



Urban & Regional Information Systems Association

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3/24/2005

Julie Binder Maitra
Standards Coordinator
Federal Geographic Data Committee
USGS HQ GIO
12201 Sunrise Valley Drive
Reston, VA 20192-0002

Dear Ms. Maitra:

The Urban and Regional Information Systems Association (URISA) is pleased to transmit this proposal to create a Street Address Data Standard to the Federal Geographic Data Committee. The objective of this effort is to create data content, classification, transfer, and quality standards for street addresses. This work will be done under the auspices of the FGDC Subcommittee on Cultural and Demographic Data.

We are transmitting this proposal for review and action by the FGDC Standards Working Group at its next meeting on April 13, 2005.

Please do not hesitate to contact Martha Lombard (mlombard@spatialfocus.com) or myself if you have any questions, comments, or concerns related to this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "D Haley", is written over a light blue horizontal line.

Dianne Haley, GISP, BSc, MScGIS
President, URISA
dianne.haley@gov.ab.ca

Enclosure

copy - Randy Fusaro, US Census Bureau
Anne O'Connor, US Census Bureau
Martha Lombard, Spatial Focus
Ed Wells, OCTO
Hilary Perkins, Jacobs Civil

Proposal to Create Street Address Data Standards
Submitted to the Federal Geographic Data Committee (FGDC)
By the Urban and Regional Information Systems Association (URISA)

1. **Project Title:** Street Address Data Standards
2. **Date of Proposal:** March 24, 2005
3. **Type of Standard Proposed:** Data content, classification, transfer, and quality
4. **Submitting Organization:** Urban and Regional Information Systems Association (see Attachment A for URISA Board authorization)
5. **Point of Contact:** Martha Lombard, mlombard@spatialfocus.com, 205-616-0205
6. **Objectives:** Creation of data content, classification, transfer, and quality standards for street addresses. The data transfer standard will build on the Address Data Content Standard previously proposed by the FGDC (Public Review Draft, April 17, 2003). Some modifications may be proposed based on the content standard that is developed.
7. **Scope:** The standard will cover physical and postal addresses.
8. **Justification/Benefits:** Street addresses are the location identifiers most widely-used by state and local government and the public. Street addresses are critical information for administrative, emergency response, research, marketing, mapping, GIS, routing and navigation, and many other purposes.

In sponsoring the creation of Street Address Data Standards, the FGDC has an important opportunity to fulfill to its broader mandate by convening a local, state, and federal agency forum wherein these issues can be resolved, thereby helping to make our spatial data infrastructure truly national. Because they have evolved over many decades, under the control of thousands of local jurisdictions, in many different record and database formats, and to serve many purposes, different address formats and types pose a number of complex geoprocessing and modeling issues. As a consequence, government agencies struggle with these issues as they seek to integrate large, mission-critical files into master address repositories.

URISA, with the support of the National Emergency Number Association (NENA), proposes to convene a Street Address Standards Working Group that includes representatives from a range of interested federal, state, regional, and local government agencies, private-sector consultants, and professional associations. We propose to create Street Address Data Standards that extend the work done on the FGDC's existing draft address data content standard (Public Review Draft, April 17, 2003), and:

1. Provide a substantive foundation for the data transfer standard to facilitate street address data exchange within and between federal, state, regional, local government, and non-governmental sectors; and to offer a migration path from legacy formats to standards-compliant ones;
2. Provide a statement of best practices for street address data content and classification;
3. Recognize, as a practical matter, that different users may require different levels of standardization; and,
4. Define standards and tests of street address data quality.

URISA is a non-profit educational and professional association dedicated to the effective and ethical use of spatial information and information technologies for the understanding and management of urban and regional systems. It has 7,000 national and chapter members in the United States and Canada. With a broad-based membership of practitioners and subject matter experts in the government, private, and academic sectors, URISA is well-positioned to convene and lead a working group to create the standard. For the past six years URISA has sponsored and organized the annual Street Smart and Address Savvy Conference (endorsed last year by NENA, the United States Postal Service (USPS), and the Census Bureau), covering a broad spectrum of addressing issues and practices. Within the past year URISA has signed Memoranda of Understanding with USGS and FGDC making URISA a USGS Partner and FGDC Stakeholder.

NENA is a professional association of 7,000 members and 46 chapters dedicated to providing effective and accessible 9-1-1 service for North America. NENA fosters the technological advancement, availability, and implementation of a universal emergency telephone number system. In carrying out its mission, NENA promotes research, planning, training, and education. The protection of human life, the preservation of property, and the maintenance of general community security are among NENA's objectives.

- 9. Development Approach:** URISA will develop the standards in cooperation and with the support of the Census Bureau (Attachment B) and NENA (Attachment C). We propose to reconvene the roundtable discussion group that met at the URISA Address and Street Savvy Conference in St. Louis last August (Attachment D), and to expand the to include representative of key federal agencies and additional professional associations (see section 12). The group will include knowledgeable professionals and practitioners from the local, state, and federal government, and private-sector communities. We propose to establish a collaborative website to facilitate discussion and consensus of administrative needs, best practices, and technical details (Attachment E). This discussion will be furthered through teleconferences and meetings. The results of the small-group consensus will then be circulated for comment to memberships of all participating organizations.

The results will then be submitted through the formal standards approval process. If they are accepted, the Census Bureau will maintain the standards under the auspices of its duties as theme lead for the Federal Subcommittee on Cultural, Society, and Demographics, ensuring that the standard is revisited on the 5-year schedule as stipulated, or updating and revising as necessary.

10. Development and Completion Schedule:

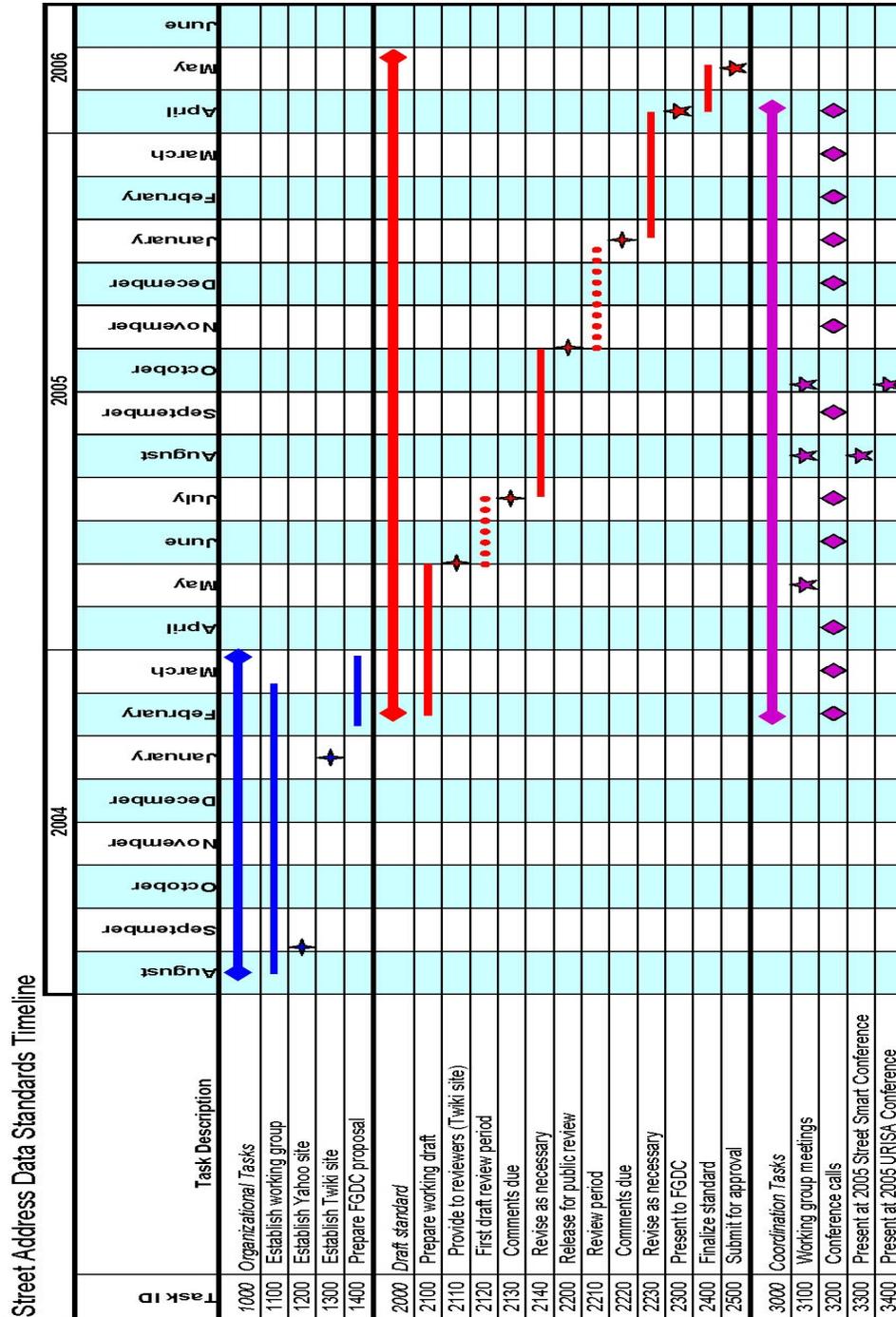
Work plan and milestones (see schedule on the following page):

1. February-May 2005: Draft and submit proposal, convene working group; set up collaborative website; obtain organizational endorsements; begin technical work; create rough draft
2. May-August 2005: Working group completes working draft for conference presentation and discussion with reviewers
3. August-October 2005: Comments synthesized into second working draft
4. October-December 2005: Review by member organizations
5. 2006: Synthesize comments and submit for release as formal draft standard for full public review; follow formal approval process thereafter

Meetings: Twelve monthly teleconferences of about one hour each, plus in-person meetings at the following milestone points:

1. May (in Washington DC): Discussion of rough draft (1 day)
2. August: Discussion of final draft; presentation at Street Smart and Address Savvy Conference (Austin, TX, August 14-17, 2005) (meeting 1 day prior to conference)
3. October: Completed consensus draft presented at URISA Annual Conference (Kansas City, MO, October 9-12, 2005) (meeting 1 day prior to conference)

Work Plan and Milestones



11. Resources Required:

Human resources: A core volunteer working group of about 10 persons, plus a larger volunteer review group of up to 20 more people. Core group members will take primary responsibility for drafting the standards. Reviewers will review and comment on the draft. All members will keep their organizations apprised and communicate any concerns from their boards or members. We expect core group members to spend about 60 hours on this effort, and review group members to spend about 40 hours.

Financial resources: If the proposal is accepted, URISA will seek support of approximately \$20,000 from FGDC, to cover modest travel stipends for in-person meetings, and teleconference and administrative support to be provided by URISA. Costs are estimated as follows:

1. Travel: Three in-person meetings of about 15 people, @ \$300/person
2. Teleconference calls: 12 one-hour calls (15 persons) @ \$100 each, based on typical URISA per-minute, per-person conference call costs
3. Coordination and administrative support (URISA staff): about \$5,000

12. Potential Participants Include:

Organizations: URISA, NENA, National States Geographic Information Council (NSGIC), National Association of Counties (NACO), National League of Cities (NLC), Geospatial Information Technologies Association (GITA), International City Managers Association (ICMA), American Planning Association (APA), National Association of State 9-1-1 Administrators (NASNA), Association of Public-Safety Communications Officials (APCO), National Emergency Management Association (NEMA), Organization for the Advancement of Structured Information Standards (OASIS).

Federal agencies: FGDC, USPS, US Census Bureau, USGS, Department of Housing and Urban Development (HUD), Environmental Protection Agency (EPA)

Private sector: GIS and CAD software vendors and consultants.

If the group becomes large, we may ask interested persons to select one of three levels of involvement:

1. Participant – Participates in writing drafts and responding to comments
2. Reviewer – Provides written comments on drafts
3. Observer – Receives copies of drafts, but does not comment

13. Related Standards: See Attachment F.

14. Other Targeted Authorization Bodies: We would prefer to work through the FGDC review process. If FGDC adoption of the standard is not possible, URISA will consider seeking ANSI recognition.

Attachment A: URISA Board Authorization

URISA Board of Directors

Motion to Support the Development of an Address Standards Working Group

Motion: The Urban and Regional Information Systems Association (URISA) supports the creation of an Address Standards Working Group for the purpose of developing address standards related to content, classification, transfer, and quality. These standards submitted to the Federal Geographic Data Committee (FGDC) under the auspices of URISA's stakeholder status with the FGDC and as a professional society participating with the FGDC in the development of the National Spatial Data Infrastructure (NSDI).

The Board further resolves to provide staff and logistical support to this effort in the form of teleconferencing and administration, in accordance with the required resources presented in the proposal.

The detailed proposal is attached to this motion and meets the specifications for the submission of a standards proposal as outlined by the FGDC.

URISA Past-President President Martha Lombard will lead this effort, with the support of former URISA Board of Directors members Ed Wells and Hilary Perkins. The core committee will consist of participants in the roundtable discussion group that met at the URISA Address and Street Savvy Conference in St. Louis in August, 2004. The committee will be expanded to include individuals familiar with addressing issues and standards development, representing the public and private sectors.

02 March 2005

Attachment B: Census Bureau Statement of Support



UNITED STATES DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. Census Bureau
Washington, DC 20233-0001

MAR 23 2005

Mr. Ivan B. DeLoatch
Staff Director
Federal Geographic Data Committee
US Geological Survey
590 National Center
Reston, VA 20192

Dear Mr. DeLoatch: *Ivan*

The U.S. Census Bureau supports the proposal by the Urban and Regional Information Systems Association (URISA) to form an Address Standards Group for the purpose of developing an Address Content and Address Data Transfer Standard. The Census Bureau recognizes that addresses are created and maintained at the local level and supports URISA's lead on the effort to develop the standard. We understand that these efforts will include the URISA constituency as well as participants from the previous effort by the Federal Geographic Data Committee (FGDC) Subcommittee on Cultural, Society, and Demographics. Information and materials from the previous Address Standard development work up will be provided to the new URISA-led working group to reference and/or incorporate into the new standard.

After the Address Content and Address Data Transfer Standard is accepted by the appropriate standards organizations, the Census Bureau, under the auspices of its duties as theme lead for the FGDC Subcommittee on Cultural, Society, and Demographics will maintain the standard. This will ensure that the standard is revisited on the 5-year schedule as stipulated and that the standard is updated and/or revised as necessary.

If you have any questions, please call Ms. Randy Fusaro of my staff. Her telephone number is 301-763-1118.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert A. Lamacchia".

ROBERT A. LAMACCHIA
Chief, Geography Division

Attachment C: NENA Statement of Support

National Emergency Number Association
The Voice of 9-1-1



March 15, 2005

Ms. Julie Binder Maitra
Standards Coordinator,
Federal Geographic Data Committee (FGDC)
12201 Sunrise Valley Drive
Reston, VA 20192-0002

Dear Ms. Maitra:

The National Emergency Number Association (NENA) is pleased to join with the Urban and Regional Information Systems Association (URISA) in support of its proposal to create a Street Address Data Standard. We endorse the effort to create data content, classification, transfer, and quality standards for street addresses, and we look forward to working with URISA and other organizations and federal agencies to achieve this goal. We hope the FGDC Standards Working Group will be able to act on the proposal at its next meeting on April 13, 2005.

NENA is a professional association of 7,000 members and 46 chapters dedicated to providing effective and accessible 9-1-1 service for North America. NENA fosters the technological advancement, availability, and implementation of a universal emergency telephone number system. In carrying out its mission, NENA promotes research, planning, training and education. The protection of human life, the preservation of property and the maintenance of general community security are among NENA's objectives.

NENA's point of contact for this effort will be Marc Berryman of Greater Harris County 911 (mberryman@911.org). Please do not hesitate to contact either of us if you have any questions, comments, or concerns related to NENA's support of this proposal.

Sincerely,



Bill McMurray, ENP
NENA President

Attachment D: Roundtable Discussion Group Participants

**URISA Address and Street Savvy Conference
St. Louis, MO, August 31, 2004**

Name	Agency	Email
Agatha Tang	ESRI	atang@esri.com
Anne O'Connor	Census	anne.v.oconnor@census.gov
Burt Ray Simpson	PCF/Address Access	psyberspyder@aol.com
Cheryl Benjamin	NYS-CSIC	cheryl.benjamin@cscic.state.ny.us
Ed Wells	DC OCTO	ed.wells@att.net
Hilary Perkins	Jacobs Civil Inc.	hilary.perkins@jacobs.com
Julie Binder Maitra	Federal Geographic Data Committee	jmaitra@usgs.gov
Martha Lombard	Spatial Focus, Inc.	mlombard@spatialfocus.com
Mike Walls	Plangraphics	mwalls@plangraphics.com
Mohammad Tariq	Peak Technology	mtariq@peaktsinc.com
Rich Allen	MAGIC	magicgis@aol.com
Sara Yurman	Spatial Focus, Inc.	syurman@spatialfocus.com

Others who have expressed interest in participating:

Name	Agency	Email
Alan Leidner	Booz Allen Hamilton	alan@bah.com
Ellen Meadows	City of Birmingham, AL	ecmeado@ci.birmingham.al.us
Kevin Neimond	National Assoc. of Counties	kneimond@naco.org
Marc Berryman	NENA / Greater Harris County 9-1-1 Emergency Network	MBerryman@911.org
Neri (Tom) Terry	Public XY Project	terryme@erols.com
Peirce Eichelberger	Chester County, PA	peichelberger@chesco.org
Peter van Demark	Caliper Corp.	peter@caliper.com
Steve Johnson	Booz Allen Hamilton	johnson_steven_e@bah.com

Attachment E: Draft Outline for Address Standards Working Group Discussion Site

--(Subject to Change by the Working Group)--

- 1.0 COMMITTEE BUSINESS AND RESOURCES
 - 1.1 Contact list
 - 1.2 Overall Scope and Approach
 - 1.3 Work plan and schedule
 - 1.4 Meeting Notes
 - 1.5 Reference Materials
- 2.0 INTRODUCTORY MATERIAL (per FGDC Standards Directive 4)
 - 2.1 Title, Title Page, Table of Contents
 - 2.2 Objective
 - 2.3 Scope
 - 2.4 Applicability
 - 2.5 Related Standards
 - 2.6 Standards Development Procedure
 - 2.7 Maintenance Authority
- 3.0 ADDRESS DATA CONTENT AND CLASSIFICATION STANDARDS
 - 3.1 General Concepts
 - 3.2 Standardization Level
 - 3.3 Simple Address Elements Definitions
 - 3.4 Compound Address Element Definitions
 - 3.5 Address Types
 - 3.6 Address Attributes
 - 3.7 Documenting Local Rules and Anomalies
- 4.0 ADDRESS DATA EXCHANGE STANDARD
 - 4.1 Introductory Material
 - 4.2 Structure
- 5.0 ADDRESS DATA QUALITY STANDARD (per ISO/TC 211 Draft Technical Specification 19138 Geographic Information – Data Quality Measures)
 - 5.1 Completeness
 - 5.2 Logic
 - 5.3 Position
 - 5.4 Temporal
 - 5.5 Thematic

Attachment F: Existing Standards Closely Related to the Proposed Standards, and Ongoing Standards Development Activities That May Affect This Project

International Standards:

- ISO 11180:1993 Standard for Postal Addressing provides mailing address structure requirements.
- ISO/TC 211 19112 Geographic Information – Spatial Referencing by Geographic Identifiers defines the conceptual schema for spatial references based on geographic identifiers that can be the basis for physical and postal address types.
- ISO/TC 211 19138 Draft Technical Specification 19138 Geographic Information – Data Quality Measures establishes the principles for the description of geographic data quality and specifies components for reporting quality.

United Kingdom:

- BS 7666: Part 3 Spatial Datasets for Geographic Referencing: Specification for Address specifies a model and structure for an address. BS 7666: Part 3 was used as a reference document.

Australia and New Zealand:

- AS/NZS 4819:2003: Geographic information - Rural and urban addressing establishes requirements and guidelines for a comprehensive rural and urban addressing system. It outlines the various elements of the system and provides guidelines for the application of those elements to a range of address site types in both urban and rural areas.

FGDC Standards:

- FGDC-STD-001-1998 Content Standard for Digital Geospatial Metadata (version 2.0) (CSDGM) defines the metadata, part of which documents addresses for contacts (persons and organizations) associated with a geospatial dataset. The CSDGM identifies the following metadata elements related to addresses: address type, address, city, state or province, postal code, and country. A data producer complying with the requirements of both the CSDGM and the Standard will note one inconsistency; the Standard expands the CSDGM closed domain of address type by recognizing a third address type: geographic. This inconsistency should not effect compliance with the requirements of either standard. (The CSDGM domain for address type is “mailing,” “physical,” “mailing or physical,” free text. The ADCS uses the term “postal address type” in place of “mailing address type” because “postal” is defined in ISO 11180, and hence is the preferred definition.)
- FGDC-STD-003, Cadastral Data Content Standard (CDCS) provides a model for storing information about geographic and physical type addresses for cadastral data collections. The CDCS additionally points to the CSDGM metadata elements to provide information about locations of agents (persons, organizations, or public agencies) associated with parcels (see FGDC-STD-001-1998).
- FGDC-STD-011-2001, Standard for a United States National Grid. The objective of this standard is to create a more favorable environment for developing location-based services within the United States and to increase the interoperability of location services appliances

with printed map products by establishing a nationally consistent grid reference system as the preferred grid for National Spatial Data Infrastructure (NSDI) applications. This standard defines the US National Grid. The U.S. National Grid is based on universally defined coordinate and grid systems and can, therefore, be easily extended for use worldwide as a universal grid reference system.

Agency Standards (United States) – USPS:

The United States Postal Service (USPS) maintains a standard, several manuals, and technical guidelines for mailing type addresses.

- USPS Publication 28, Postal Addressing Standards provides a standardized address format and content. It serves as the primary reference for identifying USPS-recognized data elements and mail delivery requirements.
- USPS Domestic Mail Manual provides definitions and elements of a complete delivery address and other information about domestic mail delivery.
- USPS International Mail Manual provides definitions and elements of a complete delivery address and other information about mail for delivery to foreign countries.
- USPS Address Element Correction Technical Guide describes procedures for correcting USPS-recognized data elements in mailpieces that have inaccurate or deficient addresses.
- USPS TIGER (Topologically Integrated Geographic Encoding and Referencing) ZIP Zone Improvement Plan 1998 documentation provides information on the TIGER/ZIP file created by matching information from the Census Bureau TIGER File to the USPS ZIP+4 Product and was used as a translation reference source.
- USPS Addressing Standards for Puerto Rico and Virgin Islands describes the proper format for mailpieces sent to Puerto Rico and the U.S. Virgin Islands.

The USPS maintains several documents of USPS-recognized data element domains. The Standard recognizes the USPS domains as approved domains for mailing address type descriptive elements.

- USPS Official Abbreviations for States and Possessions
- USPS Official Abbreviations for Street Suffixes
- USPS Official Abbreviations for Secondary Unit Designators

Note: Many USPS standards, manuals and technical guidelines are available on the Internet (URL = <http://www.usps.gov>)

Other U.S. Agency Standards used in developing the Address Standard’s descriptive elements and the Standard’s documentation requirements:

- United States Department of Housing and Urban Development’s (HUD) Address Quality Standards (draft)
- Centers for Disease Control’s (CDC) Common Data Element Implementation Guide (draft)
- The National Archives and Records Administration’s Historic American Building Survey
- The National Archives and Records Administration’s Historic American Engineering Record

- The United States Census Bureau's Master Address File (MAF) Documentation (version 5.0).
- The United States Environmental Protection Agency's (EPA) Contact Information Data Standard (draft)

Agency Standards (Canada):

- The Canadian Post Corporation's T575003 Version #2, The Canadian Addressing Standard Handbook provides Canada-specific mailing address structure requirements.

Non-Agency Standards:

- National Emergency Number Association (NENA) Standard Formats & Protocols for ALI Data Exchange, ALI Response & GIS Mapping was published by National Emergency Number Association (NENA) as a guide for the designers and manufacturers of systems that are used for the purpose of processing emergency calls.

Available at: http://www.nena.org/9-1-1TechStandards/nena_standards.htm