1. Host Schema Evaluation

This evaluates:  *Open Document Format for Office Applications (Open Document) v 1.0*

I evaluated this based upon the OASIS standard approved May 1 2005. I have ooffice running on our Department's Linux computer. I was hopping to type in some XML files based upon the standard and see if they would load. Unfortunately, I could not find the way to generate XML files.

1.1. Object Representation

Q:  Does the host schema use a generic structural markup model?
A:  Yes. It supports `h` for heading, `p` for paragraph, and `Section`, `list`.

Q:  Does the host schema define a "clause" object?
A:  The `Section`.

Q:  Does the host schema define a paragraph level object that represents a structural or grammatical paragraph?
A:  `Paragraph`

Q:  Using the host schema, can the clause equivalent object be inserted at arbitrary levels in the document hierarchy without transformation?
A:  From my reading, it does not appear that `Section` could be inserted inside a `list` or `Paragraph`.

Q:  In the host schema, are element names and the structure sufficiently flexible that the clause and paragraph level objects can be used for other legal and business documents?
A:  Yes, `Section`, `p` for paragraph and `h` are all general purpose tags and obviously intended for many types of documents.

1.2. Metadata

Q:  Does the host schema provide a mechanism to add semantic information about:

- whole documents
- distinct objects, such as clauses, within documents?

A:  The specification supports "Document Metadata" I found style and change information available for paragraphs, lists, headings, and sections.
Q: If so, is the metadata model for the host schema sufficient for contracts or will it be necessary to extend it?

A: The pre-defined metadata elements include dc:title, dc:Description, dc:Subject, Initial Creator, Creator, Printed By, Creation Date and Time, Modification Date and Time, Print Date Time.

The specification supports user defined and custom metadata. The specification states "Applications SHOULD preserve this data [custom metadata] when editing this document."

Q: Does the host schema allow embedded values to be represented and semantic information to be added to these values?

A: The system provides that OpenDocument XML documents may contain any tag or attribute not defined in the specification. They must be defined in some namespace other than those used by the OpenOffice Specification.

Applications must read the document containing these elements, but are not required to save them back out after editing. (See Section 1.5)

1.3. Processing Technologies

Q: Does the host schema require use of a particular processing technology?

A: It would be most obvious to use an application like OpenOffice to deal with the XML obeying the standard. However, one should be able to use other things like open office.

Q: Does the design of the host schema preclude use of particular currently available processing technologies?

A: See Answer above.

1.4. Number of Content Objects

Q: Does the host schema permit the numbering of clauses, paragraphs, lists and other objects to be represented in the markup?

A: Yes. The system allows the user to enter a "formatted number" using text:number, as well as a variety of numbering styles. The user may specify to "continue numbering" or may specify a "start value" This applies to headings and lists. (See 4.1.1, 4.3.1, 4.3.2) It is unclear that the user-formatted number can be applied to paragraphs.

Q: Does the host schema provide a mechanism to define the numbering schema applied to the document so that two applications could apply the same numbering, if desired?

A: See answer above.
1.5. Complete Document Representation

Q: Using the host schema, will it be possible for the contract author to explicitly represent all parts of the narrative contact terms or will it be necessary to imply some parts?

A: 

Q: Does the host schema represent the relationship between all significant components in a way that allow high quality print and web rendition of of contact documents?

A: The Open Office specificatin supports a wide variety of styles that can be applied to sections. (The purpose of the section element is to contain elements having a common style. It also supports page layout and master pages, including headers and footers.)

1.6. Variables Definition

Q: Does the host schema include a mechanism for defining variables for embedded data values?

A: Open Office supports variable filelds which can be set to values using arithmetic. The user can be prompted for variables.

Q: If the host schema does not include such a mechanism, is there any obstacle to adding it?

A: 

1.7. Ease of use for authors

Q: Based on the following factors is the host schema easy for contract authors to use:

• Does it require authors to know only a small number of elements (positive factor)?

• Does it require authors make unnecessary or subtle distinctions that will be applied inconsistently (negative factor?)

• Does it have a clear logical structure that can be quickly explained to new users ( positive factor)?

• Does it allow authors to re-locate content objects within a document hierarchy with minimal or no need for transformation of markup (positive factor)?

A: The model of headers, paragraphs, lists, and sections seems clear and precise. The specification is large, but it is not clear how much of the specificatin would be created for a simple document. An open office document is a zip file containing may components. (I unzipped a .sxw file just to see what was inside it.)
As mentioned at the top, I found no way of preparing a simple XML document in Open Office format and then reading that in with **office** installed on our Computer Science Department's Redhat Linux computer.

I do note

### 1.8. Schema Syntax

**Q:** Is the host schema a DTD only or can it also be expressed as an XML Schema or other schema type?

**A:** The schema is defined in Relax-NG Schema. I found no indication that there will be an effort to create XML Schema or DTD's for this standard.

### 1.9. Adaptability to contracts

**Q:** Does the host schema provide for the complete representation for the distinct structures commonly found in contracts?

**A:** No.

**Q:** If not, does the host schema explicitly allow additional distinct structures to be added?

**A:**

**Q:** Does the host schema allow elements not considered necessary for contracts markup to be removed without contract documents being incompatible in a disadvantageous way with other documents using the host schema?

**A:**

**Q:** If distinct contract structures are added to the host schema, will this result in contracts documents being incompatible in a disadvantageous way with other documents using the host schema?

**A:**

### 1.10. Vendor and Developer Support

**Q:** Is the host schema already in widespread or general use for markup of narrative documents?

**A:** Open Office is being used in some companies as a replacement for Microsoft Word.

**Q:** Are the already developed applications that will make it easy of for organizations to implement the TC's specification based around the host schema?

**A:** Presumably, Open Office will accept XML files written as per this standard.
Q: Is there any reason to expect that the host schema will prove any particular advantages in gaining market support.

A: A Google Answer on OpenOffice market share shows that there is little evidence that Star Office or Open Office has any significant market share beyond Linux enthusiasts. (It seems to be installed on distributions of LINUX by default.) However, no hard numbers are available.

1.11. Other Factors

Q: Does the host schema provide any other advantages for use in the TC's specification?

A: Yes, the host schema supports an extensive series of tags for trigging changes (Section 4.6). This is the familiar redlining that people do to indicate changes in documents.

Also, the schema supports a capability for bringing in sections from URL's and "DDE" from external data sources. (DDE was a name for a way of exchanging data with applications in Microsoft Applications. I am not aware that Microsoft still supports DDE or whether the "DDE" in OpenOffice is the same DDE as we saw here.)

Q: Does the host schema have any other disadvantages that make it undesirable for use in the TC's specification?

A: