

**Editor's Comments for New Version – April 28,2000, interspersed in text in bold.**

**Title:** Comments on WG2 N210 Draft TR on Metadata Registry Content

**Supersedes:** N/A

**Source:** Ray Gates

**Status:** Expert contribution

**Action:** For review and comment

**Date:** 22 February 2000

1. REFERENCES..... 1

2. RECAP OF COMMENTS MADE IN SANTA FE ..... **21**

3. NEW COMMENTS..... 2

**Below are changes Lois made to the new version:**

Attached is another draft of the content paper technical report with my revisions. I have made the following changes:

1. Deleted Annexes A-C.
2. Relabeled Annexes D and F to A and B respectively.
3. Moved Annex E (top-down approach) to Clause 6.
4. Deleted the paragraphs from Clause 6, Complex data, as specified at the Santa Fe meeting, and renumbered the clause to Clause 7.
5. Changed Clause 1 to remove reference to ANSI X3.285, and to give background introduction to the bottom-up and top-down approaches.
6. Changed character sets designations from "English language" to "Latin alphabet" and "Arabic numbers" where appropriate. (This may require change, depending on input from Ray Gates).
7. Removed references 6 and 8 from the Bibliography (they duplicated the References in Clause 2) and removed the Annex designation from the Bibliography.

## 1. References

### WG2 N210 WD Procedures for Achieving Data Registry Content Consistency

## 2. Recap of Comments made in Santa Fe

- Issue 001 X Wherever the term “data registry” is used, replace it by “metadata registry”.
- My notes from the Santa Fe meeting say to append a note to the first occurrence of "metadata registry" to read: (hereafter referred to as a "registry") and to change all occurrences of "data registry" and "data element registry" to "registry." This has been done.**
- Issue 002 X In clause 1.1 Background, para. 2, remove the reference to ANSI X3.285.
- Issue 003 X In clause 2 References, replace three references to DIS to IS.
- Issue 004 JN Terms and definitions will need to be reconciled with changes being proposed in the part 3 revision.
- I did not receive the complete terms by the end of April, so I followed the format suggested by the ISO template to refer to terms included in 11179 and 15452.**
- Issue 005 JN The example of decomposition/aggregation in clauses 4.4 and 4.5 is not a valid one. Country subdivision codes are not components of Country Identifier. Suggest using decomposition of Address into its component parts instead.
- Done.**
- Issue 006 X Change title of clause 5 from “Registry Issues” to “An approach to data element registration.” Note that this is the “bottom up” approach.
- Issue 007 X Give “equal time” to the “top-down” approach, by Annex E to the Clause 6 document body, and expanding it.
- Issue 008 X In clauses 5.1.3 and 5.2.3, discussion of “definition” and permissible values should be separated, since “definition” can be associated with any administered component, and permissible values relate specifically to value domains.

## 3. New Comments

- Issue 009 X In clause 1.1 Background, para. 1, line 1, change “A registry” to “A metadata registry”.
- [Committee proposed resolution: Accept change.](#)

- Issue 010 In clause 1.1 Background, para. 1, line 3, change “data standards” to “metadata standards”.
- No, intent of this statement is data standards, not metadata standards.*
- [Committee proposed resolution: Leave as is.](#)
- Issue 011 X In clause 1.1 Background, para. 3, line 3, change “a unit of data” to “units of data”.
- [Committee proposed resolution: Accept change](#)
- Issue 012 In clause 1.3 Scope, line 2, replace:  
“data element identifier, registry name, definition and example”  
by:  
“data element component identifiers; data element component names and definitions in particular contexts; data element examples”.
- No, this TR is about components of data elements.*
- [Committee proposed resolution: A determination was made to limit this document to data elements. It would seem that we should limit the terms to data elements \(e.g., not use “data element component identifiers”. However, the terms should be aligned with those found in the metamodel. The authors of the clauses should go through the entire document and make sure that the terms used are aligned with the terms found in the revised metamodel in Part 3. E.g., Administered component identifier for the data element. This may be done by making a table of equivalences, mapping between simple expressions such as “data element identifier” to the actual name found in the Part 3 metamodel.](#)
- [Lois changed the Scope sentence. I have aligned Clause 4 contents as recommended.](#)**
- Issue 013 X In clause 1.3 Scope, line 2, “data concept” should be “data element concept”.
- [Committee proposed resolution: Agreed.](#)
- Issue 014 X In clause 2 References, in the reference to 3166-2, “code” should be “codes”.
- [Committee proposed resolution: Agreed, “Codes” to be exact.](#)
- Issue 015 JN In clause 4.1 Abstraction types, para. 2, sentence 1 states:  
“Several methods can be used to achieve the decomposition of layers from the most abstract to the more concrete.”
- Since the clause is about “Abstraction” it would seem more appropriate to rephrase this as:  
“Several methods can be used to achieve the abstraction of layers from the more concrete to the more abstract.”

Committee proposed resolution: This is to be revised from the material considered at Santa Fe. We may need to discuss this more. Doug Mann points to a reference ISO 1087-1 and it is also mentioned in CEN N99-21 and the revision of ISO 704. The latter two are documents on the SC 32 website. Jim Carpenter suggests looking in Hiam Kilov's book, *Object Oriented Behavioral Specification*.

**I have added more explanatory material which I believe clarifies this concept.**

Issue 016 JN In clause 4.1 Abstraction types, para. 2, sentence 2 states:

“Starting with the most general conceptional notions and progressing to the data elements in applications, these layers can be labelled by the type or type of abstraction used to produce them from another layer.”

Several comments here:

1. Similar comment to the issue above re abstraction progressing up, not down.
2. Similar comment to the issue below re different applications using data at different levels of abstraction.
3. The TR does not actually seem to suggest any approach to labelling layers.

I suggest deleting the sentence.

Committee proposed resolution: See comment in Issue 15.

**See comment on Issue 15.**

Issue 017 JN Clause 4.3 describes an example specialization/generalization hierarchy. In para. 5, it is stated that application data elements would be mapped at the lowest layer in the hierarchy. His statement arises from the fact that using the bottom-up approach, the lowest level originally came from an application. But when multiple applications are considered, application data elements can be mapped at any layer that meets the application's needs.

Committee proposed resolution: Agreed. The data element can be at the generalization/specialization layer that meets the application's needs.

**See comment on Issue 15.**

Issue 018 We need a clause that describes the role of Administered Components in a registry, and how they provide a common approach to establishing identifiers, and names and definitions within contexts, for all types of data element components.

*No, this TR is about data elements, not all components.*

Committee proposed resolution: We agreed in Santa Fe to limit this

report to data elements. It would be useful to describe the role of Administered Component, but that is out of scope for this document. In scope or introductory text we should state something like: a data element is one thing that can be administered in a metadata registry. This goes along with the simplified names used in this document, as compared to the formal names in the Part 3 metamodel.

**Done. Sentence added to Introduction.**

- Issue 019      The use of a single context called “Registry” is not very helpful. A typical registry may serve multiple contexts. It would be more useful to give examples of at least two contexts, with at least one administered component used in more than one context, with appropriate names and definitions.
- The TR describes 2 contexts for name and definition for the application data element.*
- Issue 020 X      In clause 5.1.5, para. 3, the reference to 5.1.5 should be to 5.1.6, and the reference to 5.1.6 should be to 5.1.7.
- Issue 021      In clause 5.1.6, para. 3, the description of “begin date” is incorrect. Replace “was entered into the registry” by “became valid for that conceptual domain”.
- This needs to be discussed. We don’t always know the start date for value meanings. It could be the date a standard value domain was published or the date of entry in the database.*
- Not changed.**
- Issue 022      In clause 5.1.8, para. 2, reference is made to part 6 describing the registration process, and the registration status assigned to a data element. With the changes to the metamodel, registration now supports any administered component, not just data elements.
- This TR is relevant to registering data elements.*
- Issue 023 X      In clause 5.1.8, para. 2, two references to “Administrative Status” should be to “Administration Status”, based on the 1999-12-13 metamodel.
- Issue 024 X      In clause 5.2, para. 3, change “domains” to “value domains”.
- Issue 025 X      In clause 5.2.3.2, para. 2, bullet 1 “character set”. “English Language” is not a character set. “English Language alphabet” would be. (This will of course be impacted by whatever we decide to do with character sets and character set encodings in the metamodel.) Similar comment on clause 5.3.3.2.
- Issue 025      In clause 5.2.3.2, para. 2, bullet 3 “datatype”. For consistency, if the character set is “English Language alphabet”, the datatype should be “alphabetic” rather than “alphanumeric”. (Or the character set needs to include more than just the alphabet.) Similar comment on clause 5.3.3.2.

*Datatype is not an established domain of standard values. Designation of datatype is up to the registration authority. Alphanumeric allows alphabetic, numeric, and special characters.*

- Issue 026 In clause 5.2.4, it is correctly stated that “Names do not identify a data element. However, in clause 5.2.6, it is stated that: “the concept represented by ‘Short English Language Country Name’ is ‘Country Identifier’. These two statements seem contradictory.  
*We did use Label, but have dropped the term. What is suggested?*  
**I have changed "by" to "in" to clear up the ambiguity.**
- Issue 027 X Clause 5.3.2 references Part 11 of 15046. The various parts of ISO 15046 have recently been renumbered as individual standards. Part 11 became ISO 19111. Also, this standard needs to be added to clause 2.
- Issue 028 In clause 5.3.3.2, Rule Description, the ranges for minutes and seconds includes the lower bound (0), but excludes the upper bound (60). How should we specify this?  
*What is suggested? Range for minutes is 60, where 0 is the minimum and 59 is the maximum permissible value.*  
**I have changed the upper range boundary for minutes and seconds to 59.**
- Issue 029 X In clause 5.3.9, the reference to ANSI 6709 should be ISO 6709.
- Issue 030 X In clause 5.4.4.3, last para., the reference to 111779-5 should be 11179-5.
- Issue 031 X In clause 6, rework para. 2 to reflect the new 11179-3.  
*Paragraph was deleted, as was the last paragraph of the clause. This was specified at Santa Fe, and no other edits were requested at this time.*
- Issue 032 We need to consider requirements for version control. The metamodel includes a version number in the component identifier, but that only allows for versioning of individual administered components. It does not provide an easy way to control versions of related components, or of all metadata associated with a particular component. This is an issue for the metamodel as well. (In contrast, IRDS provides complete version control capabilities.)  
*The model is too open to interpretation to describe requirements for versioning. The versioning requirements for the EDR are more specific than is appropriate for the freeware. They are currently being reviewed at EPA. There are no rules for versioning concepts. Suggestions are welcome.*  
**I believe this issue is out of scope for this document.**