

State/EPA Environmental Exchange Network

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State/EPA Information Trends

- High demand for access to environmental information among partners
- Current stove-pipe approaches to information exchanges are inefficient and burdensome
- States modernizing information systems and migrating away from use of EPA national systems
- Use of integrated information technologies and approaches is on the rise



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.

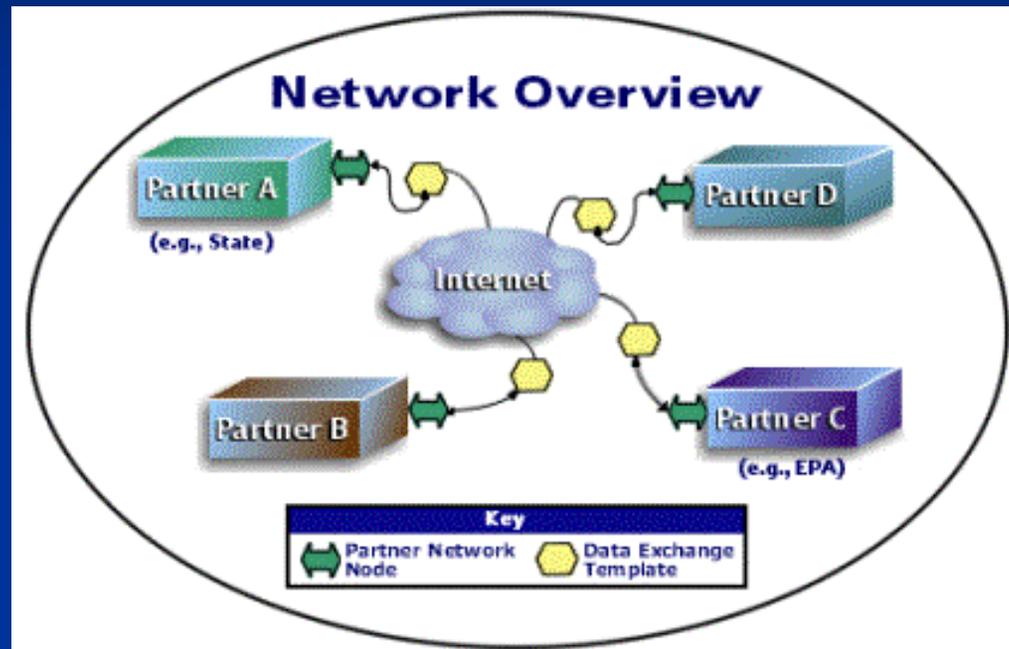


IMWG Develops Exchange Network

The IMWG focused on the issue of “how” data is exchanged between partners (states, EPA, local, industry, other agencies)

- June 2000 – IMWG prepared “*Shared Expectations of the State/EPA Information Management Workgroup for a National Environmental Information Exchange Network (the Network)*”
- July 2000 – IMWG chartered a Network Blueprint Team to prepare the conceptual design for the Network
- October 2000 – IMWG Blueprint Team Initial Report describes the Exchange Network Concepts
- February 2001 - IMWG Blueprint Team Update and commissioning of an Interim Network Steering Group to develop Implementation Plan
- 2002 Exchange Network Implementation plan finalized
- 2002 Network Steering Board (NSB) chartered to implement the Exchange Network
- Fall 2003 – First data flow from State to EPA using the Network

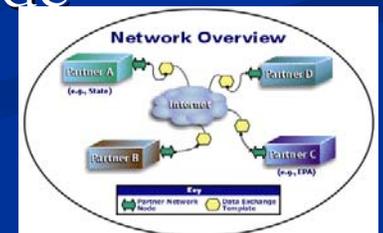
What is the Exchange Network?



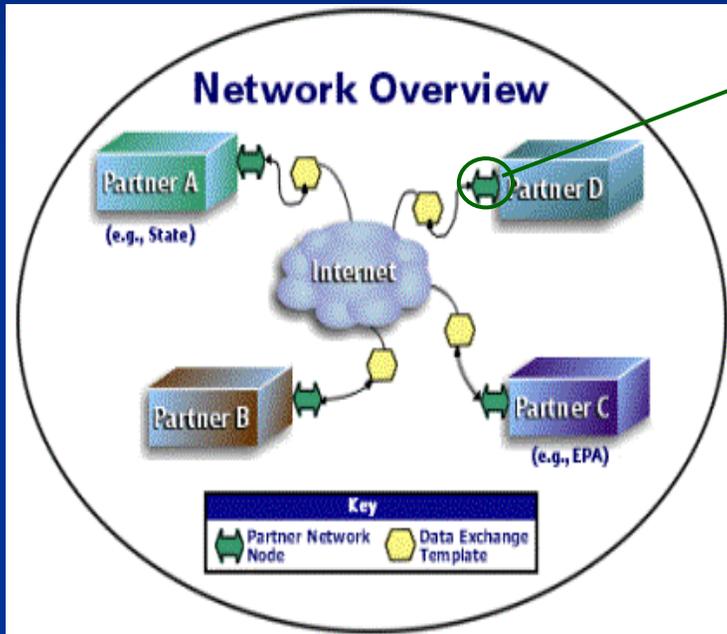
An Internet and standards-based method for exchanging environmental information between partners.

Exchange Network Foundations

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



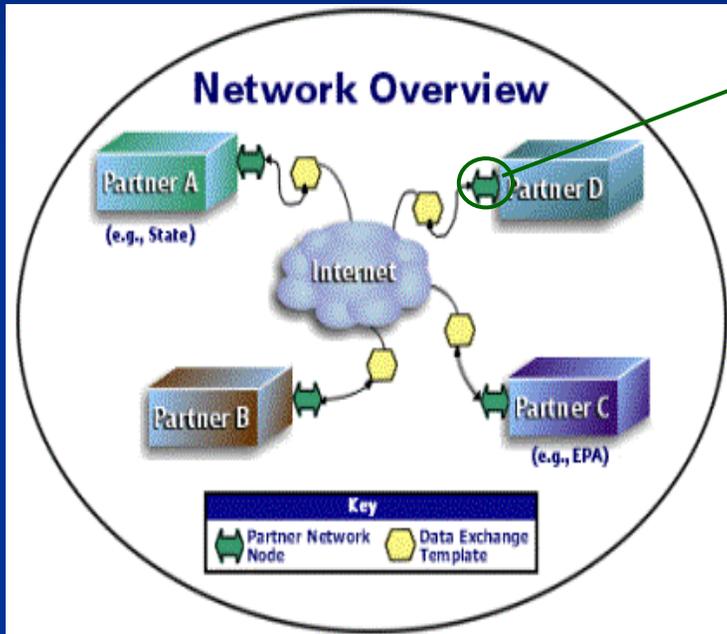
Data Transfer Nodes (Web Services)



■ 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
- Each partner has only one Node

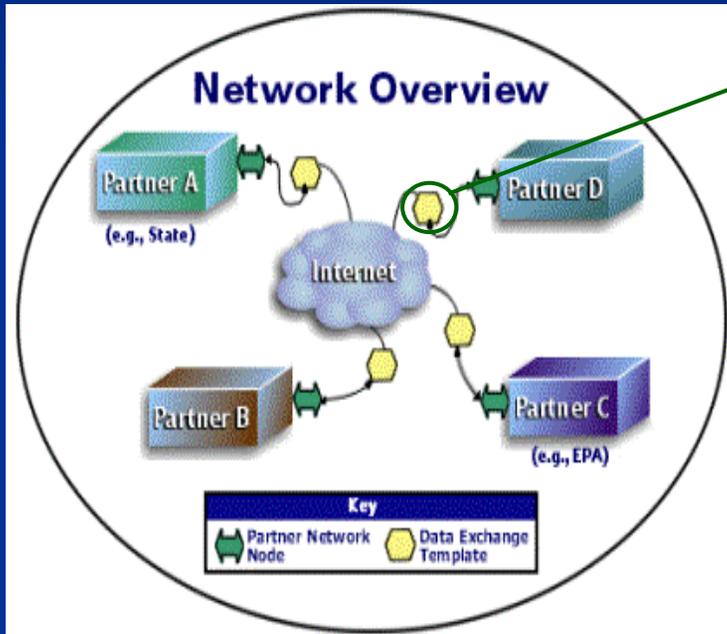
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Data Exchange Templates/ XML Schema



■ 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., Drinking Water data)

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.

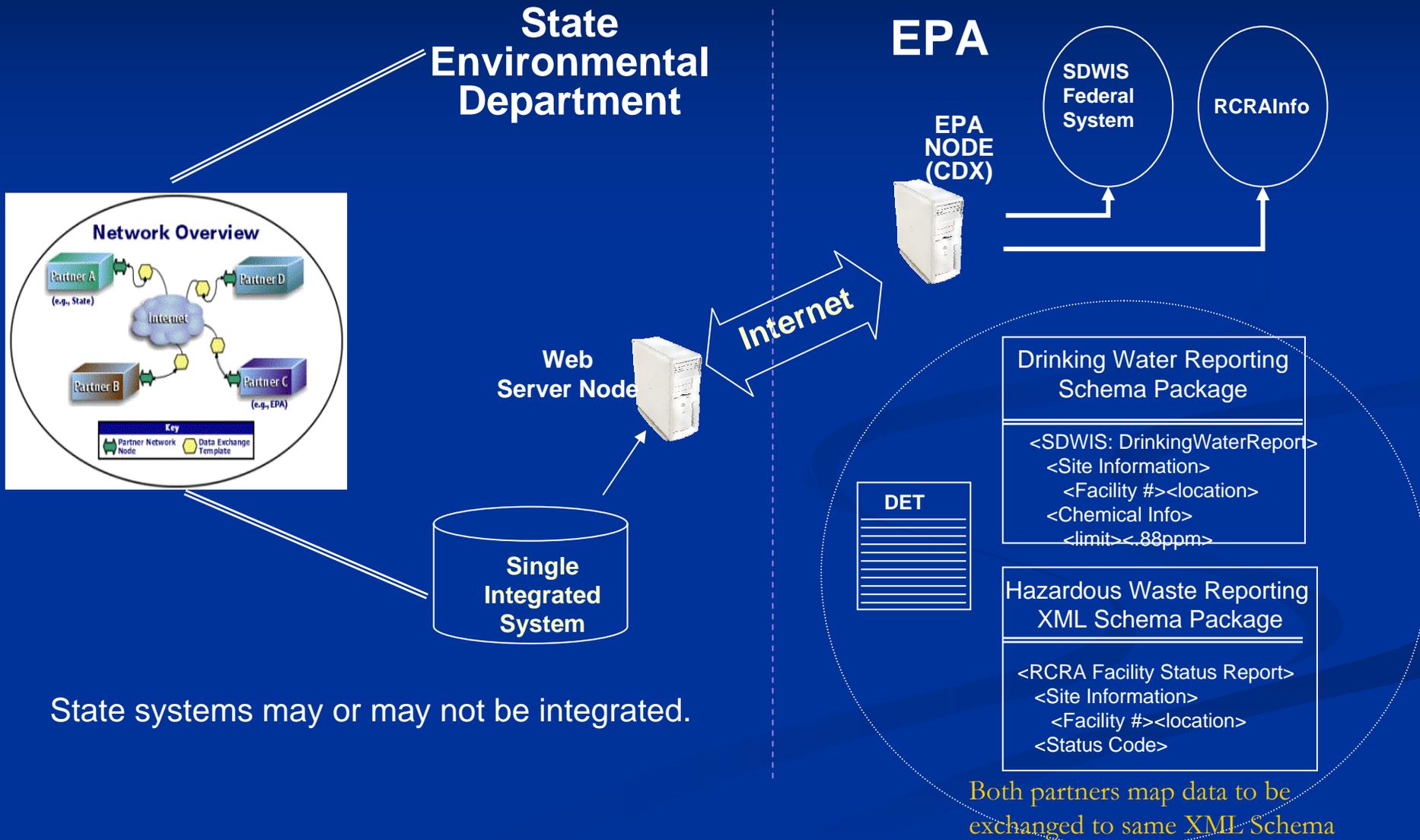
I. PURPOSE

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

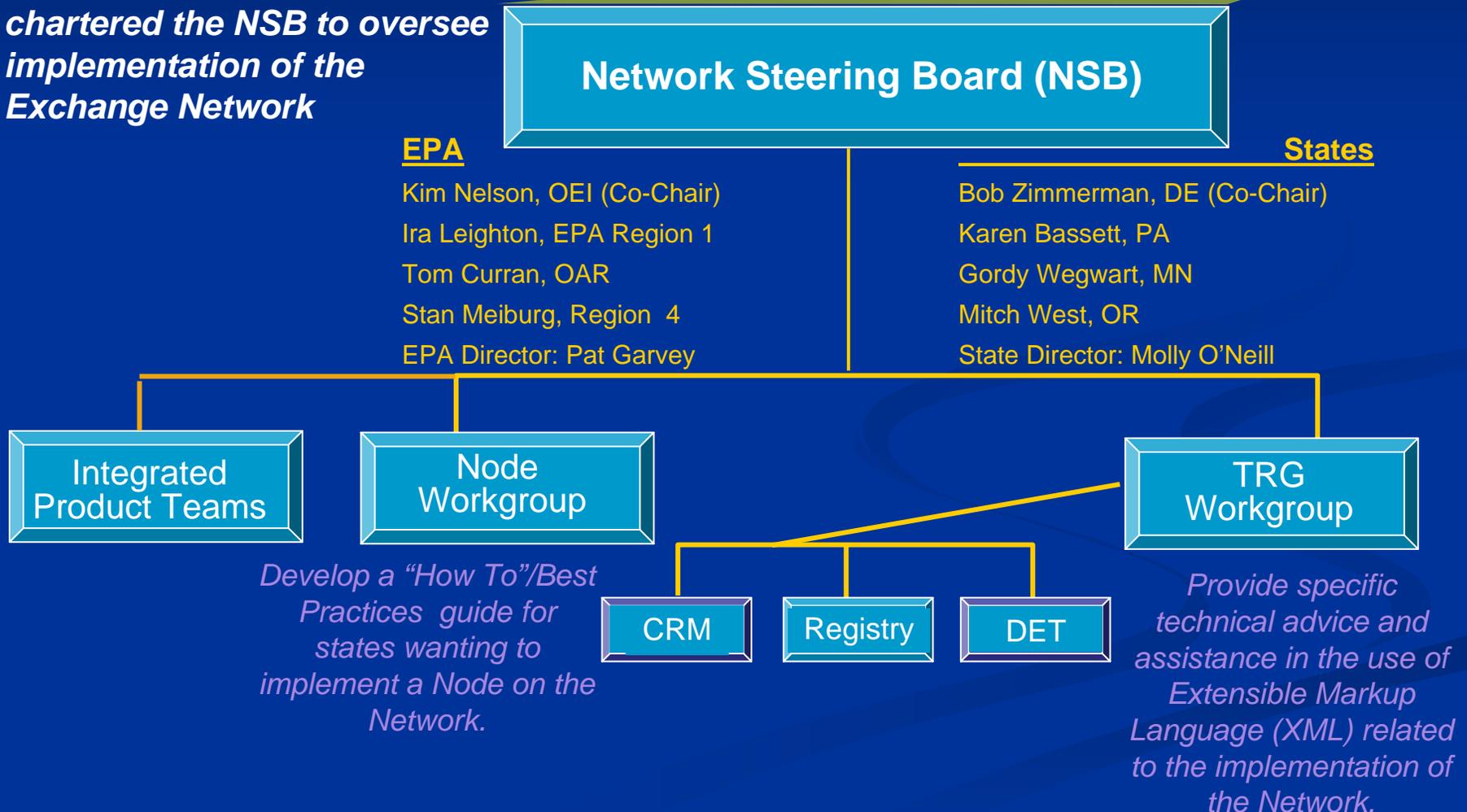
The partners represent Federal and State Government whose responsibilities in general are for the protection of the environment. As part of their responsibilities, the partners collect and maintain data to support their agency's environmental program interest activities. The consistent identification 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.

How the pieces fit together



NSB Management Organization

The State/EPA IMWG chartered the NSB to oversee implementation of the Exchange Network



Performance Measures

- Focus on both building infrastructure and exchanging data
- Goal – Create critical mass by end of 2004
- 3 Measures with Specific Targets

Performance Measures (Cont'd)

- *Performance Goal 1: Success is defined as data flowing through to destination systems with no diminution of service.*

Type	Schema Available	Goal	Progress
FRS	Yes	20	6
Beaches	Yes	7	2
NEI	Yes	12	Not due until Spring
PCS/IDEF	Yes	10	1
RCRAInfo	No	10	Not available yet
SDWIS	No	10	Not available yet

Performance Measure (Cont'd)

- *Performance Goal 2: Success is defined as States that are capable of multiple flows (two or more) to partners.*
 - *Target: 10-14 States doing multiple flows by end of 2004*
 - *Progress – No States at this time, but several on the cusp of doing multiple flows.*

Performance Measures (Cont'd)

- *Performance Goal 3: Success is defined as having the technical architecture in place by having partners establish fully functional Nodes.*
 - *Target: 35 Nodes by the end of 2004*
 - *Progress: 7 Fully Operational and flowing data between states and EPA but the queue is full....*
 - *10-12 more built or being tested*
 - *8-10 in building stage*
 - *8-10 in planning stage*

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

What's Next?

- The train is moving data from partner to partner but the processes are still bumpy
 - Therefore, developing a change management strategy to move to better next generation Exchange Network while not disrupting current progress
 - The Next Generation Network
 - Incorporating new Data Standards into next version of XML Schema
 - Smoother operations and processes – make it easy!
 - Scheduling and managing new releases of technical requirements and XML Schema.