Radon Data Exchange
Integrated Project Team (IPT) Workplan
DRAFT

This workplan defines the objectives, leadership, and membership of an Integrated Project Team (IPT) that will guide the development of a radon data exchange. It will be refined and finalized based on input from the full IPT.

Background on Integrated Project Teams

Integrated Project Teams (IPTs) are used to achieve successful solutions to complex problems that involve multiple organizations. An IPT is a multi-disciplinary, cross-functional team brought together to implement the processes necessary to deliver a defined product or set of products. IPTs are multi-disciplinary in order to bring together all the business and technology skills required to construct a successful product. IPTs are cross-functional in the sense that they include representation from the various organizations that have different functional roles with respect to the product.

Radon Data Exchange Background

Radon remains a leading cause of cancer. As we ramp up action to reduce radon's health risk, two areas where increased attention is needed are the collection of data and its subsequent use of data. EPA, states, and several national and regional consortia all collect radon data. These programs have differing data needs, reporting requirements, thresholds, calculation protocols, and approaches to validation and verification of data. Despite these differences, the data collections share common purposes – improved tracking and understanding of radon exposure. Data is information and information is the programmatic foundation for effective radon risk reduction. People leading these programs need access to data that is reliable, consistent, flexible, and comparable across programs. While there is a significant amount of radon data, there are currently no systems for examining the multiple sources or drawing larger conclusions on a regional or national level. EPA wants to launch a partnership effort with states and industry to better coordinate the collection of radon data, and aggregate as much available data as desired.

Objectives and Anticipated Work of the IPT

The technology of the National Environmental Information Exchange Network (Exchange Network) offers a standardized method for sharing environmental data. The Radon Data Exchange IPT is a forum for EPA, states, and other stakeholders to contribute toward the development of an Exchange Network solution for sharing radon data. While the role of the Exchange Network is the exchange of reported information, the process of identifying a common approach can also serve to develop more efficient data collection. Therefore, it is anticipated the IPT deliberations will help identify data elements that may be useful in an electronic data system.

The IPT's work will be completed in three consecutive phases:

Phase I: Developing a shared goal and project mission
First, the IPT needs to identify by reaching out to the radon community, and particularly data-rich states, the interests of all stakeholders in developing the database. This will create a shared understanding of the common needs, potential benefits and concerns about a common data network. These conversations will determine the basic requirements of the Network. This process will also help identify team members as well as an approach for communicating with all interested parties.

Phase II: Identify data elements for the IPT to consider including the mandatory radon reporting schema

The IPT's ultimate goal is to develop a standardized system for sharing radon data that is optimized for the reporting and informational needs of all stakeholders. This system would increase access to local, regional, and national data while reducing the reporting burden associated with radon data collection. Standardizing the reporting requirements across the states ensures there is a common set of data that will allow for better analyses on a national level. This can benefit businesses who are reporting to multiple states. Better data enables regions and states to focus limited resources on areas with greatest risk to radon exposure. The shared database can assist stakeholders to measure progress, report results, and determine where and if certain outreach programs are obtaining results as planned.

Phase III: Plan, design, develop, and document a Radon Data Exchange that includes all of the components required by the Exchange Network

The IPT is responsible for identifying the standardized common data elements and the business processes the Exchange Network will support. The IPT will work with the Exchange Network to ensure that all issues and concerns identified by our stakeholders in Phase I are addressed. The IPT will coordinate with the Exchange Network to ensure that the architecture and schema meet the needs without duplicating efforts or does not add burden to states participating in the program. The IPT will also ensure that the Exchange Network allows for room to grow in order to incorporate future needs and changes in technology.

Anticipated Work Steps:

Phase I: Completion Date, January 31, 2011

Step 1: Developing a shared goal and project mission
A meeting was held on December 17th with interested stakeholders to discuss purpose, concerns and determine basic requirements and future goals for the database. It also identified criteria for selecting team members to participate in this effort.

The following is a summary of benefits of establishing a shared radon database named by stakeholders:

- Improving data collection and increasing efficiency,
- Using data to do a better job of reducing radon risk,
- Developing a database that is compatible with existing databases and tools for comparability across regions and states, to focus on areas needing attention,

- Making reporting easier for regulated industry operating in multiple states,
- Improving the accuracy of the data being used in local decisions about testing and RRNC requirements – new codes reference the US EPA map, but isn't as accurate as it needs to be,
- Incorporating advances in technology to make data more manageable, accessible and useful, for better analysis, including capacity to compare tests year by year to see if they are going up, see if radon levels are increasing, and others,
- More accurate and accessible source for information for legislative purposes and environmental reviews,
- Ability to link to existing initiatives to provide guidance from a national level to save states time in creating their own databases, and
- Ability to incorporate other state tracking needs,

The meeting also identified the following concerns that need to be addressed in some fashion as we continue to develop and implement the Radon Data Exchange:

- Need to develop an approved approach to identify common data set that all stakeholders can agree on that addresses standardization, quality of data, and where the data is coming from. Needs to be easy and standard enough to be useful, and to draw from existing databases or data dictionaries to identify common data elements.
- Clarify the benefits and minimize the costs for states that have a comprehensive data set.
- Raises a need for improved device protocols, what devices were used during testing, and making sure the devices work, so that we know that the data is accurate.
- Clarify requirements regarding participation, and ensure consistency with state regulations and mandates and existing systems and structures. Ensure that State ownership of it's data is not undermined.
- Work with laboratories or other states that already collect the data.
- Address confidentiality concerns and state laws restricting data sharing
- Need to be flexible with use of data to meet the many uses and requirements
- Consider including data about mitigations and at some point radon-resistant new constructions.
- Keep the database needs for updating the EPA Map of Radon Zones in mind during the design stage, as this database could be a possible prelude to developing or improving maps
- Include the appropriate EPA staff and link to related initiatives – for example, Jani Palmer from EPA HQ is working with EPA R4 on the Mapping Workgroup, which started by collecting data from each state for quality assurance analysis and comparison purposes.
- Data from labs may need to be "cleaned up" before it's acceptable.

Members of the Working Group should meet the following characteristics:

- Interested and enthusiastic
- Have data or are developing databases
- Available for monthly meetings and potentially a second meeting during a month if necessary to make important decisions
- Geographic representation

The Work Group should be of a manageable size (under 20 particpants)

Step 2: Develop a shared Work Plan and Communication Strategy
Determine membership and develop a work plan for the IPT; considering the best approach for getting feedback and buy-in from other stakeholders on necessary documents and key steps in the process. The Work Plan should include an approach on obtaining consensus on major milestones (such as the common data set and states to pilot the program) and sharing of meeting minutes on RadonLeaders.org.

Phase II: Completion Date, May 30, 2011

Step 1: Define Data Needs

The first step of Phase II will be to consolidate the current and anticipated requirements of interested stakeholder's reporting regime. This needs assessment will direct subsequent efforts to accommodate as many exchange scenarios as possible.

The IPT will:

- Consolidation of the various radon reporting regimes, data requirements, and calculation and verification protocols;
- Identify business needs to determine the direction and frequency of data flows;
- Determine how future requirements can be accommodated, such as:
    - EPA's Track 2 radon rules with additional subparts
    - Future legislation
    - Changes in state reporting requirements;
- Understand and meet requirements for transporting and storing Confidential Business Information, as necessary.

Step 2: Evaluate Existing Resources and Business Processes

After completing the data needs assessment, the IPT members will consider:

- Coordinating with OIC and Exchange Network to see if there is an existing schema that satisfies identified data exchange needs;
- Discussing and agreeing upon the most effective way for States and EPA to leverage the existing schema;
- Presenting options to assure that states are ready to use radon data in XML format.

Step 3: Draft recommended list of additional data elements for consideration in the Reporting Schema

Phase III: Completion Date, September 30, 2011

Step 1: Draft a list of priority business process the Data Exchange Schema should support

- Design the architecture of the data flow. The standardized list of common radon data set that addresses how confidential information is handled across the database will be used in the architecture;
- Determine the extent to which the data exchange architecture can accommodate multiple reporting thresholds and calculation and verification protocols;
- Build for the future by incorporating common components and interoperable options that can evolve with changes in guidance or state requirements;
- Define the necessary data services and codify the instructions for implementing the data flow in a Flow Configuration Document (FCD);
- Review and provide feedback into the development of the XML data exchange schema;
- Prepare a Data Exchange Template to aid in data mapping;
- Submit data exchange documentation to the Exchange Network Technology Group for review to ensure it is consistent with the established technical requirements for the Exchange Network; and
- Plan for and conduct testing and roll out of the data exchange.

Step 2: Develop and Document a Radon Data Exchange that includes:

- Radon Flow Configuration Document
- Exchange XML Schema
- Radon Data Exchange Template
- Example Exchange XML Instance Document

Step 3: Implement and Pilot the Radon Data Exchange

Operating Prinicples

By working together on this project, the IPT members acknowledge the following:

- Members must work within the requirements and timeframes outlined in this agreement and other reporting systems need to meet in order to be successful;
- Reporting schedules set in Federal or state statutes are not flexible;
- State and other programs that are already collecting data must meet ongoing collection requirements both during and after implementation of the data exchange;
- Any solution involving shared data must appropriately manage Confidential Business Information;
- Discussions regarding a unified data collection system will be had for the purposes of determining its technical feasibility. The actual implementation of such a system requires a policy decision that may be informed but not made by this IPT.

Structure of the IPT

The IPT will be composed of representatives from EPA and states. Other organizations that have a role in exchanging radon data will provide technical advice as needed. The members will have expertise in either the radon business area or have familiarity (or know a staff person) in the information technology business area to reflect the multi-disciplinary nature of the IPT's work. The IPT will be led by 2 Co-Chairs—Peggy Bagnoli representing U.S. EPA and <Name> from <State> representing the states. The co-chairs will be responsible for communications involving the other IPT members and will facilitate their participation in IPT calls or meetings. The meeting's process, schedule, and topics will be determined by the IPT Co-Chairs in consultation with the IPT members.

The IPT meetings will focus on the objectives detailed in this document. The frequency of IPT meetings will be bi-monthly and may be adjusted throughout the life of the IPT. Given the wide-spread geographic location of stakeholders, the IPT meetings almost always will be via conference calls.

Radon Data Exchange IPT Members

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