

ISO/IEC JTC 1/SC 32 N 0522

Date: 2000-09-08

REPLACES: --

<p>ISO/IEC JTC 1/SC 32</p> <p>Data Management and Interchange</p> <p>Secretariat: United States of America (ANSI)</p> <p>Administered by Pacific Northwest National Laboratory on behalf of ANSI</p>
--

DOCUMENT TYPE	Business Plan
TITLE	BUSINESS PLAN FOR ISO/IEC JTC 1/SC32, Data Management and Interchange
SOURCE	Bruce Bargmeyer - SC 32 Chairman
PROJECT NUMBER	
STATUS	This is the current Year 2000 SC 32 Business Plan
REFERENCES	
ACTION ID.	FYI
REQUESTED ACTION	
DUE DATE	
Number of Pages	16
LANGUAGE USED	English
DISTRIBUTION	P & L Members SC Chair WG Conveners and Secretaries

Douglas Mann, Secretariat, ISO/IEC JTC 1/SC 32

Pacific Northwest National Laboratory *, 901 D Street, SW., Suite 900, Washington, DC, 20024-2115,
United States of America

Telephone: +1 703 575 2114; Facsimile: +1 703 681 9180; E-mail: MannD@battelle.org

available from the JTC 1/SC 32 WebSite <http://www.jtc1sc32.org/>

*Pacific Northwest National Laboratory (PNL) administers the ISO/IEC JTC 1/SC 32 Secretariat on behalf of ANSI

BUSINESS PLAN FOR ISO/IEC JTC 1/SC32, Data Management and Interchange

PERIOD COVERED: September 1999 to August 2000

SUBMITTED BY: Bruce Bargmeyer, Chairman JTC 1/SC 32

1. MANAGEMENT SUMMARY:

1a CHAIRMAN'S REMARKS

When plenary dates for an SC and for JTC 1 are out of phase, the SC chairman's use of this section for updating JTC 1 on SC status is required as a means to reflect developments since the business plan was approved.. This section may also be used for any other remarks the chairman believes pertinent in regards to the SC's Business Plan, its projects, opportunities, risks or new initiatives.

1.1 JTC 1 SC32 STATEMENT OF SCOPE

JTC 1/SC 32

Title: Data Management and Interchange

Area of Work: Standards for data management within and among local and distributed information systems environments. SC 32 provides enabling technologies to promote harmonization of data management facilities across sector-specific areas. Specifically, SC 32 standards include:

- 1) reference models and frameworks for the coordination of existing and emerging standards;
- 2) definition of data domains, data types and data structures, and their associated semantics;
- 3) languages, services and protocols for persistent storage, concurrent access, concurrent update and interchange of data;
- 4) methods, languages, services and protocols to structure, organize and register metadata and other information resources associated with sharing and interoperability, including electronic commerce.

JTC 1/SC 32/RG 01

Title: Reference Model for Data Management Maintenance

Area of Work: Maintenance of ISO/IEC 10032, Reference Model of Data Management, and enhancements to it as may be required by SC 32.

JTC 1/SC 32/RG 02

Title: Export/Import Maintenance

Area of Work: To develop and maintain standards that facilitate the interchange of data and metadata using stream-based media. Use of these standards will facilitate the definition of export/import services within, and the sharing of data and metadata between data management environments.
These standards do not specify a transfer mechanism, and the interchange

format is environment independent.

The scope currently includes:

- a) a standardization framework for establishing Export/Import concepts, facilities, requirements, and components candidate for standardization;
- b) specification of Export/Import services for SQL-based data management environments, and IRDS-based metadata management environments;
- c) specification of a transfer format for the interchange of data between SQL-based data management environments;
- d) specification of a transfer format for the interchange of data between IRDS-based metadata management environments.

JTC 1/SC 32/WG 01

Title: Open-edi

Area of Work: Standardization in the field of generic information technology standards for open electronic data interchange needed to attain global interoperability among the information technology systems used by organizations. Such interoperability is viewed from both business and information technology perspectives.

Within this context the scope includes:

- 1 methodology and framework for identification and modelling of business activities through business scenarios and their components, such as roles, information bundles, and semantic components;
- 2 identification and specification of formal description techniques for describing classes of business requirements and their contextual and semantic specifications;
- 3 identification and specification of formal description techniques for developing business scenarios and their components;
- 4 identification and specification of information technology services and service interfaces for accomplishing business transactions;
- 5 identification and specification of facilities to manage business scenarios and their components.

Note: Priority is on work required to support the needs of electronic commerce, electronic administration, electronic business, etc. The basis of work is the Open-edi Reference Model (ISO/IEC 14662).

JTC 1/SC 32/WG 02

Title: Metadata

Area of Work: To develop and maintain standards that facilitate specification and management of metadata. Use of these standards will enhance the understanding and sharing of data, information and processes to support, for example, interoperability, electronic commerce and component-based development. The scope shall include:

- a) a framework for specifying and managing metadata;
- b) specification and management of data elements, structures and their associated semantics;
- c) specification and management of value domains, such as classification and code schemes;
- d) specification and management of data about processes and behaviour;
- e) facilities to manage metadata, for example: data dictionaries, repositories, information resource dictionary systems, registries and glossaries;
- f) facilities to exchange metadata, including its semantics, over the Internet, intranets and other media.

JTC 1/SC 32/WG 03

Title: Database Languages

- Area of Work:**
1. To develop and maintain languages for the dynamic specification, maintenance and description of database structures and contents in multi-user and multi-server environments. The specifications may include the data types, behaviours and any integrity constraints on the contents of the defined structures. The specifications may include mechanisms for the creation and generation of new data types and behaviours so as to support the specification of other international standards.
 2. To develop and maintain languages that provide for the storage, access and manipulation of data in database structures by multiple concurrent users. These languages may be computationally complete and may contain features for the packaging and storage of modules and procedures in database structures.
 3. To provide interfaces for the languages developed to other standard programming languages.
 4. To provide interfaces or access to other standards describing data types, behaviours or database content to users of the languages developed.

JTC 1/SC 32/WG 04

Title: SQL Multimedia & Application Packages

- Area of Work:** To specify packages of abstract data types for use in various application areas. Specify each package of abstract data type definitions using the facilities for user-defined type provided in the Database Language SQL/Foundation. This should include packages such as Full-Text, Spatial, Still Image, Still Graphic, Animation, Full Motion Video, Audio, Seismic, and Music.

JTC 1/SC 32/WG 05

Title: Database Access and Interchange

- Area of Work:** Standards to facilitate interworking of applications and databases that may be located on different sites. These standards relate principally to communications and management data. They are complementary to and dependent on standards for database languages. The activities include the analysis of distributed database applications and requirements, definition of system models, communication APIs and protocols for interworking between client systems and one or more server systems; the systems may be on different hardware, with software from different suppliers.

1.2 PROJECT REPORT

SC 32/RG 01 Reference Model for Data Management Maintenance

1.32.01.01.00.00 ISO/IEC 10032:1995
Information technology - Reference Model of Data Management

SC 32/RG 02 Export/Import Maintenance

1.32.58.01.01.00 ISO/IEC CD 13238-1
 Information technology - Data Management Export/Import Facilities - Part 1: Standardization Framework
 Target Dates: CD 1997-09 FCD 2000-02 DIS 2000-11 IS 2001-09

1.32.58.01.02.00 ISO/IEC CD 13238-2
 Information technology - Data Management Export/Import Facilities - Part 2: SQL Export/Import
 Target Dates: CD 1997-09 FCD 2000-10 DIS 2001-04 IS 2001-09

1.32.58.01.03.00 ISO/IEC 13238-3:1998
 Information technology - Data Management Export/Import Facilities - Part 3: Export/Import Facilities for IRDS

SC 32/WG 01 Open-edi

1.32.31.01.01.00 ISO/IEC CD 15944-1
 Information technology - Business Agreement Semantic Descriptive Techniques Part 1: Business Operational Aspects of Open-edi for Implementation
 Target Dates: CD 1999-09 FCD 2000-12 DIS 2001-12 IS 2002-06

1.32.31.01.02.00 ISO/IEC AWI 15944-2
 Information technology - Business Agreement Semantic Descriptive Techniques Part 2: Registration of Scenarios and their Components
 Target Dates: CD 2000-06 FCD 2001-06 DIS 2002-09 IS 2003-03

1.32.31.01.03.00 ISO/IEC AWI 15944-3
 Information technology - Business Agreement Semantic Descriptive Techniques Part 3: Open-edi Description Techniques
 Target Dates: CD 2000-12 FCD 2001-06 DIS 2002-09 IS 2003-03

1.32.32.01.00.00 ISO/IEC AWI 17414
 Information technology - Open-Edi Support Services
 Target Dates: CD 2001-06 FCD 2001-12 DIS 2002-09 IS 2003-03

1.32.30.01.00.00 ISO/IEC 14662:1997
 Information technology - Open-Edi Reference Model

SC 32/WG 02 Metadata

1.32.10.02.00.00 ISO/IEC AWI 5218
 Information technology - Representation of human sexes (Revision of ISO 5218:1977)
 Target Dates: CD 2000-05 FCD 2000-05 DIS 2001-03 IS 2001-08

1.32.13.01.00.00 ISO/IEC FDIS 14481
 Information technology - Conceptual Schema Modelling Facilities
 Target Dates: CD 1996-11 FCD 1999-09 DIS 2000-10 IS 2000-04

1.32.15.02.03.00 ISO/IEC CD 11179-3
 Information technology - Specification and standardization of data elements - Part 3: Basic attributes of data elements (Revision of ISO/IEC 11179-3:1994)
 Target Dates: CD 2000-05 FCD 2000-05 DIS 2000-09 IS 2000-12

- 1.32.16.01.00.00 ISO/IEC PDTR 20943
Information technology - Procedure for Achieving Data Registry Content Consistency - Data Elements
Target Dates: CD 2000-05 FCD DIS IS
- 1.32.17.01.00.00 ISO/IEC AWI 20944
Information technology - Metadata Query Service an Object Technology Extension
Target Dates: CD FCD DIS IS
- 1.32.18.01.00.00 ISO/IEC NP 18022
Information technology - Identification, Mapping and IT-enablement of Existing Standards for Widely Used Encodeable Value Domains
Target Dates: CD 2000-12 FCD 2001-05 DIS 2001-11 IS 2002-05
- 1.32.20.01.00.00 ISO/IEC AWI 18038
Information technology - Identification and Mapping of Various Categories of Jurisdictional Domains
Target Dates: CD FCD DIS IS
- 1.32.42.01.00.00 ISO/IEC FDIS 13645
Information technology - Guidelines for the Design of IRDS Content Modules
Target Dates: CD FCD 1995-01 DIS 2000-07 IS 2000-11
- 1.32.02.02.00.00 ISO TR 9007:1987
Information processing systems - Concepts and Terminology for the Conceptual Schema and the Information Base
- 1.32.10.01.00.00 ISO 5218:1977
Information interchange - Representation of human sexes
- 1.32.11.01.00.00 ISO/IEC TR 9789:1994 type 3
Information technology - Guidelines for the organization and representation of data elements for data interchange - Coding methods and principles
- 1.32.14.02.01.00 ISO/IEC 6523-1:1998
Information technology - Structure for the identification of organizations and organization parts - Part 1: Identification of organization schemes
- 1.32.14.02.02.00 ISO/IEC 6523-2:1998
Information technology - Structure for the identification of organizations and organization parts - Part 2: Registration of organization identification schemes
- 1.32.15.01.01.00 ISO/IEC 11179-1:1999
Information technology - Specification and standardization of data elements - Part 1: Framework for the specification and standardization of data elements
- 1.32.15.01.02.00 ISO/IEC 11179-2:2000
Information technology - Specification and standardization of data elements - Part 2: Classification for data elements
- 1.32.15.01.03.00 ISO/IEC 11179-3:1994
Information technology - Specification and standardization of data elements - Part 3: Basic attributes of data elements
- 1.32.15.01.04.00 ISO/IEC 11179-4:1995
Information technology - Specification and standardization of data elements - Part 4: Rules and guidelines for the formulation of data definitions

- 1.32.15.01.05.00 ISO/IEC 11179-5:1995
Information technology - Specification and standardization of data elements - Part 5: Naming and identification principles for data elements
- 1.32.15.01.06.00 ISO/IEC 11179-6:1997
Information technology - Specification and standardization of data elements - Part 6: Registration of data elements
- 1.32.19.01.00.00 ISO/IEC 14957:1996
Information technology - Representation of data elements values: Notation of the format
- 1.32.21.01.00.00 ISO/IEC TR 15452:2000
Information technology - Specification of Data Value Domain
- 1.32.40.01.00.00 ISO/IEC 10027:1990
Information technology - Information Resource Dictionary System (IRDS) Framework
- 1.32.41.01.00.00 ISO/IEC 10728:1993
Information technology - Information Resource Dictionary Systems (IRDS) Services Interface
- 1.32.41.01.00.01 ISO/IEC 10728 :1993/Amd 1:1995
Information technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 1: C Language Binding
- 1.32.41.01.00.02 ISO/IEC 10728 :1993/Amd 2:1996
Information technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 2: Ada language binding
- 1.32.41.01.00.03 ISO/IEC 10728 :1993/Amd 3:1998
Information technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 3: CORBA IDL Binding
- 1.32.41.01.00.04 ISO/IEC 10728 :1993/Amd 4:1998
Information technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 4: Remote Procedure Call IDL Binding

SC 32/WG 03 Database Languages

- 1.32.03.04.01.01 ISO/IEC FDAM 9075 : Amd 1
Information technology- Database languages SQL - Amendment 1: SQL/OLAP (for SQL:1999)
Target Dates: CD FCD 1999-11 DIS 2000-08 IS 2000-12
- 1.32.03.04.09.00 ISO/IEC FCD 9075-9
Information technology - Database Language SQL - Part 9: Management of External Data
Target Dates: CD 1998-12 FCD 1999-09 DIS 2000-09 IS 2001-01
- 1.32.03.04.10.00 ISO/IEC FDIS 9075-10
Information technology --Database Language SQL - Part 10: Object language bindings (for SQL:1999)
Target Dates: CD FCD 1998-10 DIS 2000-04 IS 2000-08
- 1.32.03.04.99.00 ISO/IEC 9075:1999/Cor 1
Information technology- Database languages - SQL - Technical Corrigendum 1 for SQL:1999
Target Dates: CD FCD DIS 2000-03 IS 2000-07

- 1.32.03.05.01.00 ISO/IECAWI 9075-1
Information technology - Database Language SQL - Part 1: Framework (for SQL:200n)
Target Dates: CD 2001-01 FCD 2001-08 DIS 2002-06 IS 2002-10
- 1.32.03.05.02.00 ISO/IEC AWI 9075-2
Information technology - Database Language SQL - Part 2: Foundation (for SQL:200n)
Target Dates: CD 2001-01 FCD 2001-08 DIS 2002-06 IS 2002-10
- 1.32.03.05.03.00 ISO/IEC AWI 9075-3
Information technology - Database Language SQL - Part 3: Call-Level Interface (for SQL:200n)
Target Dates: CD 2001-01 FCD 2001-08 DIS 2002-06 IS 2002-10
- 1.32.03.05.04.00 ISO/IEC AWI 9075-4
Information technology - Database Language SQL - Part 4: Persistent Stored Modules (for SQL:200n)
Target Dates: CD 2001-01 FCD 2001-08 DIS 2002-06 IS 2002-10
- 1.32.03.05.07.00 ISO/IEC AWI 9075-7
Information technology - Database Language SQL - Part 7: Temporal (for SQL:200n)
Target Dates: CD 2001-11 FCD 2001-11 DIS 2002-08 IS 2002-12
- 1.32.03.05.09.00 ISO/IEC AWI 9075-9
Information technology - Database Language SQL - Part 9: Management of External Data (for SQL:200n)
Target Dates: CD 2001-02 FCD 2001-08 DIS 2002-06 IS 2002-10
- 1.32.03.05.10.00 ISO/IEC AWI 9075-10
Information technology --Database Language SQL - Part 10: Object language bindings (for SQL:200n)
Target Dates: CD 2001-01 FCD 2001-08 DIS 2002-06 IS 2002-10
- 1.32.03.05.11.00 ISO/IEC AWI 9075-11
Information technology --Database Language SQL - Part 11: Schemata (for SQL:200n)
Target Dates: CD 2001-01 FCD 2001-08 DIS 2002-06 IS 2002-10
- 1.32.03.05.12.00 ISO/IEC AWI 9075-12
Information technology --Database Language SQL - Part 12: Replication (for SQL:200n)
Target Dates: CD 2001-05 FCD 2001-11 DIS 2002-08 IS 2002-12

- 1.32.03.04.01.00 ISO/IEC 9075-1:1999
Information technology - Database Language SQL - Part 1: Framework
- 1.32.03.04.02.00 ISO/IEC 9075-2:1999
Information technology - Database Language SQL - Part 2: Foundation (SQL:1999)
- 1.32.03.04.03.00 ISO/IEC 9075-3:1999
Information technology - Database Language SQL - Part 3: Call-Level Interface
- 1.32.03.04.04.00 ISO/IEC 9075-4:1999
Information technology - Database Language SQL - Part 4: Persistent Stored Modules
- 1.32.03.04.05.00 ISO/IEC 9075-5:1999
Information technology - Database Language SQL - Part 5: Language Bindings

SC 32/WG 04 SQL Multimedia & Application Packages

- 1.32.04.01.01.00 ISO/IEC FDIS 13249-1
Information technology - SQL Multimedia and Application Packages - Part 1: Framework
Target Dates: CD FCD 1998-10 DIS 2000-04 IS 2000-07
- 1.32.04.01.05.00 ISO/IEC FCD 13249-5
Information technology - SQL Multimedia and Application Packages - Part 5: Still Image
Target Dates: CD 1997-07 FCD 1999-06 DIS 2000-03 IS 2000-10
- 1.32.04.01.06.00 ISO/IEC AWI 13249-6
Information technology - SQL Multimedia and Application Packages - Part 6: Data Mining
Target Dates: CD 2000-12 FCD 2001-07 DIS 2002-04 IS 2002-08
- 1.32.04.02.01.00 ISO/IEC AWI 13249-1
Information technology - SQL Multimedia and Application Packages - Part 1: Framework 2nd ed.
Target Dates: CD 2001-05 FCD 2001-11 DIS 2002-09 IS 2002-12
- 1.32.04.02.02.00 ISO/IEC AWI 13249-2
Information technology - SQL Multimedia and Application Packages - Part 2: Full-Text (Revision of ISO/IEC DIS 13249-2) (Later Progression)
Target Dates: CD 2001-05 FCD 2001-11 DIS 2002-09 IS 2002-12
- 1.32.04.02.03.00 ISO/IEC WD 13249-3
Information technology - SQL Multimedia and Application Packages - Part 3: Spatial (Revision of ISO/IEC DIS 13249-3) (Later Progression)
Target Dates: CD 2001-05 FCD 2001-11 DIS 2002-09 IS 2002-12
- 1.32.04.01.02.00 ISO/IEC 13249-2:2000
Information technology - SQL Multimedia and Application Packages - Part 2: Full -Text
- 1.32.04.01.03.00 ISO/IEC 13249-3:1999
Information technology - SQL Multimedia and Application Packages - Part 3: Spatial

SC 32/WG 05 Database Access and Interchange

- 1.32.05.03.00.00 ISO/IEC FCD 9579 edition 3
Information technology - Remote database access for SQL (RDA/SQL) - Edition 3 (for SQL 1999)
Target Dates: CD FCD 1998-09 DIS 1999-10 IS 2000-06
- 1.32.05.03.00.01 ISO/IEC CD 9579 ed 3 amd 1
Information technology - Remote Database Access for SQL: XML Encoding Amendment to Edition 3
Target Dates: CD 2000-10 FCD 2001-04 DIS 2001-10 IS 2002-02
- 1.32.05.03.00.02 ISO/IEC CD 9579 ed 3 amd 2
Information technology - Remote Database Access for SQL: Support for SQL/MED Amendment 2 to Edition 3
Target Dates: CD 2000-10 FCD 2001-04 DIS 2001-10 IS 2002-02
- 1.32.05.04.00.00 ISO/IEC CD 9579 ed 4
Information technology - Remote Database Access for SQL: (RDA/SQL). Edition 4
Target Dates: CD 2000-10 FCD 2001-04 DIS 2001-10 IS 2002-02

1.32.53.01.02.00

Information technology - Data Management and Interchange – Authorization and Audit

Target Dates: CD FCD DIS IS

1.32.53.01.03.00 ISO/IEC CD 9579 Amd 2

Information technology - Data Management and Interchange - Distribution Schema for RDA

Target Dates: CD 2000-05 FCD 2001-12 DIS 2002-08 IS 2002-12

1.32.53.01.04.00 ISO/IEC 9579/AWI Amd 3

Information technology - Data Management and Interchange - Encompassing Transaction

Target Dates: CD 2000-10 FCD 2001-04 DIS 2001-10 IS 2002-02

1.32.05.02.00.00 ISO/IEC9579:2000 ed 2

Information technology - Remote database access for SQL (RDA/SQL). Edition 2.

1.3 COOPERATION AND COMPETITION

A complete listing of SC 32 liaisons is listed in the following tables. SC 32 is continually reevaluating its liaisons and assessing areas of internal and external cooperation and competition. SC 32 has requested JTC 1 to remove the liaisons that have not expressed an interest in the work of SC 32.

Internal Liaison Membership

CEN/ISSS EC	Information Society Standardization System
CEN/ISSS MM	Information Society Standardization System
CEN/TC 310 AMT	Advanced Manufacturing Technologies
IEC 93	Design Automation
ISO/IEC JTC 1/SC 2	Coded character sets
ISO/IEC JTC 1/SC 6	Telecommunications and information exchange between systems
ISO/IEC JTC 1/SC 7	Software Engineering
ISO/IEC JTC 1/SC 7/WG 11	Software engineering/Life cycle management
ISO/IEC JTC 1/SC 22	Programming languages
ISO/IEC JTC 1/SC 22/JSG	Programming languages/Java Study Group
ISO/IEC JTC 1/SC 22/WG 20	Programming languages/Internationalization
ISO/IEC JTC 1/SC 24	Computer Graphics and Image Processing
ISO/IEC JTC 1/SC 27	IT Security Techniques
ISO/IEC JTC 1/SC 29	Coding of audio, picture, multimedia and hypermedia information
ISO/IEC JTC 1/SC 31	Automatic identification and data capture techniques
ISO/IEC JTC 1/SC 34	Document Description and Processing Languages
ISO/IEC JTC 1/SC 36	Learning Technology
ISO/TC 12	Quantities, units, symbols, conversion factors
ISO/TC 23/SC 19	Tractors and Machinery for agriculture and forestry/Agricultural electronics
ISO/TC 37	Terminology (principles and coordination)
ISO/TC 37/SC 3	Terminology/Computer Applications
ISO/TC 46	Information and documentation
ISO/TC 46/SC 3	Information and documentation/ Terminology

ISO/TC 46/SC 4	Information and documentation/Computer applications
ISO/TC 46/WG 2	Information and documentation/Coding of country names and related entities
ISO/TC 68	Banking, securities and other financial services
ISO/TC 68/SC 2	Banking, securities and other financial services/ Security management
ISO/TC 154	Documents and data elements in administration, commerce and industry
ISO/TC 184	Industrial automation systems and integration
ISO/TC 184/SC 4	Industrial automation systems and integration/ Industrial data
ISO/TC 204	Transport Information and Control Systems
ISO/TC 211	Geographic information/Geomatics
ISO/TC 215	Healthcare Informatics

External Liaison Membership Category - A

INTELSAT	International Telecommunications Satellite Organization
ISBT	International Society of Blood Transfusion
ITU-T	International Telecommunication Union - Telecommunication Standardization Sector
SITA	Societe Internationale de Telecommunications Aeronautiques (Airline Telecommunications & Information)
UN/ECE/CEFACT	UN/Economic Commission for Europe/CEFACT
UNCTAD	United Nations Conference of Trade and Development

External Liaison Membership Category - B

CEPT	European Conference of Postal and Telecommunications Administrations
CERN	European Organization for Nuclear Research
CISAC	International Confederation of Societies of Authors and Composers
ECMA	An International Europe-based Industry Association for Standardizing Information and Communications
ESA	European Space Agency
ETDE	Energy Technology Data Exchange
EWICS	European Workshop on Industrial Computer Systems
IFIP	International Federation for Information Processing
IPTC	International Press Telecommunications Council
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UNESA	UN-Under-Secretary for Economic and Social Affairs
UPU	Universal Postal Union
WIPO	World Intellectual Property Organization
WMO	World Metrological Organization

External Liaison Membership Category - C

EXPERTNET/SA	ExpertnetSA MEDSEC (Health Care Security and Privacy in the Information Society)
OG	Open Group
OGC	Open GIS Consortium
OMG	Object Management Group
W3C	World Wide Web Consortium

2.0 PERIOD REVIEW

Excellent progress has been made in developing SQL, SQL MM, RDA, Open-Edi, Metadata Registry standards, and we expect that progress to continue in the future. Excellent progress has been made in developing SQL. The remaining parts of the SQL:1999 standards have reached at least FCD status. An aggressive schedule for the next complete revision of ISO/IEC 9075 has been set with a target end date of 1st quarter 2003.

2.1 MARKET REQUIREMENTS

Market requirements for SC 32 standards are driven by the rapid pace of hardware and software advancement as well as by the explosive growth of Internet/Intranet/Extranet applications. These drive a stream of market requirements that are addressed by SC 32 standards for data management and interchange, including metadata management. The data management market continues to grow rapidly in line with the geometric increase in the volume of data stored and served. Technologies such as XML provide some competition to SC 32 standards, but also offer large opportunities to reach new markets by accommodating the new technologies or by taking a lead in collaborative development of the new technologies. SC 32 members are deeply involved in development of W3C XML recommendations (e.g., XML-Schema and XML-Query) and it would be desirable to position SC 32 as the appropriate JTC 1 committee for progressing these W3C recommendations to become ISO standards.

An SC 32 study period is finding an increasing market demand for semantics management. This is needed for data in databases, EDI messages, text in documents (which may be stored in databases), etc. While there are several ISO standards for various terminology content and structure, there is little connection between those standards and their potential use for data management and interchange. SC 32 is exploring the market requirements for semantics management and the existing standards in order to articulate and then fill the unmet need.

Users are driving the market demand for metadata registries that describe the structure and meaning data. Major organizations are implementing metadata registries according to SC 32 standards and in the process are creating demand for extensions and broader coverage. This work is especially driven by the public access requirements of users and by market forces requiring the capability to share metadata between organizations.

The market demand for SQL database products remains strong. The clear acceptance of the new SQL:1999 standards by the database vendors is very encouraging. The development of new parts and new features within the 9075 family of standards continues to be driven by perceived market priorities; the effort applied and the scheduling of the various parts has been adjusted accordingly.

Market demand of EDI and electronic commerce products grows as firms struggle to move into the electronic marketplace. Standards for EDI functions are necessary to facilitate this demand. The SC 32 work related to Open edi work and metadata registries is supporting JTC 1 involvement with the ISO IEC UN/ECE MoU Management Group.

Each part of SQL/MM standards is based on explicit requirements from a domain market. Especially, SQL/MM Part 2: Spatial specifying Spatial Data Management has got much attention from TC 204, TC 211, and OGC (Open GIS Consortium) and developed under closed coordination with TC 211 and OGC. Thus we believe that our standards meet with real market requirements.

2.2 ACHIEVEMENTS

The following projects have completed or are in Stage 5 – Publication

- 1.32.15.01.01.00 ISO/IEC 11179-1:1999 Information technology - Specification and standardization of data elements - Part 1: Framework for the specification and standardization of data elements

- 1.32.15.01.02.00 ISO/IEC 11179-2:2000 Information technology - Specification and standardization of data elements - Part 2: Classification for data elements
- 1.32.04.01.03.00 ISO/IEC 13249-3:1999 Information technology - SQL Multimedia and Application Packages - Part 3: Spatial
- 1.32.03.04.01.00 ISO/IEC 9075-1:1999 Information technology - Database Language SQL - Part 1: Framework
- 1.32.03.04.02.00 ISO/IEC 9075-2:1999 Information technology - Database Language SQL - Part 2: Foundation (SQL:1999)
- 1.32.03.04.03.00 ISO/IEC 9075-3:1999 Information technology - Database Language SQL - Part 3: Call-Level Interface
- 1.32.03.04.04.00 ISO/IEC 9075-4:1999 Information technology - Database Language SQL - Part 4: Persistent Stored Modules
- 1.32.03.04.05.00 ISO/IEC 9075-5:1999 Information technology - Database Language SQL - Part 5: Language Bindings
- 1.32.21.01.00.00 ISO/IEC TR 15452:2000 Information technology - Specification of Data Value Domain

The following projects are completing Stage 4 – Approval Stage by being submitted to ITTF for final vote.

- 1.32.04.01.01.00 ISO/IEC FDIS 13249-1 Information technology - SQL Multimedia and Application Packages - Part 1: Framework
- 1.32.04.01.02.00 ISO/IEC FDIS 13249-2 Information technology - SQL Multimedia and Application Packages - Part 2: Full -Text
- 1.32.03.04.01.01 ISO/IEC FDAM 9075 : Amd 1 Information technology- Database languages SQL - Amendment 1: SQL/OLAP (for SQL:1999)
- 1.32.03.04.10.00 ISO/IEC FDIS 9075-10 Information technology --Database Language SQL - Part 10: Object language bindings (for SQL:1999)

The following project completed Stage 3 – Committee Stage with FCD ballot

- 1.32.04.01.05.00 ISO/IEC FCD 13249-5 Information technology - SQL Multimedia and Application Packages - Part 5: Still Image

The following project progressing Stage 3 – Committee Stage with FCD ballot

- 1.32.03.04.09.00 ISO/IEC FCD 9075-9 Information technology - Database Language SQL - Part 9: Management of External Data
- 1.32.03.04.99.00 ISO/IEC 9075:1999/Cor 1 Information technology- Database languages - SQL - Technical Corrigendum 1 for SQL:1999
- 1.32.05.03.00.00 ISO/IEC FCD 9579 edition 3 Information technology - Remote database access for SQL (RDA/SQL) - Edition 3 (for SQL 1999)
- 1.32.03.04.01.01 ISO/IEC FPDAM 9075 : Amd 1 Information technology- Database languages SQL - Amendment 1: SQL/OLAP (for SQL:1999)

The following project is progressing in Stage 3 – Committee Stage

- 1.32.31.01.01.00 ISO/IEC CD 15944-1 Information technology - Business Agreement Semantic Descriptive Techniques Part 1: Business Operational Aspects of Open-edi for Implementation
- 1.32.53.01.03.00 ISO/IEC CD 9579 Amd 2 Information technology - Data Management and Interchange - Distribution Schema for RDA
- 1.32.15.02.03.00 ISO/IEC CD 11179-3 Information technology - Specification and standardization of data elements - Part 3: Basic attributes of data elements (Revision of ISO/IEC 11179-3:1994)
- 1.32.16.01.00.00 ISO/IEC PDTR 20943 Information technology - Procedure for Achieving Data Registry Content Consistency - Data Elements

2.3 RESOURCES

Adequate resources are currently available for all Database Languages (WG 3) projects. Some Metadata (WG 2) project require new project editors.

3.0 FOCUS NEXT WORK PERIOD

SC 32 has refined its program of work to ensure that it is focusing on those standards that will meet market requirements. SC 32 plans to continue to focus on developing standards for SQL, SQL/MM, Open edi and data semantics. SQL work is expected to be particularly active. During the next period, four parts of ISO/IEC 9075 (SQL 3) are expected to be completed through the IS stage with publication, another part of ISO/IEC 9075 will progress to FCD and significant progress on other parts is also expected. In addition a new project for another part of 9075 is anticipated to be initiated. The metadata registry market is becoming active with implementations of ISO/IEC 11179. The January 2000 SC 32/WG 2 meeting included an Open Forum on Metadata Registries presenting the current ISO/IEC 11179 standards and implementations while gathering information and requirements for future extensions.

SQL work remains particularly active. During the next period, two further parts of ISO/IEC 9075 (SQL) are expected to be completed up to the FDIS stage. In addition a Technical Corrigendum for the existing parts is expected to complete up to the IS stage with publication. This will complete work on project 1.32.03.04.

The Open-Edi (WG 1) is concentrating on their ISO/IEC 15944-1 Information technology - Business Agreement Semantic Descriptive Techniques Part 1: Business Operational Aspects of Open-edi for Implementation and ISO/IEC 18038 Identification, mapping and IT-enablement of existing standards for widely used encodable value domains. A key characteristic of commerce world-wide is that it makes extensive use of enumerated lists, code sets, etc. representing possible choices of common aspects in business transactions. The problem is that most of these code sets in use world-wide are paper-based and, even if available in electronic form, lack a computer-processable version. The objective of this standardization work is (1) the development of a tool to facilitate the creation of IT-enabled versions of existing sets of "codes representing X", and (2) to do so, in a manner which will support localization and multilingual requirements of the marketplace.

The Metadata Working Group (WG 2) is progressing the metadata registries with revisions to the ISO/IEC 11179 family of metadata registry standards. Part 3 of ISO/IEC 11179, sent out for CD ballot, is being revised to incorporate a structure of a metadata registry. The existing content of Part 3 will be updated and presented as a minimum set of attributes required for conformance. This project is being undertaken in response to the 5 year review requested by ISO/IEC. A technical report on metadata registry content is progressing through CD ballot. The content TR addresses the exchange of metadata among ISO/IEC 11179-based registries that depends not only on standard-conforming software, but also on contents that are compatible across registries. The goal of this project is to produce a Technical Report that will promote a common understanding of the content of metadata registry data elements so that they can be shared among registries. The intent is to provide guidance by example in registering data elements. WG 2 intends to recommend using XML for accessing and interchanging information in 11179 conformant data registries. We expect that specific XML tags and data structures will be algorithmically derived from the normative UML data model specified in 11179 part 3. The Object Management Group (OMG) has already adopted a standard for XMI (XML Model Interchange), which we expect to recommend as one mechanism for such algorithmic derivation of XML representation from UML models.

3.1 DELIVERABLES:

See section 1.2 for those projects with upcoming target dates.

3.2 STRATEGIES:

SC 32 will focus on progressing its program of work as quickly and efficiently as possible. It is important that the committee keep its focus on meeting market requirements, and emphasise new projects that have well-defined, concrete objectives that are market driven.

3.2.1 RISKS

SC 32 is the result of JTC 1 creating a new Technical Direction on Data Management and Interchange, and is a combination of three committees with different traditions, work programs and personalities. Each of these three groups had their own priorities, and different strategies for achieving their objectives. During the first two meetings, SC 32 successfully formulated a new working structure, scope and title. Considerable progress was made in identifying and establishing critical inter- and intra-group understanding and liaisons. While the first priority of the participants was to progress the standards proposals that came into the re-engineered SC 32, current attention has turning to developing new standards that cut across the original organizational lines. Considerable effort is being given to avoid isolated work within the WGs. At each subcommittee meeting each WG gives a tutorial on its work to the full committee.

There is always the risk that new project could be initiated that do not have clear objectives and concrete specifications. If this occurs, SC 32 will dilute its focus and create incentive to produce important standards outside of SC 32 and JTC 1.

Overlapping scope of projects is an area that needs to be continually monitored and controlled. Changes in market requirements and ability to schedule plenary sessions at the appropriate moment may cause some perturbation in the work schedules.

TC 211 is now progressing OGC's Simple Feature Access SQL (SFA SQL). SFA SQL can be regarded as mere subset of SQL/MM Part 2: Spatial. Their aim is quick adaptation of SFA SQL specification under current DBMS environments. The next edition of SFA SQL should coincide with SQL/MM Part 2. However, if we lose technology leadership, we may lose control. Therefore, rapid development of the next edition is crucial factor of future success.

If SC 32 does not pursue its work aggressively, risks exist that essential capabilities will not be available in the marketplace to support important functions, or that the marketplace will produce multiple incompatible solutions in areas that common approaches and interoperability are essential to users.

3.2.2 OPPORTUNITIES

The Internet, electronic commerce, semantics management, object technologies, and XML represent major areas of opportunity where market forces are creating demand for SC 32 standards. We will continue to work with the others involved to identify the specific standardization needs and to respond with current and newly proposed standards.

XML represents a major area of opportunity where market forces are creating demand for standards and SC 32 is continually monitoring the work in this area and will react as soon as it sees and appropriate opportunity.

3.3 WORK PROGRAMME PRIORITIES

In order to specify precisely data semantics, users need many aspects of data or information. As various aspects of data are provided, users can narrow down the semantics or meaning of the data gradually. That naturally leads to standardization, which covers a very wide range of information processing. High priority, therefore, should be given to the standardization of integrated information processing environment. The committee has established a priority of educating each working group about the work and ideas of the other work groups. The prior SC 32 meetings have shown that there is considerable

interest in the synergy that can be developed within the committee. The next SC 32 meeting will again include tutorials from each work group.

The work program priorities for WG3 are the completion of project 1.32.03.04 followed by project 1.32.03.05. Within this project priority will be given to the revision of those parts of SQL which formed part of the 1.32.03.04 project and then to the 2 new parts 7 and 12.

4.0 PERFORMANCE

JTC 1/SC 32 Performance (as of 2000-08-01)

SC 32 METRIC	1997	1998	1999	2000	2001
Attendance at Meetings ^{1,7}	N/A	47 ⁶	57	73	
New Standards Published ²	2	4	8	4	
Total Standards Published ³	N/A	23	31	28	
Active Projects ⁴	N/A	40	42	38	
New Projects ⁵	N/A	0	4	4	

¹Average Meeting Attendance at Plenaries and Working Groups (where a plenary include a meeting of all working groups – if working groups do not meet during plenary meetings, a cumulative mean attendance to working group meeting should be used) (**Att. Plena.**)

²New Standards published (**NSP**)

³Total standards published (and currently valid) (**TSP**)

⁴Active projects (**AP**)

⁵New projects introduced(**NP**)

⁶This does not include the first Planning meeting of JTC 1/SC 32 in February 1998

⁷At the National Body level the Working Groups are obtaining considerable participation with electronic participation