative Agreement.

Assistance to NewCo:

If NewCo has a technical question or a need to access appropriate intellectual property of NSI, and the answer to such question or such access is reasonably necessary for NewCo to carry out its responsibilities as described in the "Coordinated Functions", the "Purpose" and the "Transition" sections of the Statement of Policy (NewCo's Responsibilities), and provided that NewCo shall have agreed to protect the confidentiality and security of any such information under a confidentiality agreement mutually acceptable to NSI and NewCo, NSI shall provide such answer or access and shall not assert any of its intellectual property rights or its desire to protect confidentiality or security as a basis to deny such requests; provided, however, that NSI shall not be required to expend excessive time or resources in answering such questions or fulfilling such requests unless it receives reasonable compensation for such expenditures; and provided further, that, except as otherwise expressly provided herein, nothing in this paragraph is intended to alter any intellectual property rights of the USG or NSI established in the Cooperative Agreement.

Recognition of NewCo

NewCo:

As provided in the Statement of Policy, the USG will effect the transition of its DNS responsibilities through an agreement with NewCo. That agreement will (i) require NewCo to exercise the responsibilities delineated in the Statement of Policy in a transparent, non-arbitrary, and reasonable manner, (ii) prohibit NewCo from acting unjustifiably and arbitrarily to injure particular persons or entities or particular categories of persons or entities, and (iii) require NewCo to subject registrars to consistent requirements designed to promote a stable and robustly competitive DNS, as set forth in the Statement of Policy. Following the finalization of the agreement between the USG and NewCo, NSI will recognize NewCo pursuant to a contract between NSI and NewCo.

NSI acknowledges that NewCo will have the authority, consistent with the provisions of the Statement of Policy and the agreement between the USG and NewCo, to carry out NewCo's Responsibilities.

Nothing in this agreement, apart from NSI's recognition of NewCo pursuant to this section of this agreement, shall limit NSI's rights to operate as a registry or registrar in TLDs other than .com, .net, .org, .edu, or to participate in any other lawful business pursuit.

Miscellaneous

Root Servers:

NSI agrees to continue to function as the administrator for the primary root server for the root server system and as a root zone administrator until such time as the USG instructs NSI in writing to transfer either or both of these functions to NewCo or a specified alternate entity.

While NSI continues to operate the primary root server, it shall request written direction from an authorized USG official before making or rejecting any modifications, additions or deletions to the root zone file. Such direction will be provided within ten (10) working days and it may instruct NSI to process any such changes directed by NewCo when submitted to NSI in conformity with written procedures established by NewCo and recognized by the USG.

Modification
Of Cooperative
Agreement:

Except as modified by this Amendment, the terms and conditions of the Cooperative Agreement, as previously amended, remain unchanged.