A proposal for a new work item shall be submitted to the secretariat of the ISO/IEC joint technical committee concerned with a copy to the ISO Central Secretariat.

**Title (subject to be covered and type of standard, e.g. terminology, method of test, performance requirements, etc.)**

- Document Schema Definition Language (DSDL)

**Scope (and field of application)**

The definition of document structures, data types and data relationship constraints that can be applied to data represented using the ISO/IEC 8879 Standard Generalized Markup Language and its derivatives, such as ISO/IEC 10744, Hypermedia/Time-based Structuring Language (HyTime), and the W3C Extensible Markup Language (XML).

**Purpose and justification** - attach a separate page as annex, if necessary

SGML Document Type Definitions (DTDs) allow document structures to be formally modelled but do not allow details of data types or data relationships to be recorded in an XML-compatible way. While the W3C XML Schema Definition language (XSD) allows data types to be used to validate the contents of SGML elements and values of attributes, it does not allow the relationships between the values of different attributes and contents of elements to be validated. A new, compact, efficient and XML document type definition for the integrated description of document structures, data types and data relationships will make it possible to automate the processing of structured information resources to the level required by business users, which has a higher level of requirements than those identified from the publishing community for which SGML was originally developed. The standard will also define the scope and notation for converting and interworking a core subset of document structure, data type, and data relationship constraint models among the three notations: DSDL, DTD declarations and XSDL.

**Programme of work**

If the proposed new work item is approved, which of the following document(s) is (are) expected to be developed?

- [X] a single International Standard
- If more than one International Standard (expected number: ........ )
- [ ] a multi-part International Standard consisting of ....... parts
- an amendment or amendments to the following International Standard(s) ........................................................ ......................
- a technical report, type ......

**Relevant documents to be considered**

The RELAX TR developed by the Japanese National Body as ISO 22250 and the TREX language developed by James Clark (the editor of the ISO/IEC 10179 Document Style Semantics and Specification Language) both propose efficient XML representations of document models, including data types. The widely acknowledged XML Schema Data Types specification will be referenced. The Schematron language allows the relationships between data elements and attributes to be described. The committee expects to be able to integrate the best practices of these proposals to form the basis of a first draft of the new standard.

**Cooperation and liaison**

Liaison with the W3C XML Coordinating Committee will be undertaken to keep the standard aligned with the work being done to manage information sets developed for XML.

**Preparatory work offered with target date(s)**

A preparatory draft will be contributed by the UK National Body for the SC34 meeting in December 2001.

**Signature**

proposing SC Secretary

**Will the services of a maintenance agency or registration authority be required?**

- [X] yes
- [ ] no

**Are there any known requirements for coding?**

- [X] yes
- [ ] no

**Does the proposed standard concern known patented items?**

- [X] yes
- [ ] no

**Comments and recommendations of the JTC secretariat** - attach a separate page as annex, if necessary

- [X] It is proposed to assign this new item to JTC 1/SC 34/WG 1
Voting on the proposal
Each P-member of the ISO/IEC joint technical committee has an obligation to vote within the time limits laid down (normally three months after the date of circulation).

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