



Environmental Information Exchange Network

Supporting the Mission:
Making Technology Work for You

Patrick Garvey

EPA Director

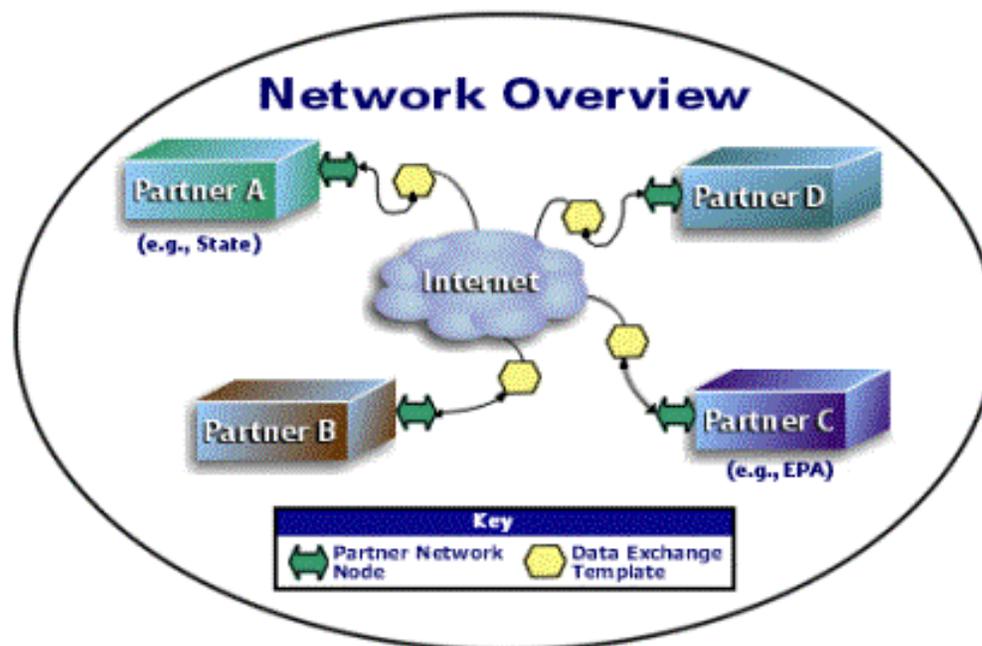
Network Steering Board

State/EPA Shared Vision

The States and EPA are committed to a partnership to build locally and nationally accessible, cohesive and coherent environmental information systems that will ensure that both the public and regulators have access to the information needed to document environmental performance, understand environmental conditions, and make sound decisions that ensure environmental protection.



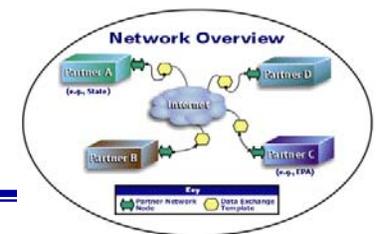
What is the Exchange Network?



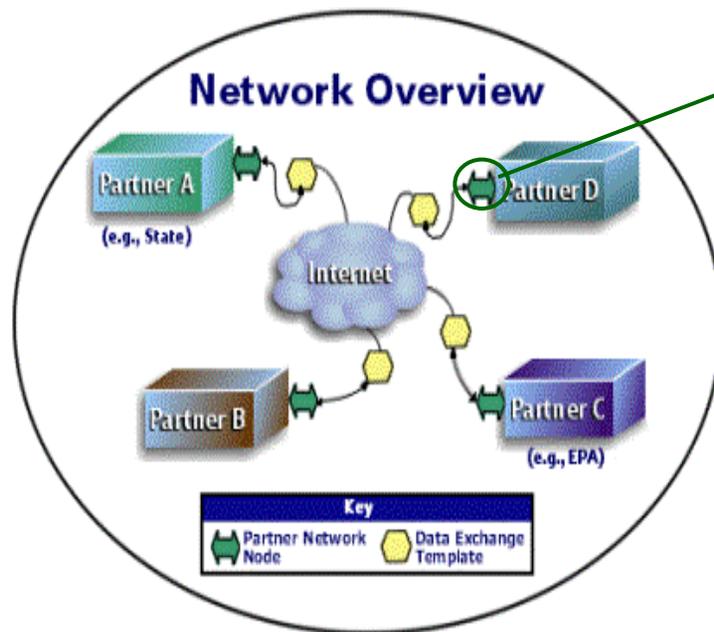
An Internet and standards-based method for exchanging environmental information between partners.

Exchange Network Foundations

- Data standards are incorporated
- Partners agree on exchange data type, frequency, and method
 - Trading Partner Agreements
 - Registered XML schema
 - Exchange data over a secure network via each partner's data transfer point, or "Node"



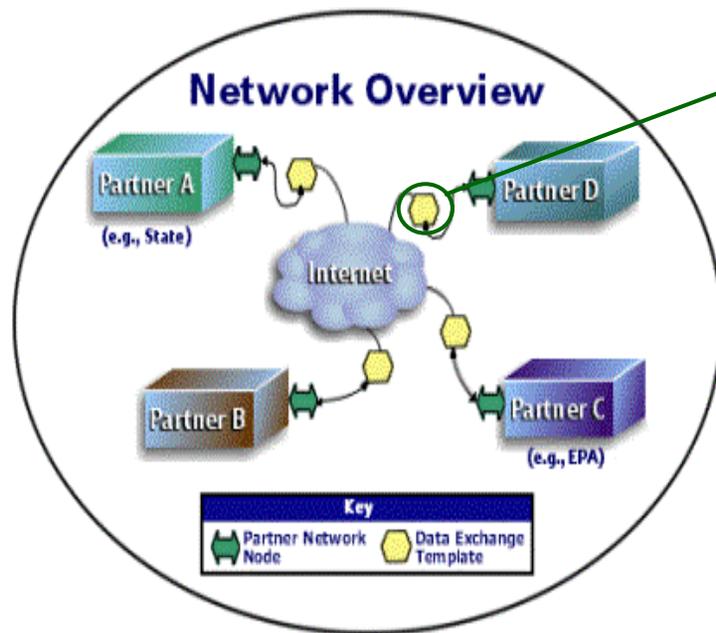
Data Transfer Nodes (Web Services)



Nodes

- Hardware and software used to exchange information on the Network
- Use the Internet, a set of protocols, and appropriate security to respond to authorized requests for information
- Send the requested information in a standard format, XML

Data Exchange Templates/ XML Schema



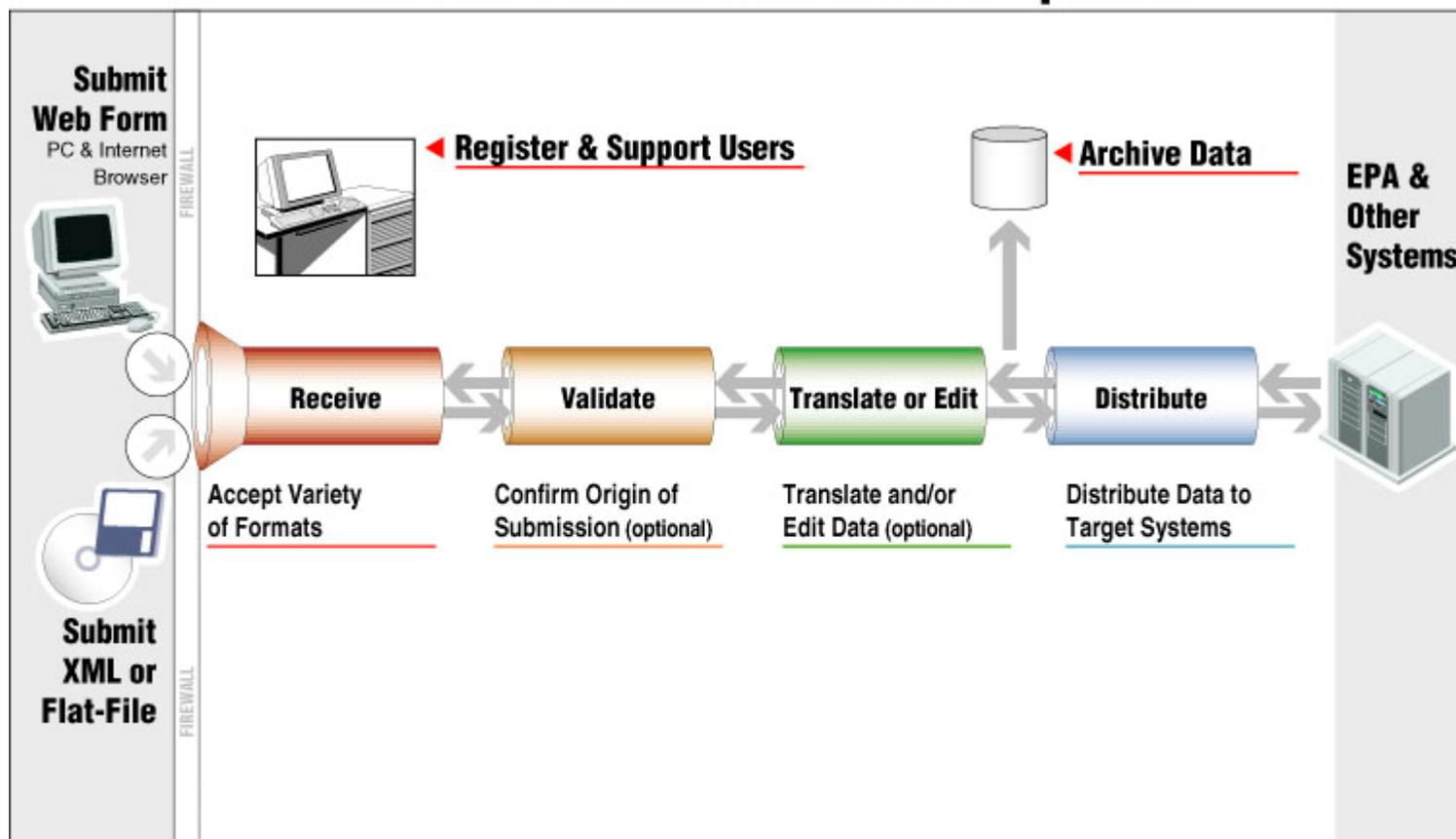
● Data Exchange Templates

- Describe format of data being exchanged
- Consist of XML schema
- Draw upon data standards
- Potential to reuse XML schema modules

Schema are developed for each exchange type (e.g., Discharge Monitoring Report data)

Central Data Exchange (CDX)

Overview of CDX Functions and Options



Data Standard Example

- Environmental Sampling Analysis and Results
 - Test methods
 - Sample results
 - Type of measures
 - Time/date formats
 - Sample treatment
 - Extensions for water, waste and air

Trading Partner Agreements (TPAs)

- TPAs are made between exchange partners (e.g., State and EPA)
- Identify data exchange frequency
- Identify exact data types/fields exchanged

TRADING PARTNER AGREEMENT

Between the Nebraska Department of Environmental Quality hereinafter referred to as NDEQ and the U.S. Environmental Protection Agency Region VII acting as a representative for the U.S. Environmental Protection Agency and hereinafter referred to as EPA for their participation in sharing data as part of the Facility Identification Integration Activities. The use of the term Agency will refer to both partners.

I. PURPOSE

The purpose of this Trading Partner Agreement (TPA) is to identify the activities that NDEQ and EPA will undertake as partners of the Facility Identification Integration Activities. As partners, each will work cooperatively to implement an exchange of facility identification data pertaining to Nebraska sites/facilities for incorporation into the Nebraska Integrated Information System(IIS) and the EPA Facility Registry System(FRS). Each partner will provide internet access to the data, making it available for use by each partner, businesses, interest groups, and the public in general.

II. BACKGROUND

The partners represent Federal and State Government whose responsibilities in general are for the protection of the environment. As part of their responsibilities, the partners collect and maintain data to support their agency's environmental program interest activities. The consistent identification of facilities within each agency and between agencies is key to the proper use of other data collected by agency environmental programs. It ensures that NDEQ and EPA recognize the same universe of regulated facilities in Nebraska and how these facilities relate to environmental program interests, and their associated data.

Breadth of Exchange Network

eDMR Challenge Grant

Using the EN to develop electronic Discharge Monitoring Reports with States and EPA

- Michigan, Wisconsin, Florida, Indiana, Pennsylvania, and Minnesota

Beaches Challenge Grant –

Exchanging Beach Monitoring Data with EPA

- New Jersey, Delaware, New Hampshire, Georgia, California, North Carolina

Pacific Northwest Surface Water Quality Exchange

Challenge Grant - Exchanging surface water monitoring data between states

- Oregon, Washington, Alaska and Idaho

Drinking Water Laboratory

Challenge Grant –Exchanging drinking water laboratory results between Laboratories and states using the EN

- New Hampshire, Maine, Rhode Island, Vermont, New Jersey

Progress/Trends

- While not a set performance measure – much early success has been extending the Exchange Network beyond the State to EPA exchange
 - Facility/Regulated Community to State exchanges occurring
 - State-to-State exchanges occurring
 - State agency to State agency exchanges starting
- Many states are asking for EPA out flows – from EPA to States. For example:
 - TRI data
 - NPDES data (when states aren't delegated)
 - RCRA info data

Changing Roles!

- Partners assume increased data stewardship responsibilities
- Partners collaborate to develop data/transaction standards and Trading Partner Agreements
- Partners have responsibility to map internal system data to Data Exchange Templates or schema

What's next?

- Harmonization of products
 - In the future, things will be easier
- Look to expedite XML schema development
- Leverage the Network in non-traditional reporting relationships
- Keep up with technology changes
- Document Data for Shared Use

Contact



www.exchangenetwork.net