MINUTES OF THE
INELA NATIONAL DATABASE COMMITTEE MEETING
FEBRUARY 1, 2006

The National Database Committee of the Institute for National Environmental Laboratory Accreditation (INELA) met on February 1, 2006 at 2:00 p.m., Central Standard Time (CST) at the Forum on Laboratory Accreditation in Chicago, IL. Chairperson Dan Hickman of the Oregon Department of Environmental Quality led the meeting. A list of action items is given in Attachment A. A list of participants is given in Attachment B. The purpose of the meeting was to educate attendees on the activities of the committee and gain feedback.

Welcome and Introductions

Mr. Hickman introduced himself as chairperson of the committee and welcomed the participants. The committee members then introduced themselves. Mr. Hickman noted that committee members Paul Ellingston, Keith Ward, Michael Haller and Phil Coyner were absent. Mr. Hickman acknowledged their contributions to the committee.

Mr. Hickman gave a brief history of the committee and their current mission:

> To complete a comprehensive project plan, including project specifications, quality assurance protocols and success measurement criteria for a national data management system to track state accreditation status of environmental laboratories.

The committee decided against using the word "database" because it was too constrictive. The committee is charged with developing an information technology quality assurance plan. This will be started next week and will eventually be available on the INELA website.

Objectives of the project

➢ Identify users and stakeholders
➢ Identify user group needs and requirements
➢ Define fields needed to be included in the information management system
➢ Establish processes required for security
➢ Investigate type/design of information management system needed
➢ Establish process for data uploads and data retrieval
➢ Establish protocols for the management of the system
➢ Identify where the information management system will reside
➢ Determine the cost to maintain the information management system and investigate long-term funding options
➢ Prepare an Information Technology Quality Assurance (ITQA) Plan
➢ Devise a development plan for a national accreditation information management system

The committee will look at the whole data management system, not just store data. The scope is to write ITQA specifications for a Request for Proposal (RFP) so some entity will bid on it. There is a possibility to partner with the National Forensic Science Technology Center (NFSTC) since part of their cooperative agreement included a national database.

Assumptions

➢ Downtime minimized but dependent on resources.
➢ System is not required to be designed as a classical database application.
➢ System must use unified codes for methods, analytes, technologies, and matrices. A lack of maintained codes will cause the project to fail.

➢ System will be available to Accrediting Authorities, NELAC and non-NELAC, with create, delete and edit capabilities.
➢ Accrediting Authorities have the responsibility for data entry and review.
➢ System must be flexible and provide for future expansion.
➢ System will be available to the general public on the web in a read only format.

An important part of the project is the codes which will need to be unified or the project will not succeed. Mr. Hickman acknowledged that some existing systems may be used as resources. Dr. Anand Mudambi reported on the Staged Electronic Data Deliverable (SEDD) project that he is working on that uses data elements in a tiered system with multiple translation fields. Another attendee reported that ECOS established an added value list of methods, technologies and matrices from all 50 states. NEMI is a joint project with EPA Office of Water and USGS but has a limitation due to only the most recent version of a method is listed. The Substance Registry System (SRS) is another example of a coding system. Communication will be key – state to state and state to federal.

Stakeholders

The committee outlined who will need information:

➢ NELAC State Accrediting Authorities
➢ NELAC Federal Accrediting Authorities
➢ Non-NELAC State accrediting Authorities
➢ Other Accrediting Authorities
➢ Commercial Laboratories
➢ Municipal Treatment Plants
➢ Water Supplies
➢ Federal and State Regulators
➢ Federal and State Enforcement (Criminal and Civil)
➢ Legal Professionals
➢ General Public

An attendee asked that engineering consulting firms be added to the list.

Data Upload and Maintenance

Who will need to upload data and maintain the system:

➢ NELAC State Accrediting Authorities
➢ Non-NELAC State Accrediting Authorities
➢ Other Accrediting Authorities (Federal or commercial)

Information needed

Mr. Hickman outlined what type of information will be needed:

➢ Laboratory Fields of Accreditation
➢ Accreditation Status
➢ Primary and Secondary Accrediting Authority
➢ Laboratory Location
➢ Laboratory Contact Information
➢ Accreditation Status in History
➢ Pricing

An attendee asked that accreditation status needs to be real time if an analyte is dropped. Will the public assume that certification was revoked or suspended? Any entry should include the revision date by the accrediting authority; the current standard requires a minimum of two weeks. A suggestion was made that fields should be general so other customers can use the system. Some attendees felt that the accreditation history should only be available to AAs and enforcement people. The history needs to include lab names since these can frequently change. Attendees were very against putting pricing information in the data system.

Mr. Hickman asked is there were items missing. An attendee from USGS would like PT data added, specifically pass/fail. They would also like PT sample analyte concentration level and acceptance criteria. USGS has been asked to develop a database for PT results and was hoping that this one could be used for that purpose. Another request was for a uniform application package that would be online. Mr. Hickman stated that this request is not new; it has been requested for years.

Data elements

Mr. Hickman outlined the data elements that could be included in the system:

- Matrix
  - Code
  - Description
- Technology
  - Code
  - Description
- Analyte
  - Code
  - Name
  - FOT Category
- Method
  - Code
  - Description
  - Revision
  - Date
  - Technology
  - Program Approval
- Laboratory
  - EPA ID
  - State ID
  - Address
  - City
  - State
  - Zip
  - Phone
  - FAX
  - Web Address
- Lab Contact
  - Name
  - Title
  - Discipline
  - Phone
  - FAX
  - Email

- ➢ Lab Fields of Accreditation
  - • Lab
  - • Method/Analyte
  - • Matrix
  - • Accreditation Status
  - • Date
- ➢ Certificate
  - • Certificate #
  - • Issue Date
  - • Expiration Date
  - • Last Onsite
- ➢ Accrediting Authority
  - • Primary Contact
  - • Address
  - • City
  - • State
  - • Zip
  - • Phone
  - • FAX
  - • Email
  - • Webpage
  - • FOA
  - • Onsite Interval

One attendee stated that preparation method needs to be tied to determinative method or the prep method will just become another method. Attendees were concerned about the laboratory contact. Could there be multiple contacts? How do you make sure that the lab contact is unique? A discussion ensued regarding intervals of onsite audits. Since the audit interval of non-NELAC states can vary, notation must be made in database. This information could be password protected.

In Process

Mr. Hickman outlined the types of processes that will need to be developed:

- ➢ Establish processes required for security
- ➢ Investigate type/design of information management system needed
- ➢ Establish process for data uploads and data retrieval
- ➢ Establish protocols for the management of the system

It is important that we define what we want instead of how we want it. The discussion generated questions and comments:

- ➢ Define minimum criteria
- ➢ Who should own the database?
- ➢ There should be one identification per accrediting authority for security purposes.
- ➢ Backend platform could be SQL – Oracle, Open Source, etc.
- ➢ Front end software could be .NET2005 or JAVA
- ➢ Set benchmark for technology so it stays current for some period of time and can easily be maintained.
- ➢ Use password complexity rules for security
- ➢ Use documentation and online help

Can data be automatically uploaded to alleviate some of the above issues? We could include this but not require it.

Next steps

Mr. Hickman outlined the next steps of the committee:

➢ Prepare the Information Technology Quality Assurance Plan
➢ Determine the cost to maintain the information management system and investigate long-term funding options
➢ Complete a development plan for a national accreditation information management system
➢ Identify where the information management system will reside

The draft ITQA Plan will be posted on the INELA website for comments. One attendee suggested that it could be posted as a Request for Information (RFI). It could also be posted as a draft RFP to find problems before the RFP is officially posted.

The big question is where the data system will live. Also, who owns the data and the application. What about liabilities with ownership? An attendee suggested posting a disclaimer screen or add "terms of use". Could PT provider FoPT scope and AA scope of accreditation be added? These tables could be related to the data system.

Additional suggestions included:

➢ Look for a vendor with potential marketing opportunity to write code and not charge for it.
➢ Look for a vendor who writes code for another non-profit organization who can tweak the code and sell new code at a reduced price.
➢ Take ITQA document back to EPA for a grant.
➢ Look for a vendor who can merge what they are doing with some of what we are trying to do (e.g., A2LA, ACIL)
➢ INELA should maintain ownership of data system

Adjournment

Mr. Hickman closed the discussion by asking for comments in writing. The committee will start working on the plan next week. Their timeline is to post on the INELA website before the Kansas meeting in August. There being no further business to discuss, Mr. Hickman adjourned the meeting.

ACTION ITEMS
INELA NATIONAL DATABASE COMMITTEE MEETING
FEBRUARY 1, 2006

Item No.	Date Proposed	Action	Date to be Completed
1.	2/1/06	Develop ITQA Plan and post on INELA website for comment	
2.			
3.			
4.			
5.			
6.			

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