

OASIS NIEMOpen Analytical Laboratory Sub-committee

Proposing OASIS NIEMOpen Analytical Laboratory Sub-Committee



**Homeland
Security**

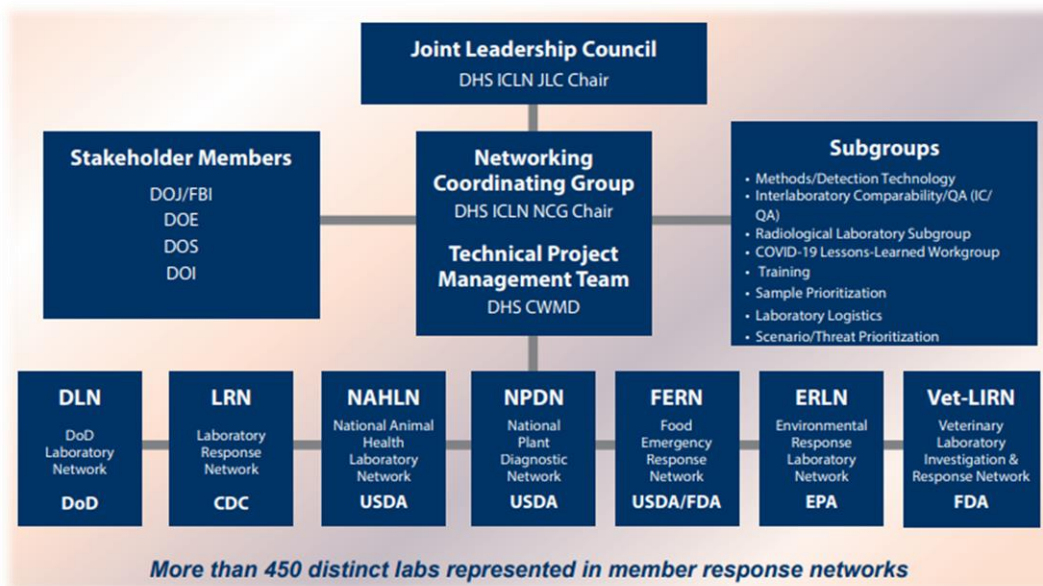
Science and Technology

Unclassified

About ICLN



- The Integrated Consortium of Laboratory Networks (ICLN) coordinates federally sponsored analytical laboratory services for chemical, biological, radiological, and nuclear incidents. The ICLN does this through planning, identifying resources, providing laboratory surge capacity support, and defining key process steps for information exchange and data sharing during an incident.



ICLN Coordination



Two Major Coordinating Elements of the ICLN:

- 1. STRATEGIC LEVEL:** Joint Leadership Council (JLC) is made up of one senior policy member from each Department or Agency participating in the ICLN.
 - The JLC is charged with “assuring an appropriate strategy is in place to support an effective all-hazard laboratory response capability.”
- 2. OPERATIONAL LEVEL:** Network Coordinating Group (NCG) is composed of senior technical and program representatives.
 - The NCG is charged with “promoting enhanced commonality and integration of network functions.”
 - There are presently seven networks within the NCG: **DLN, CDC LRN, ERLN, FERN, NAHLN, NPDN, and Vet-LIRN.**

Network Name	Primary Network Focus
DLN: DoD Laboratory Network; Agency: DoD	Human clinical, animal (e.g., zoonotic surveillance), vector-borne (e.g., mosquito and tick surveillance), environmental, and food matrices of the military
ERLN: Environmental Response Laboratory Network; Agency: EPA	Environmental matrices
FERN: Food Emergency Response Network; Agencies: HHS/FDA and USDA/FSIS	Food consumed by humans and animal feeds
LRN: Laboratory Response Network; Agencies: HHS/CDC	Clinical specimens as well as environmental, water, and food samples
NAHLN: National Animal Health Laboratory Network; Agency: USDA	Animal clinical/live animals in the field
NPDN: National Plant Diagnostic Network; Agency: USDA	Plants/crops in the field
Vet-LIRN: Veterinary Laboratory Investigation & Response Network; Agencies: HHS/FDA	Regulatory compliance and safety of animal feeds and veterinary drugs by testing animal diagnostic samples

NIEMOpen Analytical Laboratory Sub-Committee Value Proposition

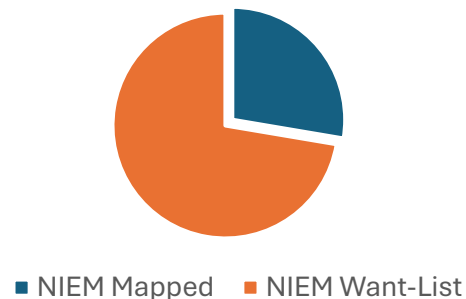


- Increases use of analytical Labs common and standard data and information sharing model for their Community of Interest
- Using NIEMOpen increases interoperability within the DoD, DHS and other federal, state, local, and tribal entities
- Reduces development and maintenance costs for any entity seeking information sharing links with Integrated Consortium of Laboratory Networks
- Analytical Laboratory broadens accessibility of information to Other NIEMOpen sub-committee members
- Promotes analytical Labs community-based agreements on Data Element names and definitions and code list

Analytical Laboratory Sub-Committee Initial Data Element overview

- Analytical Laboratory initial Minimum Data Element (MDE): 47
- Analytical Laboratory Data Elements Mapped to NIEMOpen: 13
- Analytical Labs Data Elements inclusion into NIEMOpen (want-List): 34
- The Analytical Laboratory 13 Data Elements are mapped to the NIEM CORE
- Standards harmonization activity is required to harmonize the initial Analytical Laboratory code list such as “Location Type” and “Uncertainty Type”

Initial Analytical Laboratory
Data Element



MDE = Minimum Data Element
Want-List = List of attributes requiring standardization for
input into OASIS

NIEMOpen Analytical Laboratory Sub-Committee Next Steps

- ✓ Establishing a business need and formal NIEM model functional area
 - e-CLA and I-CLA (Contributor License Agreement)
- ✓ Registering for NIEMOpen mailing lists
- Reviewing OASIS lightweight rules: <https://www.oasis-open.org/policies-guidelines/open-projects-process/>
- Review NBAC governance doc
- ✓ Establishes the organization, governance, rules, and processes for their Col (i.e. Drafting a governance doc) to manage the model content associated with the Analytical Laboratory Sub-Committee
- ✓ Attending NBAC meetings
- ✓ Preparing a brief for the NBAC
- ✓ Actual content can be worked on, before hand, in parallel or after creating the Sub-Committee
- Notifying OASIS PGB

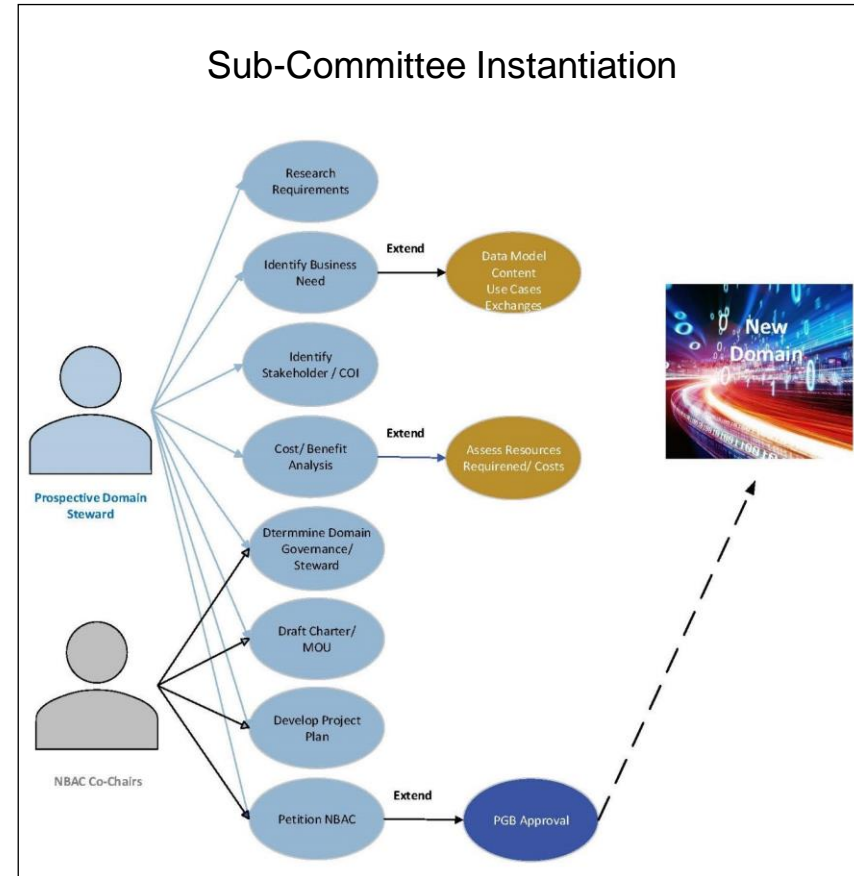
Open Project Rules

This version of the OASIS Open Project (OP) Rules was approved by the OASIS Board of Directors on 14 June 2022 and became effective immediately. The change was announced to OASIS members on 01 July 2022 in <https://lists.oasis-open.org/archives/members/202207/msg00000.html> Table of Contents 1. Purpose of Open Projects 2. Project Formation 3. Roles of Parties in the [...] www.oasis-open.org

NIEMOpen Analytical Laboratory Sub-Committee Operational Responsibilities

With the Support of DHS S&T Standard's Office

- Finalize governance document
- ✓ Create standard operating procedures
- ✓ Appoint Chair/Co-Chairs
- ✓ Appoint NBAC TSC voting members
- ✓ Maintain a roster
- ✓ Schedule and hold public meetings
- ✓ Conduct a kickoff meeting
- ✓ Conduct sub-committee business
- Technical - create model and exchanges
- Technical - participate in harmonization and model version cycle activities
- ✓ Conduct outreach to stakeholders.





Homeland Security

Science and Technology

DIVERSE PERSPECTIVES + SHARED GOALS = POWERFUL SOLUTIONS



ICLN Tools

Portal: A secure, password-protected web portal that can be used by member networks on a day-to-day basis as well as during an incident.



Combined Registry: A password-protected database that houses the Methods Registry, network proficiency testing data and schedules, and the training calendar.



The Combined Registry is a multi-function application and available through the ICLN Portal. It provides the ICLN community the ability to securely access and share Methods, Proficiency Testing, Training information, and schedules.

Data Exchange Utility

Utility: A secure online system that supports the exchange of laboratory results data in an agreed-upon standardized ICLN format, available through the ICLN Portal.



- Converts from native network formats to common MDE* format
- >10K record upload in <10 minutes
- 400K records searchable <4 minutes with 8 concurrent users

*MDE = Minimum Data Elements: A format developed by the Methods and IT subgroups comprising some 40 fields intended to encompass all attributes potentially associated with samples.

Standard Operating Procedure/Key Process Steps

Checklist: Provides guidance on how to request assistance for capability/capacity support from fellow networks; describes the processes/procedures to communicate about ongoing incidents/events; simplifies data reporting between network program offices; and assists with returning resources back to their home network.



OPERATIONAL STEPS OF THE ICLN

ICLN Activated

- Network member recognizes there may be a need for collaboration.
- Incident is created on the ICLN Portal.
- Communication is sent to all NCG members.

Initial SITREP

- A SITREP is issued when a potential or evolving situation has been confirmed as a valid incident via a positive analytical result.

ICLN Coordination Teleconference

- Details of the incident, including current laboratory capacity and capability, are discussed. Resources may be requested to help respond to the incident.

SITREP Updates & Data Exchange

- SITREPs are updated as new information becomes available.
- Analytical data results are uploaded to the ICLN Data Exchange Utility.

ICLN Deactivated

- Resources no longer needed are returned to their home network.
- Final SITREP issued to close out incident.

—This process may vary slightly from incident to incident.—

ICLN Exercises

Completed ICLN Tabletop (TTX) and ILCE/Live Sample Exercises:

Monthly Exercises

Tabletop Exercises

Internetwork Laboratory Coordination Exercises

Interagency Exercises

ICLN COLLABORATION & COORDINATION

Tabletop Exercises (TTXs):

- B. anthracis (December 2008)
- Melamine in macaroni product (December 2008)
- H5N1 exercise (2009)
- B. anthracis inhalation (IBRD, July 2010)
- B. anthracis inhalation (October 2010)
- C. botulinum in food (October 2010)
- Sodium fluoroacetate in food (October 2010)
- Foot and Mouth Disease (March 2011)
- Rhythibacter Toxicus (September 2011)
- Rad TTX: 3 RDD (Denver, Chicago, Los Angeles) using Strontium-90 and Plutonium-238 (February 2012)
- Chemical-in-Milk/ChemR2 (August 2012)
- Foot and Mouth Disease in Milk (May 2013)
- Radiological IND (July 2013)
- Anthrax Validation Exercise (April, 2014)

- Cyclosarin Tabletop Exercise (September 2014)
- Nuclear Power Plant Tabletop Exercise (June 2015)
- Sodium Fluoroacetate Tabletop Exercise (December 2015)
- Cyanide/Ethyl Parathion/Strontium-90 Mixed Agent Tabletop Exercise (September 2017)
- Opioid Tabletop Exercise (September 2018)
- Biological/Radiological – Americium-241/ Highly Pathogenic Avian Influenza (H5N1) (June 2022)

Internetwork Laboratory Coordination Exercises (ILCEs) & Live Sample Exercises:

- BioRad2 Live Sample Exercise (January 2023)
- Fentanyl Live Sample Exercise (January 2024)

IN SUMMARY:

The ICLN delivers a coordinated consortium of networks that are:

- Aligned with national, departmental, and agency guidance, policies, and response mechanisms.
- Poised to deal with high consequence, low probability events by leveraging existing laboratory resource capability and capacity.

The ICLN provides an operational, cost-effective contribution to national security.

CONTACT INFORMATION

Email:
ICLN@HQ.DHS.GOV
Public Website:
<https://www.icln.org/>

