

ISO/IEC JTC 1/SC 32 N 0393

Date: 1999-12-08

REPLACES: --

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

DOCUMENT TYPE	Secretariat Report
TITLE	Secretariat Report for ISO/IEC JTC 1/SC 32 – Data Management and Interchange
SOURCE	JTC 1/SC 32 Secretariat
PROJECT NUMBER	
STATUS	This is prepared for the JTC 1SC 32 meeting in January 2000. Part 1 is the SC 32 Business Plan (32N0360 of October 1999).
REFERENCES	
ACTION ID.	FYI
REQUESTED ACTION	
DUE DATE	
Number of Pages	49
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://bwonotes5.wdc.pnl.gov/SC32/JTC1SC32.nsf>

*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: January 1999 to September 1999

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

1. MANAGEMENT SUMMARY:

1a CHAIRMAN'S REMARKS

SC 32 met in late May 1999 in Matsue, Japan. All working groups were present.

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;

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 behavior;
- 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, behaviors 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 behaviors 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, behaviors 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

<i>SC/WG</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>TARGET</i>	<i>TARGET</i>	<i>TARGET</i>	<i>TARGET</i>	<i>TARGET</i>
<i>Project Title</i>		<i>ACTUAL</i>	<i>ACTUAL</i>	<i>ACTUAL</i>	<i>ACTUAL</i>	<i>ACTUAL</i>

SC 32/RG 01 Reference Model for Data Management Maintenance

		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
SC 32/RG 01	Schnarr, Rick					
30.01.00.00.00	[17995 / 10032					
Information Technology - Reference Model of Data Management	/ 60.60]					
						1995-05

SC 32/RG 02 Export/Import Maintenance

		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
SC 32/RG 02	Berube, Jean	ISO/IEC CD 13238-1		SC 32 N0018		
58.01.00.00.00	[29940 / 13238-01	/	30.20]			
Information Technology - Data Management				1999-09	2000-02	2000-08
Export/Import Facilities - Part 1: Standardization Framework				1997-09		
				1997-11		
SC 32/RG 02	Olle, William	ISO/IEC CD 13238-2		SC 32 N0019		
58.02.00.00.00	[29941 / 13238-02	/	30.20]			
Information Technology - Data Management				1999-09	2000-02	2000-08
Export/Import Facilities - Part 2: SQL Export/Import				1997-09		
				1997-11		
SC 32/RG 02	Wilcox, Terry	ISO/IEC 13238-3: 1998		SC 32 N10899		
58.03.00.00.00	[21473 / 13238-03	/	60.00]			
Information Technology - Data Management				1995-01	1996-01	1998-11
Export/Import Facilities - Part 3: Export/Import Facilities for IRDS (Final Text - SC 32 N 174)				1995-03	1997-06	1999-03

SC 32/WG 01**Open-edi**

<i>SC/WG</i> <i>Project</i> <i>Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>TARGET</i> <i>ACTUAL</i>	<i>TARGET</i> <i>ACTUAL</i>	<i>TARGET</i> <i>ACTUAL</i>	<i>TARGET</i> <i>ACTUAL</i>	<i>TARGET</i> <i>ACTUAL</i>
SC 32/WG 01 30.02.01.00.00 Information Technology - Business Agreement Semantic Descriptive Techniques Part 1: Business Operational Aspects of Open-edi for Implementation	Levine, Paul [/ 15944-01	ISO/IEC AWI 15944-1 / 20.00]	1999-09	2000-12	2001-12	2002-06
SC 32/WG 01 30.02.02.00.00 Information Technology - Business Agreement Semantic Descriptive Techniques Part 2: Registration of Scenarios and their Components	Levine, Paul [/ 15944-02	ISO/IEC AWI 15944-2 / 20.00]	2000-06	2001-06	2002-09	2003-03
SC 32/WG 01 30.02.03.00.00 Information Technology - Business Agreement Semantic Descriptive Techniques Part 3: Open-edi Description Techniques	Levine, Paul [/ 15944-03	ISO/IEC AWI 15944-3 / 20.00]	2000-12	2001-06	2002-09	2003-03
SC 32/WG 01 30.03.00.00.00 Edi Support Services	*to be defined* [20953 / 17414	ISO/IEC AWI 17414 / 20.00]	2000-12	2001-12	2002-09	2003-03
SC 32/WG 01 30.04.00.00.00 Open-Edi Reference Model Standard	Pelkonen, Hannu [25154 / 14662	ISO/IEC 14662 : 1997 / 60.60]				1997-09

SC 32/WG 02**Metadata**

<i>SC/WG</i> <i>Project</i> <i>Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>TARGET</i> <i>ACTUAL</i>	<i>TARGET</i> <i>ACTUAL</i>	<i>TARGET</i> <i>ACTUAL</i>	<i>TARGET</i> <i>ACTUAL</i>	<i>TARGET</i> <i>ACTUAL</i>
SC 32/WG 02 01.00.00.00.00 Information Processing Systems - Concepts and Terminology for the Conceptual Schema and the Information Base	*to be defined* [16549 / 09007	ISO TR 9007 : 1987 / 60.60]				1987-07
SC 32/WG 02 06.01.00.00.00 Information Processing Systems - Information Resource Dictionary System (IRDS) Framework	Gradwell, David [17985 / 10027	ISO/IEC 10027 : 1990 / 90.92]				1990-06

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>			<i>IS TARGET ACTUAL</i>
		<i>NP TARGET ACTUAL</i>	<i>CD TARGET ACTUAL</i>	<i>FCD TARGET ACTUAL</i>	<i>FDIS TARGET ACTUAL</i>		
SC 32/WG 02 06.02.00.00.00 Information Technology - Information Resource Dictionary Systems (IRDS) Services Interface	Bourne, Tim [18821 / 10728	ISO/IEC 10728 : 1993 / 90.92]					1993-04
SC 32/WG 02 06.02.01.00.00 Information Technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 1: C Language Binding	Gradwell, David [24341 / 10728	ISO/IEC 10728 :1993/Amd 1:1995 / 60.60]					1995-12
SC 32/WG 02 06.02.02.00.00 Information Technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 2: Ada language binding	Colket, William [24342 / 10728	ISO/IEC 10728 :1993/Amd 2:1996 / 60.60]					1996-11
SC 32/WG 02 06.02.03.00.00 Information Technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 3: CORBA IDL Binding	Gradwell, David [27123 / 10728	ISO/IEC 10728 :1993/Amd 3:1998 / 60.60]					1996-12
SC 32/WG 02 06.02.04.00.00 Information Technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 4: Remote Procedure Call IDL Binding	Horiuchi, Hajini [28052 / 10728	ISO/IEC 10728 :1993/Amd 4:1998 / 60.60]		1996-05 1996-08		1998-02 1997-03	1998-08 1998-08
SC 32/WG 02 06.06.00.00.00 Information Technology - IRDS Content Module - Design Support for SQL Applications	Bartley, Don [31371 / 17415	ISO/IEC NP 17415 / 10.00]		1999-09	2000-05	2001-03	2001-10
SC 32/WG 02 06.07.00.00.00 Information Technology - Information Resource Dictionary System (IRDS) Services Interface (Revision of ISO/IEC 10728:1993) Extensions to IRDS Services Interface	Bourne, Tim [25838 / 10728	ISO/IEC CD 10728 / 30.20]		1997-09 1998-03	2001-01	2001-10	2002-01
SC 32/WG 02 06.08.00.00.00 Information Processing Systems - Information Resource Dictionary System (IRDS) Framework (Revision of ISO/IEC 10027:1990)	Gradwell, David [20189 / 10027	ISO/IEC WD 10027 edition 2 / 20.20]		2000-02	2000-07	2001-04	2001-07

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>			
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>	
		<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	
SC 32/WG 02 06.09.00.00.00 Information Technology - Guidelines for the Design of IRDS Content Modules	Gradwell, David [21852 / 13645	ISO/IEC FDIS 13645 / 40.60]		SC 32 N10940	1995-01 1996-08	1998-10	1999-01
SC 32/WG 02 06.09.01.00.00 Information Technology - IRDS Content Module to Support a Naming and Thesaurus Facility	Gradwell, David [21472 / 13237	ISO/IEC FDIS 13237 / 40.60]	2000-02 1997-09	SC 32 N11032	2000-11	2001-10	2002-02
SC 32/WG 02 14.02.00.00.00 Information processing - Representation of SI and other units in systems with limited character sets (Proposed to JTC 1 for withdrawal)	*to be defined* [8005 / 02955	ISO 2955 : 1983 / 90.93]					
SC 32/WG 02 14.03.01.00.00 Information technology - General structures for the interchange of code values - Part 1: Identification of coding schemes (Recommended for withdrawal to ITTF - Five Year Review)	*to be defined* [14748 / 07826-01	ISO/IEC 7826-1 : 1994 / 60.60]					
SC 32/WG 02 14.03.02.00.00 Information technology - General structure for the interchange of code values - Part 2: Registration of coding schemes (Recommended for withdrawal to ITTF - Five Year Review)	*to be defined* [20686 / 07826-02	ISO/IEC 7826-2 : 1994 / 60.60]					
SC 32/WG 02 14.04.01.00.00 Information Technology - Structure for the identification of organizations and organization parts - Part 1: Identification of organization schemes	*to be defined* [25773 / 06523-01	ISO/IEC 6523-1: 1998 / 60.00]			1997-06		1999-06 1998-06
SC 32/WG 02 14.04.02.00.00 Information Technology - Structure for the identification of organizations and organization parts - Part 2: Registration of organization identification schemes	*to be defined* [25774 / 06523-02	ISO/IEC 6523-2: 1998 / 60.00]			1997-06		1999-06 1998-06

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>
SC 32/WG 02 14.06.00.00.00 Standard representation of latitude, longitude and altitude for geographic point locations (Review at Matsue for moving to TC 211)	*to be defined* [13152 / 06709	ISO 6709 : 1983 / 90.92]				
SC 32/WG 02 14.06.01.00.00 Standard representation of latitude, longitude and altitude for geographic point locations (Revision of ISO 6709:1983)	*to be defined* [31384 / 06709	ISO/IEC AWI 6709 / 20.00] 1998-07	1999-05	2000-05	2000-08	2000-12
SC 32/WG 02 14.08.00.00.00 Information Technology - Specification of Data Element Concepts (propose for deletion at Matsue)	Ngo, Phong [28698 / 17413	ISO/IEC NP 17413 / 10.00]	2000-12	2001-08	2002-03	2002-07
SC 32/WG 02 14.09.00.00.00 Information technology - Specification of Data Value Domain	Newton, Judith [27695 / 15452	ISO/IEC DTR 15452 / 30.20]	1998-01	1999-05	1999-12 1998-09	2000-05
SC 32/WG 02 14.10.00.00.00 Information interchange - Representation of human sexes	Hunter, David [11219 / 05218	ISO 5218 : 1977 / 90.92]				
SC 32/WG 02 14.10.01.00.00 Information interchange - Representation of human sexes (Revision of ISO 5218:1977)	Hunter, David [31365 / 05218	ISO/IEC AWI 5218 / 20.00] 1998-07	1999-09	2000-05	2001-03	2001-08
SC 32/WG 02 14.14.02.00.00 Information technology - Guidelines for the organization and representation of data elements for data interchange - Coding methods and principles	*to be defined* [17651 / 09789	ISO/IEC TR 9789 : 1994 type 3 / 60.60]				
SC 32/WG 02 14.15.00.00.00 Data processing - Check character system (Proposed to JTC 1 for withdrawal)	*to be defined* [13631 / 07064	ISO 7064 : 1983 / 90.92]				

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>
SC 32/WG 02 14.16.00.00.00 Information technology - Representation of data elements values: Notation of the format	Thienot, Alain [2365 / 14957	ISO/IEC 14957 : 1996 / 60.60]				
SC 32/WG 02 14.17.01.00.00 Information technology - Specification and standardization of data elements - Part 1: Framework for the specification and standardization of data elements	Gillman, Dan [2349 / 11179-01	ISO/IEC FDIS 11179-1 / 40.20]		SC 32 N0243 1998-11 1999-02	1999-03	1999-06
SC 32/WG 02 14.17.02.00.00 Information Technology - Specification and standardization of data elements - Part 2: Classification for data elements	Bargmeyer, Bruce [2317 / 11179-02	ISO/IEC FDIS 11179-2 / 40.20]	1997-09 1998-02	SC 32 N0245	1999-03	1998-12
SC 32/WG 02 14.17.03.00.00 Information technology - Specification and standardization of data elements - Part 3: Basic attributes of data elements	Christensen, Joe [19184 / 11179-03	ISO/IEC 11179-3 : 1994 / 90.92]				
SC 32/WG 02 14.17.04.00.00 Information Technology - Specification and standardization of data elements - Part 3: Basic attributes of data elements (Revision of ISO/IEC 11179-3:1994)	Christensen, Joe [31367 / 11179-03	ISO/IEC AWI 11179-3 / 20.00]	1998-07 1999-07		2000-05 2000-09	2000-12
SC 32/WG 02 14.17.05.00.00 Information technology - Specification and standardization of data elements - Part 4: Rules and guidelines for the formulation of data definitions	Bargmeyer, Bruce [23788 / 11179-04	ISO/IEC 11179-4 : 1995 / 60.60]				1995-06
SC 32/WG 02 14.17.06.00.00 Information Technology - Specification and standardization of data elements - Part 5: Naming and identification principles for data elements	Newton, Judith [1758 / 11179-05	ISO/IEC 11179-5 : 1995 / 60.60]				1995-06

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>			<i>IS TARGET ACTUAL</i>
		<i>NP TARGET ACTUAL</i>	<i>CD TARGET ACTUAL</i>	<i>FCD TARGET ACTUAL</i>	<i>FDIS TARGET ACTUAL</i>		
SC 32/WG 02 14.17.07.00.00 Information technology - Specification and standardization of data elements - Part 6: Registration of data elements	Ngo, Phong [1677 / 11179-06	ISO/IEC 11179-6 : 1997 / 60.60]					1995-06
SC 32/WG 02 63.00.00.00.00 Information Technology - Conceptual Schema Modelling Facilities	King, Martin [22785 / 14481	ISO/IEC FDIS 14481 / 40.20]		1996-11 1997-01	SC 32 N0171 1999-09 1998-12	1999-12	2000-04
SC 32/WG 03	Database Languages						
SC 32/WG 03 03.03.00.00.00 Information Processing Systems - Database Language SQL 2 (to be withdrawn upon publication of 9075-1, 9075-2 and 9075-5, SQL3)	Cannan, Stephen [16663 / 09075	ISO/IEC 9075 : 1992 edition 3 / 90.93]					1992-11
SC 32/WG 03 03.03.01.00.00 Information Technology - Database Language SQL - Part 3: Call-Level Interface (for SQL2) (to be withdrawn upon publication of 9075-3, SQL3)	Cannan, Stephen [24357 / 09075-03	ISO/IEC 9075-3 : 1995 / 90.92]					1995-12
SC 32/WG 03 03.03.01.01.00 Information technology- Database languages - SQL - Technical Corrigendum 3 (to be withdrawn upon publication of 9075-1, 9075-2 and 9075-5, SQL:1999)	*to be defined* [30673 / 09075	ISO/IEC 9075 : 1992/Cor 3 / 30.99]			1999-11	2000-08	2000-12
SC 32/WG 03 03.03.02.00.00 Information Technology - Database Language SQL - Part 4: Persistent Stored Modules (for SQL2) (to be withdrawn upon publication of 9075-4, SQL3)	Cannan, Stephen [24358 / 09075-04	ISO/IEC 9075-4 : 1996 / 90.92]					1996-12
SC 32/WG 03 03.04.00.00.00 Information technology- Database languages - SQL - Technical Corrigendum 1 for SQL:1999	*to be defined* [/ 09075	ISO/IEC 9075 : 1999/Cor 1 /]				2000-02	2000-07

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>
SC 32/WG 03 03.04.01.00.00 Information Technology - Database Language SQL - Part 1: Framework (for SQL:1999)	Melton, Jim [26196 / 09075-01	ISO/IEC 9075-1 / 40.20]		SC 32 N0222 1996-06 1997-09	1999-03 1999-03	1999-07 1999-08
SC 32/WG 03 03.04.01.01.00 Information technology- Database languages SQL - Amendment 1: SQL/OLAP (for SQL:1999)	Melton, Jim [/ 09075-04	ISO/IEC WD 9075 : Amd 1 /]		1999-11	2000-08	2000-12
SC 32/WG 03 03.04.01.02.00 Information Technology - Database Language SQL - Part 3: Call-Level Interface (SQL/CLI) Technical Corrigendum 1 (to be withdrawn upon publication of 9075-3, SQL:1999)	Cannan, Stephen [31022 / 09075-03	ISO/IEC 9075-3 : 1995/Cor 1 / 60.00]				
SC 32/WG 03 03.04.01.03.00 Information Technology - Database Language SQL - Part 4: Persistent Stored Modules (SQL/PSM) Technical Corrigendum 1 (to be withdrawn upon publication of 9075-4, SQL:1999)	Cannan, Stephen [31023 / 09075-04	ISO/IEC 9075-4 : 1996/Cor 1 / 60.00]				
SC 32/WG 03 03.04.02.00.00 Information Technology - Database Language SQL - Part 2: Foundation (SQL:1999)	Melton, Jim [26197 / 09075-02	ISO/IEC 9075-2 / 40.20]		SC 32 N0223 1996-06 1997-09	1999-03 1999-03	1999-07
SC 32/WG 03 03.04.03.00.00 Information Technology - Database Language SQL - Part 3: Call-Level Interface (for SQL:1999)	Melton, Jim [30609 / 09075-03	ISO/IEC FDIS 9075-3 / 40.20]		SC 32 N0176 1998-09 1998-08	1999-08 1999-05	1999-09
SC 32/WG 03 03.04.04.00.00 Information Technology - Database Language SQL - Part 4: Persistent Stored Modules (for SQL:1999)	Melton, Jim [29864 / 09075-04	ISO/IEC 9075-4 / 40.20]		SC 32 N0224 1997-10 1997-10	1999-03 1999-03	1999-07 1999-08
SC 32/WG 03 03.04.05.00.00 Information Technology - Database Language SQL - Part 5: Language Bindings (for SQL:1999)	Melton, Jim [26198 / 09075-05	ISO/IEC 9075-5 / 40.60]		SC 32 N0225 1996-06 1997-09	1999-03 1999-03	1999-07 1999-08

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>
SC 32/WG 03 03.04.06.00.00 Information Technology - Database Language SQL - Part 6: XA Specialization (for SQL:1999) "Subdivision withdrawn subject to JTC1 endorsement"	Melton, Jim [26199 / 09075-06	ISO/IEC WD 9075-6 / 20.20]		SC 21 N9467 1999-10	2000-06	2000-10
SC 32/WG 03 03.04.07.00.00 Information Technology - Database Language SQL - Part 7: Temporal (for SQL:1999)	Melton, Jim [30611 / 09075-07	ISO/IEC AWI 9075-7 / 20.00]		2000-06	2001-01	2001-05
SC 32/WG 03 03.04.09.00.00 Information Technology - Database Language SQL - Part 9: Management of External Data	Melton, Jim [31370 / 09075-09	ISO/IEC CD 9075-9 / 20.00]	1998-12 1998-12	32N0197 1999-09	2000-07	2000-12
SC 32/WG 03 03.04.10.00.00 Information technology --Database Language SQL - Part 10: Object language bindings (for SQL:1999)	Melton, Jim [30613 / 09075-10	ISO/IEC FCD 9075-10 / 20.00]		32N0198 1998-10 1998-12	2000-01	2000-08
SC 32/WG 03 32.03.05.01.00 Information Technology - Database Language SQL - Part 1: Framework (for SQL:200n)	Melton, Jim [/ 09075-01	ISO/IECAWI 9075-1 /]	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.02.00 Information Technology - Database Language SQL - Part 2: Foundation (SQL:200n)	Melton, Jim [/ 09075-02	ISO/IEC AWI 9075-2 /]	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.03.00 Information Technology - Database Language SQL - Part 3: Call-Level Interface (for SQL:200n)	Melton, Jim [/ 09075-03	ISO/IEC AWI 9075-3 /]	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.04.00 Information Technology - Database Language SQL - Part 4: Persistent Stored Modules (for SQL:200n)	Melton, Jim [/ 09075-04	ISO/IEC AWI 9075-4 /]	2001-10	2002-08	2003-08	2003-12

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>
SC 32/WG 03 32.03.05.07.00 Information Technology - Database Language SQL - Part 7: Temporal (for SQL:200n)	Melton, Jim [/ 09075-07]	ISO/IEC AWI 9075-7 []	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.09.00 Information Technology - Database Language SQL - Part 9: Management of External Data (SQL:200n)	Melton, Jim [/ 09075-09]	ISO/IEC AWI 9075-9 []	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.10.00 Information technology --Database Language SQL - Part 10: Object language bindings (for SQL:200n)	Melton, Jim [/ 09075-10]	ISO/IEC AWI 9075-10 []	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.11.00 Information technology --Database Language SQL - Part 11: Schemata (for SQL:200n)	Melton, Jim [/ 09075-11]	ISO/IEC AWI 9075-11 []	2001-10	2002-08	2003-08	2003-12

SC 32/WG 04 SQL Multimedia & Application Packages

				<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>NP</i>	<i>CD</i>			
SC 32/WG 04 64.01.00.00.00 Information Technology - SQL Multimedia and Application Packages - Part 1: Framework	Newton, Mike [21484 / 13249-01]	ISO/IEC FDIS 13249-1 [40.20]		SC 32 N0188 1998-10 1998-10	1999-09	2000-01
SC 32/WG 04 64.02.00.00.00 Information Technology - SQL Multimedia and Application Packages - Part 2: Full -Text	Cotton, Paul [28053 / 13249-02]	ISO/IEC FDIS 13249-2 [40.20]		SC 32 N0014 1996-08 1997-11	1999-09	1999-12
SC 32/WG 04 64.02.01.00.00 Information Technology - SQL Multimedia and Application Packages - Part 2: Full-Text (Revision of ISO/IEC DIS 13249-2) (Later Progression)	Cotton, Paul [31368 / 13249-02]	ISO/IEC AWI 13249-2 [20.00]		2000-12	2001-12	2002-06

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		<i>IS TARGET ACTUAL</i>
		<i>NP TARGET ACTUAL</i>	<i>CD TARGET ACTUAL</i>	<i>FCD TARGET ACTUAL</i>	<i>FDIS TARGET ACTUAL</i>	
SC 32/WG 04 64.03.00.00.00	Ashworth, Mark [28054 / 13249-03	ISO/IEC FDIS 13249-3 / 40.20]		SC 32 N0229		
Information Technology - SQL Multimedia and Application Packages - Part 3: Spatial			1996-08 1997-11	1996-08 1997-11	1998-09 1999-03	1999-09
SC 32/WG 04 64.03.01.00.00	Cotton, Paul [31369 / 13249-03	ISO/IEC WD 13249-3 / 20.00]				
Information Technology - SQL Multimedia and Application Packages - Part 3: Spatial (Revision of ISO/IEC DIS 13249-3) (Later Progression)				2000-12	2001-12	2002-06
SC 32/WG 04 64.05.00.00.00	Cotton, Paul [30617 / 13249-05	ISO/IEC FCD 13249-5 / 30.20]		SC 32 N0342		
Information Technology - SQL Multimedia and Application Packages - Part 5: Still Image			1997-07 1998-01	1999-06 1999-08	2000-03	2000-10
SC 32/WG 05	Database Access and Interchange					
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
SC 32/WG 05 31.04.00.00.00	Hadjoannou, John [29799 / 09579	ISO/IEC FDIS 9579 edition 1 / 50.00]		SC 32 N0145		
Information Technology - Remote Database Access for SQL (Proceed as 9579, Ed. 1, new edition of RDA consolidating all parts. To be withdrawn upon publication of ISO/IEC 9579, Ed. 2)				1997-09 1997-09	1998-05 1998-06	1998-10
SC 32/WG 05 31.04.01.00.00	Hadjoannou, John [30688 / 09579	ISO/IEC 9579/Damd 1 / 40.60]		SC 32 N0339		
Information technology - Remote database access for SQL (RDA/SQL). Amendment 1. Secure RDA.			1998-05 1998-04	1998-05 1998-04	1999-06	1999-12
SC 32/WG 05 31.04.02.00.00	Hadjoannou, John [31373 / 09579	ISO/IEC 9579/AWI Amd 2 / 20.00]		32 N 0339		
Information Technology - Remote Database Access for SQL (RDA/SQL) - Amendment 2: Distribution Schema for RDA				1999-08	2000-06	2000-10
SC 32/WG 05 31.04.03.00.00	Hadjoannou, John [31372 / 09079	ISO/IEC 9579/AWI Amd 3 / 20.00]				
Information Technology - Remote Database Access for SQL (RDA/SQL) - Amendment 3: Encompassing Transaction (Subdivision subject to JTC 1 endorsement)				2000-02	2000-06	2000-10

<i>SC/WG Project Project Title</i>	<i>Project Editor</i>	<i>ISO/IEC Design Document</i>		<i>Reference</i>		
		<i>NP</i>	<i>CD</i>	<i>FCD</i>	<i>FDIS</i>	<i>IS</i>
		<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>	<i>TARGET ACTUAL</i>
SC 32/WG 05 31.05.00.00.00 Information technology - Remote database access for SQL (RDA/SQL) - Support for SQL 3	Hadjoannou, John [30615 / 09579	ISO/IEC CD 9579 edition 2 / 20.00]		1998-09	1999-10 1999-07	2000-06
SC 32/WG 05 31.05.01.00.00 Remote Database Access for SQL: XML Encoding	Hadjoannou, John [0 /	ISO/IEC CD 9579 ed 2 amd 1 /]		2000-02	2000-10	2001-06
SC 32/WG 05 31.05.02.00.00 Remote Database Access for SQL: Extended Security	Hadjoannou, John [0 /	ISO/IEC CD 9579 ed 2 amd 2 /]		2000-02	2000-10	2001-06
SC 32/WG 05 31.05.03.00.00 Remote Database Access for SQL: Support for SQL/MED	Hadjoannou, John [0 /	ISO/IEC CD 9579 ed 2 amd 3 /]		2000-02	2000-10	2001-06

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

ISO/IEC or CEN Group	Organization
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/WG 2	Information and documentation/Coding of country names and related entities
ISO/TC 46/SC 3	Information and documentation/ Terminology
ISO/TC 46/SC 4	Information and documentation/Computer applications
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
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	
ISO/IEC JTC 1/SC 22/WG 20	Programming languages/Internationalization
ISO/IEC JTC 1/SC 22/JSG	Programming languages/Java Study Group
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 Verified 990121	Automatic identification and data capture techniques
ISO/IEC JTC 1/SC 34	Document Description and Processing Languages
IEC 93	Design Automation
CEN/ISSS EC	Information Society Standardization System – Electronic Commerce XML-EDI
CEN/ISSS MM	Information Society Standardization System – Multimedia Metadata
CEN/TC 310 AMT	Advanced Manufacturing Technologies

Category A Liaison Membership

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

Category B Liaison Membership

Acronym	Organization
CEPT	European Conference of Postal and Telecommunications Administrations
CERN	European Organization for Nuclear Research
CISAC	Confederation internationale des societes d'auteurs et compositeurs
ECMA	European Computer Manufacturers Association
ESA	European Space Association
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

Category C Liaison Membership

Acronym	Organization
ExpertnetSA	ExpertnetSA MEDSEC (Health Care Security and Privacy in the Information Society)
IETF Security Group	
OMG	Object Management Group
Open Group	Open Group
OGC	Open GIS Consortium
ODB	Statistical Open Source Consortium for Output Databases (ODB)
W3C	World Wide Web Consortium

SC 32 is working with the MoU Management Group, UN/ECE/CFACT, and Intelsat, as well as other ISO groups involved in EDI, data representation and database activity. Cooperation exists with the World Wide Web Consortium (W3C), and CEN/TC 310 AMT.

Cooperation has been established with TC 211 on SQL/MM and Meta-data, JTC 1 SC 2 on coded character sets, SC 7 on Data Definition and Representation, SC 22 on Internationalization, SC 33.

2.0 PERIOD REVIEW

Excellent progress has been made in developing SQL, SQL MM, RDA, IRDS, and Data Representation, and Conceptual Schema standards, and we expect that progress to continue in the future. Open-Edi and Data Representation projects are also proceeding well. Most of the SQL-99 standards have progressed to international standard.

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 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 an 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.

Market demand for SQL database products is strong, with a clear market need for advanced SQL multimedia standards and products. The work of SC 32 in these areas is particularly importing in defining the standards that industry will implement to satisfy rapid growth in data content that must be captured, stored, managed, and accessed by an ever broadening range of users. The new SQL standard responds to market demands for broader capabilities and new data management techniques. The marketplace for database access and interchange technologies continue to evolve with the Internet providing new demand for sharing data among heterogeneous systems.

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.

2.2 ACHIEVEMENTS

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

58.03.00.00.00	Information Technology - Data Management Export/Import Facilities - Part 3: Export/Import Facilities for IRDS (Final Text - SC 32 N 174)
[ISO-id 21473]	ISO/IEC 13238-3: 1998
06.02.04.00.00	Information Technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 4: Remote Procedure Call IDL Binding
[ISO-id 28052]	ISO/IEC 10728 :1993/Amd 4:1998
14.04.01.00.00	Information Technology - Structure for the identification of organizations and organization parts - Part 1: Identification of organization schemes
[ISO-id 25773]	ISO/IEC 6523-1: 1998
14.04.02.00.00	Information Technology - Structure for the identification of organizations and organization parts - Part 2: Registration of organization identification schemes
[ISO-id 25774]	ISO/IEC 6523-2: 1998
03.04.01.00.00	Information Technology - Database Language SQL - Part 1: Framework (for SQL3)
[ISO-id 26196]	ISO/IEC 9075-1
03.04.02.00.00	Information Technology - Database Language SQL - Part 2: Foundation (SQL 3)
[ISO-id 26197]	ISO/IEC 9075-2
03.04.04.00.00	Information Technology - Database Language SQL - Part 4: Persistent Stored Modules (for SQL 3)
[ISO-id 29864]	ISO/IEC 9075-4
03.04.05.00.00	Information Technology - Database Language SQL - Part 5: Language Bindings (for SQL 3)
[ISO-id 26198]	ISO/IEC 9075-5

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

14.17.01.00.00	Information technology - Specification and standardization of data elements - Part 1: Framework for the specification and standardization of data elements
[ISO-id 2349]	ISO/IEC FDIS 11179-1
14.17.02.00.00	Information Technology - Specification and standardization of data elements - Part 2: Classification for data elements
[ISO-id 2317]	ISO/IEC FDIS 11179-2
14.09.00.00.00	Information technology - Specification of Data Value Domain
[ISO-id 27695]	ISO/IEC DTR 15452
31.05.00.00.00	Information Technology – Remote database access for SQL (RDA/SQL) – Support

		for SQL-3
[ISO-id	30615]	ISO/IEC FDIS 9579 edition 2
64.02.00.00.00		Information Technology - SQL Multimedia and Application Packages - Part 2: Full - Text
[ISO-id	28053]	ISO/IEC FDIS 13249-2
64.03.00.00.00		Information Technology - SQL Multimedia and Application Packages - Part 3: Spatial
[ISO-id	28054]	ISO/IEC FDIS 13249-3

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

03.04.10.00.00		Information technology --Database Language SQL - Part 10: Object language bindings
[ISO-id	30613]	ISO/IEC CD 9075-10

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

64.05.00.00.00		Information technology –SQL Multimedia and Application Packages – Part 5: Still Image
[ISO-id	30617]	ISO/IEC FCD 13249-5

The following project is progressing in Stage 3 – Committee Stage

03.04.09.00.00		Information Technology - Database Language SQL - Part 9: Management of External Data (Subdivision subject to JTC 1 endorsement)
[ISO-id	31370]	ISO/IEC CD 9075-9

2.3 RESOURCES

Adequate resources are available for all projects. Conveners are in place for all WGs although the Convener for WG 2 will change. The SC Secretariat is the Pacific Northwest National Laboratory who operates SC 32 on behalf of ANSI. The committee chairman, Mr. Bruce Bargmeyer is in mid-term.

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 will include an Open Forum on Metadata Registries to describe the current ISO/IEC 11179 standards and implementations while gathering information and requirements for the study period.

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 emphasize 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, some attention is now turning to developing new standards that cut across the original organizational lines. Considerable effort is being given to avoid isolated work within the WGs. Each subcommittee gave a tutorial on its work to the full committee at the last SC 32 meeting. It was agreed to set aside a period of time at the future meetings for each working group to provide tutorials on their activities for the other working groups.

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.

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.

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 of the work and ideas of the other work groups. The Brisbane and Matsue meetings have shown that there is considerable interest in the synergy that can be developed within the committee. The next SC 32 meeting will include tutorials from each work group.

Part 2 SC 32 Secretariat Report

2.1 P- and O-members and liaisons with other international organizations;

P - Participating National Body

O - Observer National Body

P

Category / National Body	Organization	Web Link
Australia	SAA	www.standards.org.au
Belgium	IBN	www.ibn.be
Brazil	ABNT	www.abnt.org.br
Canada	SCC	www.scc.ca
China	CSBTS	www.csbts.cn.net
Czech Republic	COSMT	www.csni.cz
Denmark	DS	www.ds.dk
Finland	SFS	www.sfs.fi
France	AFNOR	www.afnor.fr
Germany	DIN	www.din.de
Italy	UNI	www.unicei.it
Japan	JISC	www.aist.go.jp/jisc/htm/jisc00.htm www.jisc.org/
Korea, Republic of	KNITQ	www.nitq.go.kr
Netherlands, The	NNI	www.nni.nl
Norway	NSF	www.standard.no www.nts.no/it
United Kingdom	BSI	www.bsi.org.uk
USA	ANSI	www.ansi.org

O

Category / National Body	Organization	Web Link
Austria	ASI	www.on-norm.at
Russian Federation	GOST R	www.gost.ru
Sweden	ITS	www.sis.se

JTC 1/SC 32 Internal Liaisons

ISO/IEC or CEN	Organization	Topic	Date Confirmed
Liaison from SC 32	Liaison to SC 32	E-Mail	
CEN/ISSS EC Bill Olle (WG1)	Information Society Standardization System Luc Van den Berghe	Electronic Commerce luc.vandenberghe@cenorm.be	1998-10-15
CEN/ISSS MM Bill Olle (WG 1)	Information Society Standardization System Luc Van den Berghe	Metadata for Multimedia luc.vandenberghe@cenorm.be	1998-10-15

CEN/TC 310 AMT Bill Olle (WG 1)	Advanced Manufacturing Technologies Paul Leadbeater	Data paul_leadbeater@bsi.org.uk	
IEC 93	Design Automation Greg Ledenbach	greg.w.ledenbach@intel.com	
ISO/IEC JTC 1/SC 2 Kohji Shibano(WG 4)	Coded character sets Toshiko Kimura	Coded character sets kimura@itscj.ipsj.or.jp	1998-10-16
ISO/IEC JTC 1/SC 6 John Hadjiannou(WG5)	Telecommunications and information exchange between systems Jean Shildneck	ASN.1 jshildne@ansi.org	
ISO/IEC JTC 1/SC 7 Steven van't Veld / Mike Newton	Software Engineering Jean-Norman Drouin	ODP Enterprise Viewpoint Reference Model (RM-ODP) fcoallie@qc.bell.ca	
ISO/IEC JTC 1/SC Jean Berube(RG2)	Software engineering/Life cycle management Jean Berube	Data definition and representation jberube@ibm.net	
ISO/IEC JTC 1/SC 22 Frank Farance (WG2)	Programming languages Isak Korn	isak@image.dk	1998-10-15
ISO/IEC JTC 1/SC Frank Farance (WG2)	Programming languages/Java Study Group Bob Mathis	Java bob@pithecanthropus.com	1998-10-15
ISO/IEC JTC 1/SC Jim Melton(WG3)	Programming languages/Internationalization Arnold Winkler	Internationalization arnold.winkler@unisys.com	1998-10-15
ISO/IEC JTC 1/SC 24 Open (WG4)	Computer Graphics and Image Processing Mr Carlson		
ISO/IEC JTC 1/SC 27 Bruce Catley(WG5)	IT Security Techniques Krystyna Passia	IT Security Techniques passia@ni.din.de	
ISO/IEC JTC 1/SC 29	Coding of audio, picture, multimedia and hypermedia information Narumi Hirose	hirose@itscj.ipsj.or.jp	1999-10-21
ISO/IEC JTC 1/SC 31 Sandra K. Paul(WG1)	Automatic identification and data capture techniques Maria Schneider	mschneider@mail.uc-council.org	1999-01-21

ISO/IEC JTC 1/SC 34 Mike Brough	Document Description and Processing Languages	SGML masonjd@ornl.gov	
ISO/TC 12	Quantities, units, symbols, conversion factors	anders.j.thor@stg.se	
ISO/TC 23/SC 19	Tractors and Machinery for agriculture and forestry/Agricultural electronics	zen_lav@vdma.org	
ISO/TC 37 Jake Knoppers (WG1, WG2)	Terminology (principles and coordination) Mrs C Galinski, ON Austria	Firmapost@nsf.telemax.no	
ISO/TC 37/SC 3	Terminology/Computer Applications Mr. Gotfried Herzog, DIN German	Herzog@NABD.DIN.DE	
ISO/TC 46	Information and documentation Mrs. E. Lechner, DIN Germany	LECHNER@NABD.DIN.DE	1998-10-30
ISO/TC 46/SC 3	Information and documentation/ Terminology	isiri.infoc@neda.net	1998-10-30
ISO/TC 46/SC 4	Information and documentation/Computer applications Pat Harris (NISO)	pharris@cni.org	
ISO/TC 46/WG 2 Jake Knoppers(WG1, WG2)	Information and documentation/Coding of country names and related entities	Documents received thru TC 46	1998-10-30
ISO/TC 68	Banking, securities and other financial services	cfuller@aba.com	
ISO/TC 68/SC 2	Banking, securities and other financial services/ Security management	cfuller@aba.com	
ISO/TC 154 Bill Olle(WG1, WG2)	Documents and data elements in administration, commerce and industry	Basic Semantic Repository Hennig@NBUE.DIN.DE	
ISO/TC 184 Mike Newton (WG4)	Industrial automation systems and integration Mrs. Christine Hermetet-Filez, AFNOR France	Christine.hermetet-filez@email.afnor.fr	

ISO/TC 184/SC 4	Industrial automation systems and integration/ Industrial data	Mrs. C. Hermetet-Filez, AFNOR France	sc4sec@cme.nist.gov
ISO/TC 204	Transport Information and Control Systems	Andy Schoka(WG2) Paul Scarponcini (WG4)	Transportation 1998-10-15 arlan@sae.org / jbrandt@sae.org
ISO/TC 211	Geographic information/Geomatics	David Gradwell(WG2) Kohji Shibano(WG4) John Herring	Geographic Information 19981016 Bjornhild.Saeteroy@nts.no /
ISO/TC 215	Healthcare Informatics	Robert Mayes(WG2)	Healthcare Informatics tcendrow@astm.org

JTC1/SC 32 External Liaisons

Organization	Liaison from SC 32	Liaison to SC 32	Topic E-mail	Date Confirmed
Category : A	Liaisons			
INTELSAT	International Telecommunications Satellite Organization	(Tokuo Oishi\\(Colin Amor)	colin.amor@intelsat.int	19981026
ISBT	International Society of Blood Transfusion WG 2			
ITU-T	International Telecommunication Union - Telecommunication Standardization Sector	Wolfgang Wolleber	Conceptual Schema Modelling tsbedh@itu.int	
SITA	Societe Internationale de Telecommunications Aeronautiques (Airline Telecommunications & Information)			
UN/ECE/CEFACT	UN/Economic Commission for Europe/CEFACT Klaus-Dieter Naujok			
UNCTAD	United Nations Conference of Trade and Development			
Category : B	Liaisons			

CEPT	European Conference of Postal and Telecommunications Administrations	
CERN	European Organization for Nuclear Research	
CISAC	International Confederation of Societies of Authors and Composers Dominique Yon	19981202 Cisac@cisac.org
ECMA	An International Europe-based Industry Association for Standardizing Information and Communications	
ESA	European Space Agency	
ETDE	Energy Technology Data Exchange	Debbie_cutler@ccmail.osti.gov
EWICS	European Workshop on Industrial Computer Systems	
IFIP	International Federation for Information Processing	www.ifip.or.at
IPTC	International Press Telecommunications Council	
SWIFT	Society for Worldwide Interbank Financial Telecommunication	19981130 Frank.vandamme@swift.com
UNESA	UN-Under-Secretary for Economic and Social Affairs	
UPU	Universal Postal Union	

WIPO	World Intellectual Property Organization			
WMO	World Metrological Organization			19981210
Category : C	Liaisons			
EXPERTNET/SA	ExpertnetSA MEDSEC (Health Care Security and Privacy in the Information Society)			
	John Hadjioannou (WG 5)		nickt@expertnet.hol.gr	
OG	Open Group John Hadjioannou (WG 5) Paul Cotton (WG 3 - SQL Conformance Testing)			
OGC	Open GIS Consortium			19981016
	Mark Ashworth (WG 4)	Kurt Buehler Martin Ford	Kurt@opengis.org	
OMG	Object Management Group			19981106
	(Harold Sobrig) (Thomas Culpepper) (WG 2 - Object Mgmt)	(Henry Lowe) (Harold Sobrig) (Thomas Culpepper)	henry@omg.org	
W3C	World Wide Web Consortium			19981201
	Bruce Bargmeyer (WG 2 -Data Management and Interchange) Paul Cotton (WG 3, 4 - XML)			

2.2 SC 32 Organization

SC 32 Data Management and Interchange

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.

Web : <http://208.226.167.205/sc32/jtc1sc32.nsf>
News Email : SC32-news@nist.gov
Ftp :

SC 32/WG 01 Open-edi

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).

Web : www.telmo.fi/sty/sc30wg1
News Email :
Ftp :

SC 32/WG 02 Metadata

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

Web : www.metadata.aihw.gov.au
News Email : SC32WG2-news@nist.gov
Ftp : <ftp://www.sdct.itl.nist.gov/x3l8/sc32wg2>

SC 32/WG 03 Database Languages

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.

Web :

News Email :

Ftp :

SC 32/WG 04 SQL Multimedia & Application Packages

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.

Web :

News Email :

Ftp :

SC 32/WG 05 Database Access and Interchange

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.

Web : www.sc32wg5.freemove.co.uk

News Email :

Ftp :

SC 32/RG 01 Reference Model for Data Management Maintenance

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

Web :

News Email :

Ftp :

SC 32/RG 02 Export/Import Maintenance

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.

Web :
News Email :
Ftp :

2.3 SC32 Projects

SC/WG	Project Editor	ISO/IEC Design Document			Reference Document	
		NP	CD	FCD	FDIS	IS
Project		TARGET	TARGET	TARGET	TARGET	TARGET
Project Title		ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL

SC 32/RG 01 Reference Model for Data Management Maintenance

		NP	CD	FCD	FDIS	IS
SC 32/RG 01	Schnarr, Rick					
30.01.00.00.00	[17995 / 60.60]				Published 1995-05	
Information Technology - Reference Model of Data Management						1995-05

SC 32/RG 02 Export/Import Maintenance

		NP	CD	FCD	FDIS	IS
SC 32/RG 02	Berube, Jean					SC 32 N0018
58.01.00.00.00	[29940 / 30.20]					FCD awaited
Information Technology - Data Management Export/Import Facilities - Part 1: Standardization Framework			1997-09 1997-11	1999-09	2000-02	2000-08

SC 32/RG 02	Olle, William	ISO/IEC CD 13238-2			SC 32 N0019
58.02.00.00.00	[29941 / 30.20]				FCD awaited
Information Technology - Data Management		1997-09	1999-09	2000-02	2000-08
Export/Import Facilities - Part 2: SQL Export/Import		1997-11			

SC 32/RG 02	Wilcox, Terry	ISO/IEC 13238-3: 1998			SC 32 N10899
58.03.00.00.00	[21473 / 60.00]				Published 1998-12
Information Technology - Data Management		1995-01		1996-01	1998-11
Export/Import Facilities - Part 3: Export/Import Facilities		1995-03		1997-06	1999-03
for IRDS (Final Text - SC 32 N 174)					

SC 32/WG 01 Open-edi

		NP	CD	FCD	FDIS	IS
SC 32/WG 01	Levine, Paul					N0370
30.02.01.00.00	[/ 20.00]				CD Ballot closes 2000-01-24	
Information Technology - Business Agreement			1999-09	2000-12	2001-12	2002-06
Semantic Descriptive Techniques Part 1: Business			1999-10			
Operational Aspects of Open-edi for Implementation						

SC 32/WG 01	Levine, Paul	ISO/IEC AWI 15944-2				
30.02.02.00.00	[/ 20.00]					AWI
Information Technology - Business Agreement		2000-06		2001-06	2002-09	2003-03
Semantic Descriptive Techniques Part 2: Registration						
of Scenarios and their Components						

SC 32/WG 01	Levine, Paul	ISO/IEC AWI 15944-3				
30.02.03.00.00	[/ 20.00]					AWI
Information Technology - Business Agreement		2000-12		2001-06	2002-09	2003-03
Semantic Descriptive Techniques Part 3: Open-edi						
Description Techniques						

SC 32/WG 01	*to be defined*	ISO/IEC AWI 17414				
30.03.00.00.00	[20953 / 20.00]					AWI
Edi Support Services		2000-12		2001-12	2002-09	2003-03

SC 32/WG 01	Pelkonen, Hannu	ISO/IEC 14662 : 1997				
30.04.00.00.00	[25154 / 60.60]					Published 1997-12
Open-Edi Reference Model Standard						1997-09

SC 32/WG 02 Metadata

	NP	CD	FCD	FDIS	IS
--	----	----	-----	------	----

SC 32/WG 02	*to be defined*	ISO TR 9007 : 1987			
01.00.00.00.00	[16549 / 60.60]			Published 1987-07	
Information Processing Systems - Concepts and Terminology for the Conceptual Schema and the Information Base					1987-07
SC 32/WG 02	Gradwell, David	ISO/IEC 10027 : 1990			
06.01.00.00.00	[17985 / 90.92]			Published 1990-06	
Information Processing Systems - Information Resource Dictionary System (IRDS) Framework					1990-06
SC 32/WG 02	Bourne, Tim	ISO/IEC 10728 : 1993			
06.02.00.00.00	[18821 / 90.92]			Published 1993-04	
Information Technology - Information Resource Dictionary Systems (IRDS) Services Interface					1993-04
SC 32/WG 02	Gradwell, David	ISO/IEC 10728 :1993/Amd 1:1995			
06.02.01.00.00	[24341 / 60.60]			Published 1995-12	
Information Technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 1: C Language Binding					1995-12
SC 32/WG 02	Colket, William	ISO/IEC 10728 :1993/Amd 2:1996			
06.02.02.00.00	[24342 / 60.60]			Published 1996-11	
Information Technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 2: Ada language binding					1996-11
SC 32/WG 02	Gradwell, David	ISO/IEC 10728 :1993/Amd 3:1998			
06.02.03.00.00	[27123 / 60.60]			Published 1996-12	
Information Technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 3: CORBA IDL Binding					1996-12
SC 32/WG 02	Horiuchi, Hajini	ISO/IEC 10728 :1993/Amd 4:1998			
06.02.04.00.00	[28052 / 60.60]			Published 1998-05	
Information Technology - Information Resource Dictionary System (IRDS) Service Interface - Amendment 4: Remote Procedure Call IDL Binding					1998-05
			1996-05	1998-02	1998-08
			1996-08	1997-03	1998-08
SC 32/WG 02	Bartley, Don	ISO/IEC NP 17415			
06.06.00.00.00	[31371 / 10.00]			CD Awaited	
Information Technology - IRDS Content Module - Design Support for SQL Applications					
			1999-09	2000-05	2001-03
					2001-10

SC 32/WG 02	Bourne, Tim	ISO/IEC CD 10728			SC 32 N0095
06.07.00.00.00	[25838 / 30.20]				FCD expected January 2001
Information Technology - Information Resource Dictionary System (IRDS) Services Interface (Revision of ISO/IEC 10728:1993) Extensions to IRDS Services Interface		1997-09	2001-01	2001-10	2002-01
		1998-03			
SC 32/WG 02	Gradwell, David	ISO/IEC WD 10027 edition 2			SC 32 N10412
06.08.00.00.00	[20189 / 20.20]				CD expected July 1999
Information Processing Systems - Information Resource Dictionary System (IRDS) Framework (Revision of ISO/IEC 10027:1990)		2000-02	2000-07	2001-04	2001-07
SC 32/WG 02	Gradwell, David	ISO/IEC FDIS 13645			SC 32 N10940
06.09.00.00.00	[21852 / 40.60]				IS text awaited
Information Technology - Guidelines for the Design of IRDS Content Modules			1995-01	1998-10	1999-01
			1996-08		
SC 32/WG 02	Gradwell, David	ISO/IEC FDIS 13237			SC 32 N11032
06.09.01.00.00	[21472 / 40.60]				FCD expected October 1998
Information Technology - IRDS Content Module to Support a Naming and Thesaurus Facility		2000-02	2000-11	2001-10	2002-02
		1997-09			
SC 32/WG 02	*to be defined*	ISO 2955 : 1983			Proposed for withdrawal
14.02.00.00.00	[8005 / 90.93]				
Information processing - Representation of SI and other units in systems with limited character sets (Proposed to JTC 1 for withdrawal)					
SC 32/WG 02	*to be defined*	ISO/IEC 7826-1 : 1994			recommended for withdrawal to ITTF
14.03.01.00.00	[14748 / 60.60]				
Information technology - General structures for the interchange of code values - Part 1: Identification of coding schemes (Recommended for withdrawal to ITTF - Five Year Review)					
SC 32/WG 02	*to be defined*	ISO/IEC 7826-2 : 1994			Recommended for withdrawal to ITTF
14.03.02.00.00	[20686 / 60.60]				
Information technology - General structure for the interchange of code values - Part 2: Registration of coding schemes (Recommended for withdrawal to ITTF - Five Year Review)					
SC 32/WG 02	*to be defined*	ISO/IEC 6523-1: 1998			Published 1998-12
14.04.01.00.00	[25773 / 60.00]				1999-06
Information Technology - Structure for the identification of organizations and organization parts - Part 1: Identification of organization schemes			1997-06		1998-06

SC 32/WG 02	*to be defined*	ISO/IEC 6523-2: 1998					
14.04.02.00.00	[25774 / 60.00]					Published 1998-12	
Information Technology - Structure for the identification of organizations and organization parts - Part 2: Registration of organization identification schemes						1999-06	1998-06
SC 32/WG 02	*to be defined*	ISO 6709 : 1983					Published 1983-05
14.06.00.00.00	[13152 / 90.92]						
Standard representation of latitude, longitude and altitude for geographic point locations (Review at Matsue for moving to TC 211)							
SC 32/WG 02	*to be defined*	ISO/IEC AWI 6709					
14.06.01.00.00	[31384 / 20.00]						
Standard representation of latitude, longitude and altitude for geographic point locations (Revision of ISO 6709:1983)		1998-07	1999-05	2000-05	2000-08	2000-12	
SC 32/WG 02	Ngo, Phong	ISO/IEC NP 17413					
14.08.00.00.00	[28698 / 10.00]					Proposed for deletion	
Information Technology - Specification of Data Element Concepts (propose for deletion at Matsue)			2000-12	2001-08	2002-03	2002-07	
SC 32/WG 02	Newton, Judith	ISO/IEC DTR 15452					32N0228
14.09.00.00.00	[27695 / 30.20]					Passed to ITTF for publication	1999-03
Information technology - Specification of Data Value Domain		1998-01	1999-05	1999-12	2000-05	1998-09	
SC 32/WG 02	Hunter, David	ISO 5218 : 1977					
14.10.00.00.00	[11219 / 90.92]					Published 1977-09	
Information interchange - Representation of human sexes							
SC 32/WG 02	Hunter, David	ISO/IEC AWI 5218					
14.10.01.00.00	[31365 / 20.00]					CD expected May 1999	
Information interchange - Representation of human sexes (Revision of ISO 5218:1977)		1998-07	1999-09	2000-05	2001-03	2001-08	
SC 32/WG 02	*to be defined*	ISO/IEC TR 9789 : 1994 type 3					
14.14.02.00.00	[17651 / 60.60]					Published 1994	
Information technology - Guidelines for the organization and representation of data elements for data interchange - Coding methods and principles							
SC 32/WG 02	*to be defined*	ISO 7064 : 1983					
14.15.00.00.00	[13631 / 90.92]					Proposed for withdrawal	
Data processing - Check character system (Proposed to JTC 1 for withdrawal)							

SC 32/WG 02	Thienot, Alain	ISO/IEC 14957 : 1996						
14.16.00.00.00	[2365 / 60.60]							Published 1996-12
Information technology - Representation of data elements values: Notation of the format								
SC 32/WG 02	Gillman, Dan	ISO/IEC FDIS 11179-1						SC 32 N0243
14.17.01.00.00	[2349 / 40.20]							FDIS sent to ITTF 1999-04-12
Information technology - Specification and standardization of data elements - Part 1: Framework for the specification and standardization of data elements								
		1997-11			1998-11	1999-02	1999-03	1999-06
SC 32/WG 02	Bargmeyer, Bruce	ISO/IEC 11179-2:1999						SC 32 N0245
14.17.02.00.00	[2317 / 40.20]							Being Published 1999-09-15
Information Technology - Specification and standardization of data elements - Part 2: Classification for data elements								
		1997-09			1998-03		1999-03	1998-12
		1998-02					1999-03	
SC 32/WG 02	Christensen, Joe	ISO/IEC 11179-3 : 1994						Published 1994-12
14.17.03.00.00	[19184 / 90.92]							
Information technology - Specification and standardization of data elements - Part 3: Basic attributes of data elements								
SC 32/WG 02	Christensen, Joe	ISO/IEC AWI 11179-3						CD expected May 1999
14.17.04.00.00	[31367 / 20.00]							
Information Technology - Specification and standardization of data elements - Part 3: Basic attributes of data elements (Revision of ISO/IEC 11179-3:1994)								
		1998-07	1999-07		2000-05		2000-09	2000-12
SC 32/WG 02	Bargmeyer, Bruce	ISO/IEC 11179-4 : 1995						Published 1995-07
14.17.05.00.00	[23788 / 60.60]							
Information technology - Specification and standardization of data elements - Part 4: Rules and guidelines for the formulation of data definitions								
								1995-06
SC 32/WG 02	Newton, Judith	ISO/IEC 11179-5 : 1995						Published 1995-12
14.17.06.00.00	[1758 / 60.60]							
Information Technology - Specification and standardization of data elements - Part 5: Naming and identification principles for data elements								
								1995-06
SC 32/WG 02	Ngo, Phong	ISO/IEC 11179-6 : 1997						Published 1997-04
14.17.07.00.00	[1677 / 60.60]							
Information technology - Specification and standardization of data elements - Part 6: Registration of data elements								
								1995-06

SC 32/WG 02	King, Martin	ISO/IEC FDIS 14481		SC 32 N0171
63.00.00.00.00	[22785 / 40.20]			FCD ballot closed 15 January 1999
Information Technology - Conceptual Schema		1996-11	1999-09	1999-12
Modelling Facilities		1997-01	1998-12	2000-04

SC 32/WG 03 Database Languages

		NP	CD	FCD	FDIS	IS
SC 32/WG 03	Cannan, Stephen					
03.03.00.00.00	[16663 / 90.93]					
Information Processing Systems - Database Language						Published 1992-10
SQL 2 (to be withdrawn upon publication of						1992-11
9075-1, 9075-2 and 9075-5, SQL3)						
SC 32/WG 03	Cannan, Stephen					
03.03.01.00.00	[24357 / 90.92]					
Information Technology - Database Language SQL -						Published 1995-12
Part 3: Call-Level Interface (for SQL2) (to be						1995-12
withdrawn upon publication of 9075-3, SQL3)						
SC 32/WG 03	*to be defined*					
03.03.01.01.00	[30673 / 30.99]					
Information technology- Database languages - SQL -						Published 1992
Technical Corrigendum 3 (to be withdrawn upon						2000-12
publication of 9075-1, 9075-2 and 9075-5, SQL:1999)				1999-11	2000-08	
SC 32/WG 03	Cannan, Stephen					
03.03.02.00.00	[24358 / 90.92]					
Information Technology - Database Language SQL -						Published 1996-12
Part 4: Persistent Stored Modules (for SQL2) (to be						1996-12
withdrawn upon publication of 9075-4, SQL3)						
SC 32/WG 03	*to be defined*					
03.04.00.00.00	[/]					
Information technology- Database languages - SQL -						2000-07
Technical Corrigendum 1 for SQL:1999					2000-02	
SC 32/WG 03	Melton, Jim					
03.04.01.00.00	[26196 / 40.20]					
Information Technology - Database Language SQL -						SC 32 N0222
Part 1: Framework						Published 1999-11-15
				1996-06	1999-03	1999-07
				1997-09	1999-03	1999-11
SC 32/WG 03	Melton, Jim					
03.04.01.01.00	[/]					
Information technology- Database languages SQL -						32N0379
Amendment 1: SQL/OLAP (for SQL:1999)						FPDAM ballot closes 2000-05-01
				1999-11	2000-08	2000-12
				1999-11		

SC 32/WG 03 03.04.01.02.00 Information Technology - Database Language SQL - Part 3: Call-Level Interface (SQL/CLI) Technical Corrigendum 1 (to be withdrawn upon publication of 9075-3, SQL:1999)	Cannan, Stephen [31022 / 60.00]	ISO/IEC 9075-3 : 1995/Cor 1			Published 1995
SC 32/WG 03 03.04.01.03.00 Information Technology - Database Language SQL - Part 4: Persistent Stored Modules (SQL/PSM) Technical Corrigendum 1 (to be withdrawn upon publication of 9075-4, SQL:1999)	Cannan, Stephen [31023 / 60.00]	ISO/IEC 9075-4 : 1996/Cor 1			Published 1996
SC 32/WG 03 03.04.02.00.00 Information Technology - Database Language SQL - Part 2: Foundation (SQL:1999)	Melton, Jim [26197 / 40.20]	ISO/IEC 9075-2	1996-06 1997-09	SC 32 N0223 Published 1999-11-15 1999-03 1999-03	1999-07 1999-11
SC 32/WG 03 03.04.03.00.00 Information Technology - Database Language SQL - Part 3: Call-Level Interface	Melton, Jim [30609 / 40.20]	ISO/IEC 9075-3	1998-09 1998-08	SC 32 N0176 Published 1999-11-15 1999-08 1999-05	1999-09 1999-11
SC 32/WG 03 03.04.04.00.00 Information Technology - Database Language SQL - Part 4: Persistent Stored Modules	Melton, Jim [29864 / 40.20]	ISO/IEC 9075-4	1997-10 1997-10	SC 32 N0224 Published 1999-11-15 1999-03 1999-03	1999-07 1999-11
SC 32/WG 03 03.04.07.00.00 Information Technology - Database Language SQL - Part 7: Temporal (for SQL:1999)	Melton, Jim [30611 / 20.00]	ISO/IEC AWI 9075-7	2000-06	FCD expected November 1999 2001-01	2001-05
SC 32/WG 03 03.04.09.00.00 Information Technology - Database Language SQL - Part 9: Management of External Data	Melton, Jim [31370 / 20.00]	ISO/IEC FCD 9075-9	1998-12 1998-12	32N0368 FCD ballot closes 2000-05-01 2000-07	2000-12
SC 32/WG 03 03.04.10.00.00 Information technology --Database Language SQL - Part 10: Object language bindings (for SQL:1999)	Melton, Jim [30613 / 20.00]	ISO/IEC FCD 9075-10	1998-10 1998-12	FCD ballot closed 1999-04-30 2000-01	2000-08
SC 32/WG 03 32.03.05.01.00 Information Technology - Database Language SQL - Part 1: Framework (for SQL:200n)	Melton, Jim [/]	ISO/IECAWI 9075-1	2001-10	2002-08 2003-08	2003-12

SC 32/WG 03 32.03.05.02.00 Information Technology - Database Language SQL - Part 2: Foundation (SQL:200n)	Melton, Jim [/]	ISO/IEC AWI 9075-2	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.03.00 Information Technology - Database Language SQL - Part 3: Call-Level Interface (for SQL:200n)	Melton, Jim [/]	ISO/IEC AWI 9075-3	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.04.00 Information Technology - Database Language SQL - Part 4: Persistent Stored Modules (for SQL:200n)	Melton, Jim [/]	ISO/IEC AWI 9075-4	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.07.00 Information Technology - Database Language SQL - Part 7: Temporal (for SQL:200n)	Melton, Jim [/]	ISO/IEC AWI 9075-7	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.09.00 Information Technology - Database Language SQL - Part 9: Management of External Data (SQL:200n)	Melton, Jim [/]	ISO/IEC AWI 9075-9	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.10.00 Information technology --Database Language SQL - Part 10: Object language bindings (for SQL:200n)	Melton, Jim [/]	ISO/IEC AWI 9075-10	2001-10	2002-08	2003-08	2003-12
SC 32/WG 03 32.03.05.11.00 Information technology --Database Language SQL - Part 11: Schemata (for SQL:200n)	Melton, Jim [/]	ISO/IEC AWI 9075-11	2001-10	2002-08	2003-08	2003-12

SC 32/WG 04 SQL Multimedia & Application Packages

	NP	CD	FCD	FDIS	IS
SC 32/WG 04 64.01.00.00.00 Information Technology - SQL Multimedia and Application Packages - Part 1: Framework	Newton, Mike [21484 / 40.20]	ISO/IEC FDIS 13249-1	1998-10 1998-10	FCD passed 1999-03-02 1999-09	SC 32 N0188 2000-01

SC 32/WG 04	Cotton, Paul	ISO/IEC FDIS 13249-2				SC 32 N0014
64.02.00.00.00	[28053 / 40.20]					FDIS expected
Information Technology - SQL Multimedia and Application Packages - Part 2: Full -Text			1996-08	1999-09	1999-12	
			1997-11			
SC 32/WG 04	Cotton, Paul	ISO/IEC AWI 13249-2				CD expected after May 1999
64.02.01.00.00	[31368 / 20.00]					
Information Technology - SQL Multimedia and Application Packages - Part 2: Full-Text (Revision of ISO/IEC DIS 13249-2) (Later Progression)			2000-12	2001-12	2002-06	
SC 32/WG 04	Ashworth, Mark	ISO/IEC FDIS 13249-3				SC 32 N0229
64.03.00.00.00	[28054 / 40.20]					FDIS ballot approved 1999-09-22
Information Technology - SQL Multimedia and Application Packages - Part 3: Spatial		1996-08	1996-08	1998-09	1999-09	
		1997-11	1997-11	1999-03		
SC 32/WG 04	Ashworth, Mark	ISO/IEC WD 13249-3				CD expected after May 1999
64.03.01.00.00	[31369 / 20.00]					
Information Technology - SQL Multimedia and Application Packages - Part 3: Spatial (Revision of ISO/IEC DIS 13249-3) (Later Progression)			2000-12	2001-12	2002-06	
SC 32/WG 04	Cotton, Paul	ISO/IEC FCD 13249-5				SC 32 N0342
64.05.00.00.00	[30617 / 30.20]					FCD ballot closes 1999-12-31
Information Technology - SQL Multimedia and Application Packages - Part 5: Still Image		1997-07	1999-06	2000-03	2000-10	
		1998-01	1999-08			

SC 32/WG 05 Database Access and Interchange

			NP	CD	FCD	FDIS	IS
SC 32/WG 05	Hadjoannou, John	ISO/IEC FDIS 9579 edition 1					SC 32 N0145
31.04.00.00.00	[29799 / 50.00]						FDIS ballot closed 1999-03-07
Information Technology - Remote Database Access for SQL			1997-09	1998-05	1998-10		
(Proceed as 9579, Ed. 1, new edition of RDA consolidating all parts. To be withdrawn upon publication of ISO/IEC 9579, Ed. 2)			1997-09	1998-06			
SC 32/WG 05	Hadjoannou, John	ISO/IEC FDIS 9579 ed 2					SC 32 N0339
31.04.01.00.00	[30688 / 40.60]						FDIS ballot closes 1999-12-28
Information technology - Remote database access for SQL (RDA/SQL). Amendment 1. Secure RDA.		1998-05	1998-05	1999-06	1999-12		
		1998-04	1998-04	1999-07			
SC 32/WG 05	Hadjoannou, John	ISO/IEC CD 9579 Amd 2					32 N 0369
31.04.02.00.00	[31373 / 20.00]						CD Ballot closes 2000-01-12
Information Technology - Remote Database Access for SQL (RDA/SQL) - Amendment 2: Distribution Schema for RDA		1999-10	1999-08	2000-06	2000-10		

SC 32/WG 05	Hadjoannou, John	ISO/IEC 9579/AWI Amd 3			
31.04.03.00.00	[31372 / 20.00]				PDAM expected February 2000
Information Technology - Remote Database Access for SQL (RDA/SQL) - Amendment 3: Encompassing Transaction (Subdivision subject to JTC 1 endorsement)			2000-02	2000-06	2000-10
SC 32/WG 05	Hadjoannou, John	ISO/IEC FCD 9579 edition 3			N0349
31.05.00.00.00	[30615 / 20.00]				in FCD ballot
Information technology - Remote database access for SQL (RDA/SQL) - Support for SQL 3			1998-09	1999-10	2000-06
			1999-08		
SC 32/WG 05	Hadjoannou, John	ISO/IEC CD 9579 ed 2 amd 1			
31.05.01.00.00	[0 /]				
Remote Database Access for SQL: XML Encoding			2000-02	2000-10	2001-06
SC 32/WG 05	Hadjoannou, John	ISO/IEC CD 9579 ed 2 amd 2			
31.05.02.00.00	[0 /]				
Remote Database Access for SQL: Extended Security			2000-02	2000-10	2001-06
SC 32/WG 05	Hadjoannou, John	ISO/IEC CD 9579 ed 2 amd 3			
31.05.03.00.00	[0 /]				
Remote Database Access for SQL: Support for SQL/MED			2000-02	2000-10	2001-06

2.4 SC Chairman and Secretariat, WG Conveners and Project Editors

Mr. Mark Ashworth

2285 Regional Road 57
 Phone: + 1 905 697 0838
 Fax: Bowmanville
 Ontario
 Email: Mark.Ashworth@ACM.org
 L1C 3K4
 Canada

Project Editor	64.03.01.00.00	ISO/IEC WD 13249-3
Project Editor	64.04.00.00.00	ISO/IEC CD 13249-4
Project Editor	64.03.00.00.00	ISO/IEC FDIS 13249-3

Mr. Bruce Bargmeyer

Phone: + 1 202 260 5306
Fax: + 1 202 260 5865
Email: Bargmeyer.bruce@epamail.epa.gov

Environmental Protection Agency PM-218
Room 3618

Washington
DC

20460
USA

Chairman

Project Editor 14.17.02.00.00 ISO/IEC 11179-2:1999

Project Editor 14.17.05.00.00 ISO/IEC 11179-4:1995

Mr. Don Bartley

Phone: +61 2 6252 6779
Fax: +61 2 6252 6383
Email: don.bartley@abs.gov.au

Australian Bureau of Statistics, Cameron Offices
Chandler Street

P.O. Box 10
Belconnen
ACT

2616
Australia

Project Editor 06.06.00.00.00 ISO/IEC NP 17415

Mr. Jean Berube

Phone: + 1 450 465 0245
Fax: + 1 450 465 2398
Email: jberube@ibm.net

IDEgenic Inc.
87 Burton

Greenfield Part
Quebec

J4V 2Y6
Canada

Rapporteur

Project Editor 58.01.00.00.00 ISO/IEC CD 13238-1

Mr. Tim Bourne

Phone: + 44 442 672 20
Fax: + 44 442 230 404
Email: tbourne@siam.win-uk.net

SIAM
1 St. David's Close

Hemel Hempstead

HP3 8LU
United Kingdom

Project Editor 06.02.00.00.00 ISO/IEC 10728:1993

Project Editor 06.07.00.00.00 ISO/IEC CD 10728

Mr. Stephen Cannan

Phone: + 31 29 423 6666

Fax: + 31 29 423 0346

Email: stephen.cannan@jamesmartin.nl

James Martin & Co.
Rijksstraatweg 102-B

3632 AD Loenen, a/d Vecht

The Netherlands

Project Editor	03.03.00.00.00	ISO/IEC 9075:1992
Project Editor	03.03.01.00.00	ISO/IEC 9075-3:1995
Project Editor	03.03.02.00.00	ISO/IEC 9075-4:1996
Project Editor	03.04.01.02.00	ISO/IEC 9075:1995 C1
Project Editor	03.04.01.03.00	ISO/IEC 9075-4:1996/
Project Editor		
Project Editor		
Convenor		

Mr. Joe Christensen

Phone: +61 2 6244 1148

Fax: +61 2 6244 1255

Email: joe.christensen@aihw.gov.au

Australian Institute of Health and Welfare
National Information Devel. UnitCanberra
ACT2601
Australia

Project Editor	14.17.03.00.00	ISO/IEC 11179-3:1994
Project Editor	14.17.04.00.00	ISO/IEC AWI 11179-3

Mr. William Currie Colket

Phone: + 1 703 602 1483

Fax: + 1 703 602 6805

Email: colket@smtp-gw.spawar.navy.mil

9906 Dale Ridge Road

Vienna
VA22181
USA

Project Editor	06.02.02.00.00	ISO/IEC 10728:1993/2
----------------	----------------	----------------------

Mr. Paul Cotton

Phone: + 1 613 225 5445

Fax: + 1 613 226 6913

Email: cotton@ca.ibm.com

IBM Canada Ltd.
17 Eleanor DriveNepean
OntarioK2E 6A3
Canada

Project Editor	64.02.01.00.00	ISO/IEC AWI 13249-2
Project Editor	64.05.00.00.00	ISO/IEC FCD 13249-5

Project Editor 64.02.00.00.00 ISO/IEC FDIS 13249-2

Mr. Larry Fitzwater (acting)

Phone: + 1 202 260 3071
Fax: + 1 202 401 8390
Email: Fitzwater.Larry@epamail.epa.gov

Environmental Protection Agency
Room 3408

Washington
DC

20460
USA

Convenor

Mr. Daniel Gillman

Phone: + 1 301 457 4860
Fax: + 1 301 457 2299
Email: gillman@info.census.gov

Bureau of the Census
Statistical Research Division

Washington
DC

20233
USA

Project Editor 14.17.01.00.00 ISO/IEC FDIS 11179-1

Mr. David Gradwell

Phone: + 44 1 276 23519
Fax: + 44 1 276 676670
Email: david@gradwell.com

Data Dictionary Systems Limited
16 Tekels Avenue

Surrey

GU15 2LB
United Kingdom

Project Editor	06.09.00.00.00	ISO/IEC FDIS 13645
Project Editor	06.09.01.00.00	ISO/IEC FDIS 13237
Project Editor	06.08.00.00.00	ISO/IEC WD 10027
Project Editor	06.02.03.00.00	ISO/IEC 10728:1993/3
Project Editor	06.02.01.00.00	ISO/IEC 10728:1993/1
Project Editor	06.01.00.00.00	ISO/IEC 10027:1990

Mr. John Hadjoannou

Phone: + 44 1525 374 667
Fax: +44 1525 850427
Email: john@minster.co.uk

Blue Star Information Systems
197 Grasmere Way

Linslade
Leighton Buzzard

LU7 7QB
United Kindgom

Project Editor	31.02.01.00.00	ISO/IEC 9579-2:1998
Project Editor	31.04.00.00.00	ISO/IEC FDIS 9579
Project Editor	31.04.01.00.00	ISO/IEC 9579 ED2
Project Editor	31.05.00.00.00	ISO/IEC FCD 9579 ed3

Project Editor	31.04.02.00.00	ISO/IEC CD 9579/ A2
Project Editor	31.04.03.00.00	ISO/IEC 9579/AWI A3
Project Editor	31.05.01.00.00	ISO/IEC 9579 Amd 1
Project Editor	31.05.03.00.00	ISO/IEC 9579 Amd 3
Convenor		
Project Editor	31.05.02.00.00	ISO/IEC 9579 Amd 2

Mr. Hajimi Horiuchi

1-13-1 Matobakita

Phone:

Fax:

Email: hori@tiu.ac.jp

Saitama

350 11

Japan

Project Editor	06.02.04.00.00	ISO/IEC 10728:1993/4
----------------	----------------	----------------------

Mr. David Hunter

Australian Bureau of Statistics
PO Box 10

Phone: + 2 62526300

Fax:

Email: david.hunter@abs.gov.au

Belconnen
A.C.T.

2615
Australia

Project Editor	14.10.00.00.00	ISO 5218:1977
Project Editor	14.10.01.00.00	ISO/IEC AWI 5218

Mr. Martin King

Phone:

Fax:

Email: martin_king@uk.ibm.com

Project Editor	63.00.00.00.00	ISO/IEC FDIS 14481
----------------	----------------	--------------------

Paul Levine

Telcordia
Room RRC 4D876

Phone: +1 732 699 3042

Fax: +1 732 336 2980

Email: plevine@telcordia.com

444Hoes Lane
Piscataway
NJ

08854
USA

Project Editor	30.02.03.00.00	ISO/IEC AWI 15944-3
Project Editor	30.02.02.00.00	ISO/IEC AWI 15944-2
Project Editor	30.02.01.00.00	ISO/IEC CD 15944-1

Mr. Douglas Mann

Phone: + 1 703 575 2114
Fax: + 1 703 671 9180
Email: mannd@battelle.org

Secretariat

Battelle Memorial Institute
5109 Leesburg Pike

Six Skyline Place, Suite 819
Falls Church
VA

22041-3208
USA

Mr. Jim Melton

Phone: + 1 801 942 0144
Fax: + 1 801 942 3345
Email: jim.melton@acm.org

Oracle Corporation
1930 E. Viscounti Drive

Sandy
UT

84093
USA

Project Editor	32.03.05.09.00	ISO/IEC AWI 9075-9
Project Editor	32.03.05.10.00	ISO/IEC AWI 9075-10
Project Editor	32.03.05.07.00	ISO/IEC AWI 9075-7
Project Editor	32.03.05.04.00	ISO/IEC AWI 9075-4
Project Editor	32.03.05.03.00	ISO/IEC AWI 9075-3
Project Editor	32.03.05.02.00	ISO/IEC AWI 9075-2
Project Editor	03.04.10.00.00	ISO/IEC FCD 9075-10
Project Editor	03.04.01.01.00	ISO/IEC FP9075:99 a1
Project Editor	03.04.09.00.00	ISO/IEC FCD 9075-9
Project Editor	03.04.07.00.00	ISO/IEC AWI 9075-7
Project Editor	03.04.06.00.00	ISO/IEC WD 9075-6
Project Editor	03.04.05.00.00	ISO/IEC 9075-5
Project Editor	03.04.04.00.00	ISO/IEC 9075-4
Project Editor	03.04.02.00.00	ISO/IEC 9075-2
Project Editor	03.04.01.00.00	ISO/IEC 9075-1
Project Editor	03.04.03.00.00	ISO/IEC 9075-3
Project Editor	32.03.05.11.00	ISO/IEC AWI 9075-10
Project Editor	32.03.05.01.00	ISO/IEC AWI 9075-1
Project Editor		

Ms. Judith Newton

Phone: + 1 301 975 3256
Fax:
Email: jnewton@nist.gov

NIST
United States Dept. of Commerce

Gaithersburg
MD

20899
USA

Project Editor	14.09.00.00.00	ISO/IEC DTR 15452
Project Editor	14.17.06.00.00	ISO/IEC 11179-5:1995

Mr. Mike Newton

Phone: + 44 1 908 653 706

Fax: + 44 1 908 653 744

Email: m.a.newton@open.ac.uk

Open University
Computing Department

Bucks

MK7 6AA
United Kingdom

Project Editor	64.01.00.00.00	ISO/IEC FDIS 13249-1
Rapporteur		

Mr. Phong Ngo

Phone: + 1 703 292 6246

Fax:

Email: phong.x.ngo@cpmx.saic.com

SAIC
200 N. Glebe Road, Suite 300

Arlington
VA

22203
USA

Project Editor	14.08.00.00.00	ISO/IEC NP 17413
Project Editor	14.17.07.00.00	ISO/IEC 11179-6:1997

Mr. William Olle

Phone: + 44 1 932 221 224

Fax: + 44 1 932 221 227

Email: bill_olle@compuserve.com

T. William Olle Associates
2 Ashley Park Road

Walton-on-Thames
Surrey

KT12 1JU
United Kingdom

Project Editor	58.02.00.00.00	ISO/IEC CD 13238-2
----------------	----------------	--------------------

Mr. Dipak Patel

Phone: + 1 408 473 0200

Fax:

Email: dipak.patel@atinet.com

Automation Technology, Inc.
2890 Zanker Road

San Jose
CA

95134
USA

Project Editor	31.01.00.00.00	ISO/IEC 9579-1:1993
----------------	----------------	---------------------

Mr. Hannu Pelkonen

Phone: +358 204 51 4559

Fax: +358 204 51 4525

Email: hannu.pelkonen@posti.fi

Finland Post Ltd, EDI-Services
P.O.BOX 702

FIN-00011 POSTI

Project Editor 30.04.00.00.00
ConvenorFinland
ISO/IEC 14662:1997**Mr. Rick Schnarr**

Phone: + 1 613 996 5655

Fax: + 1 613 996 8982

Email: rschnarr@archives.ca

National Archives of Canada
395 Wellington StreetOttawa
OntarioK1A 0N3
Canada

Project Editor 30.01.00.00.00

ISO/IEC 10032:1995

Prof Kohji Shibano

Phone: + 81 3 5974 3813

Fax: + 81 3 5974 3838

Email: shibano@aa.tufs.ac.jp

Institute for the Study of Languages and Cultures
Tokyo University of Foreign Studies

Tokyo

114-8580
Japan

Convenor

Mr. Alain Thienot

Phone: + 1 33 1 42 91 59 73

Fax: + 1 33 1 42 91 56 56

Email: 100546.3352@compuserve.com

AFNOR
Tour Europe, F-92049

Paris Le Defense

CEDEX 7
France

Project Editor 14.16.00.00.00

ISO/IEC 14957:1996

Mr. Terry Wilcox

Phone:

Fax:

Email: 100010.2147@compuserve.com

Lexica Ltd.
Nine FoxleysWatford
HertsWD1 5DB
United Kingdom

Project Editor 58.03.00.00.00

ISO/IEC 13238-3

