

CRM Introduction Letter

Announcing the Availability of the Draft Version 1.0 Core Reference Model for Your Comment

This letter invites you to review and comment on the Core Reference Model (CRM) Version 1.0, a product of the Technical Resource Group (TRG), CRM workgroup. The TRG is a technical function of the Network Steering Board (NSB), a coalition of State/EPA representatives who make up the Environmental Information Exchange Network (Exchange Network).

What is the CRM?

The CRM is an inventory to organize and identify commonalities in the data States and EPA currently and anticipate exchanging. The Exchange Network's intent to use shared XML schema fostered the CRM development effort that provides Network Partners some new tools to improve exchangeable information by harmonizing its common components.

By analogy, the CRM can be thought of as a box of Legos. The diagram on the Lego box shows the elaborate "big picture" of what can be created when using all the pieces. While this big picture can serve as an inspiring guide, each Network Partner has the option of using only those pieces to construct what they need.

The CRM team conducted a "bottoms up" inventory of environmental information by researching forms, reports, and exchange formats from a variety of state and EPA sources. The Team then looked for data structure commonalities:

- Among different States and EPA Partners
- Across program functional areas such as permitting, enforcement, and monitoring
- Across different media (air, water, or waste)
- At different points in its lifecycle (e.g., its generation by a regulated entity or laboratory, its flow through and from one agency to another, etc.)

In addition to providing a framework for harmonizing the schema used in current data flows, the CRM will provide guidance on how new schema for new data flows can be structured. For instance, the CRM can be used as a framework to develop web services that Partner's Nodes process for the exchange of information. Eventually, Partners will be able to make their environmental data holdings available on their Nodes in a common organized format.

Keep these Thoughts in Mind as You Review

The CRM is both a conceptual framework and a working draft, with anticipated refinements in many areas. Please keep in mind that the application and implementation of the presented data blocks will require either the addition of data elements unique to a program/flow or the use of only some portion of a data group. The data elements in this draft are illustrative *examples* of the basic concept of that data block. They are not intended to be exhaustive or comprehensive of either the required data or their respective data standard.

The workgroup recognizes the following areas require additional work/clarification/analysis:

- Some Major Data Groups, such as in the Facility and Enforcement/Compliance areas, are inconsistent (like the flows they were derived from) with existing EDSC data standards.
- The proposed Major Data Groups represent common aggregations of data and are neither set in stone nor proposed as “Objects” or “Entities” at this time. Please comment on Major Data Groups but pay special attention to the Data Blocks.
- Several Major Data Groups are placeholders for additional work, especially:
 - Spatial Data
 - Grants
 - Licenses
 - Others to be Categorized
- The current draft does not model relationships between data blocks beyond the basic parent-child relationship (Major Data Group to Compound Data Blocks and Data Blocks, and Compound Data Blocks to Data Blocks). The relationships shown in the Major Data Groups are illustrative only.
- How the CRM will be represented in XML is still being developed. For example, one possibility is that the Data Blocks identified here would be expressed as XML schema “chunks” bearing the same name. These chunks could be selected, elaborated/restricted, and assembled (like Lego pieces) into an overall XML schema to support a data flow.

What Happens Next?

Along with the incorporation of your feedback, the CRM workgroup is considering the next steps for CRM Phase II. We recommend that you visit Chapter 7 to see our intentions.