ISO Central Secretariat

1, rue de Varembé
Case postale 56
CH -1211 Genève 20
Switzerland

Telephone + 41 22 749 01 11
Fax + 41 22 733 34 30
E-mail central@iso.ch
Web www.iso.ch

Organisation internationale de normalisation
International Organization for Standardization
Международная Организация по Стандартизации

Our ref. ISO/ICANN PSO

Date 2002-03-25

Mr. Vladimir Androuchko
PSO Secretary
ITU
Place des Nations
CH-1211 GENEVE 20

ISO application for SDO membership of the PSO

Dear Mr. Androuckhko,

The International Organization for Standardization has for numerous years been developing International Standards in the Information Technology sector, in many instances working in close liaison with numerous other SDOs. ISO also has various committees acting in a supporting role to ICANN, e.g. ISO/TC 46 and the ISO 3166 MA on country codes.

More recently our attention has been drawn to the role and work of the ICANN PSO and the close technical association of our joint technical committee on Information Technology (ISO/IEC JTC 1) to the work of the PSO. Based on this, an ISO representative, Professor J. Houldsworth, participated in the last General Assembly of the PSO in ETSI, Sophia Antipolis, France, with a view to exploring the value of ISO becoming a PSO signatory. Professor Houldsworth had positive discussions during this Assembly with a number of PSO Council members.

As a result of the report we received from Professor Houldsworth and our belief that ISO could add to the skill base of the PSO in advising ICANN on a wider standard spectrum, we officially submit, in accordance with article 8b) of the PSO Memorandum of Understanding, to the PSO Council our application for membership of the PSO and to be signatory of the MoU.

We believe after careful consideration that ISO does match the membership criteria for SDOs laid down in Appendix A of the PSO By-Laws and have attached a completed listing of how ISO matches the membership criteria. We would also be prepared to discuss this application if so desired at the next PSO General Assembly.

Thanking you in advance for considering this matter.

Yours faithfully,

Christian J. Favre
Assistant Secretary-General

Enclosure

ISO Membership of the ICANN Protocol Support Organization

ISO hereby applies for membership of the Protocol Support Organization (PSO) of the Internet Corporation for Assigned Names and Numbers (ICANN). If ISO becomes a member as a PSO-qualified SDO, the serving members would be an ISO senior officer plus an expert drawn from initially SC 6 of JTC 1.

How ISO Satisfies the Qualifications in the PSO By Laws

The following sections are referenced to the 5 conditions in Appendix A of the PSO By Laws - Requirements for consideration as a PSO-qualified SDO – which state that SDOs must be open, international, voluntary technical standard and technical specification development organizations which:

1) Develop standards and/or specifications for use over the public Internet.

The Following Internet Related Standards are the Responsibility of ISO/IEC JTC1:

A) ISO/IEC 10589: Intra-domain IS-IS routing protocol

B) ISO/IEC 14476 / ITU-T X.ectp: Enhanced Communications Transport Protocol (Joint development between ISO and ITU-T)

C) ISO/IEC 9594 / ITU-T X.500 The Directory and associated standards for APIs and conformance (Joint Text Standards with ITU-T)

D) ISO/IEC 8824/8825 / ITU-T X.680/X.690 Abstract Syntax Notation One (ASN.1)

Although this is not strictly speaking a protocol, it is used as the fundamental encoding mechanism for many Internet protocols, such as SNMP

E) ISO/IEC 13818-6: 1998 Generic coding of moving pictures and associated audio information -- Part 6: Extensions for DSM-CC

F) ISO/IEC 14496-1: 1999 (a.k.a. MPEG-4) Coding of audio-visual objects -- Part 1: Systems and Part 6: Delivery Multimedia Integration Framework (DMIF)

G) ISO/IEC 16500 series (from 16500-1 to 16500-9) (These specifications, originally from DAVIC, were standardised in JTC1. Generic Digital Audio – Visual Systems - Part 1: System Reference Models and Scenarios, Part 2: System Dynamics, Scenarios and Protocol Requirements, Part 3: Contours: Technology Domain, Part 4: Lower Layer Protocols and Physical, Interfaces, Part 5: High And Mid-Layer Protocols, Part 6: Information Representation, Part 7: Basic Security Tools, Part 8: Management Architecture and Protocols, Part 9: Usage Information Protocols

H) Private Integrated Services Network Inter Exchange Signalling protocols based on Q-SIG. These currently use dedicated ISDN and BISDN signalling Channels but collaborative work is about to begin in collaboration with ECMA on using the Internet to relay Inter Exchange Signalling to control applications in Private Integrated Services Network Exchanges.

I) Computer Supported Telephony Applications. SC 6 is currently standardizing application protocols, which have been developed by ECMA to allow telephony services to be supported by computer services. It is intended that the Internet will be used as one of the transfer mechanisms for the protocols, which invoke the links between the components of the CSTA systems.

It is intended that the associated protocols would run over IP.

J) ISO 8879 Standard Generalised Mark-up Language (SGML), a metalanguage for defining applications (e.g., HTML) that structure information or documents. ISO/IEC 9070, Registration Procedures for SGML Public Identifiers, a mechanism for (self) registration of names to use with some SGML document components (RA: Graphic Communications Association).

K) International Standard ISO 3166, Codes for the representation of names of countries, under the responsibility of ISO/TC 46.

2) Can demonstrate active membership in the IP-related standards and/or specification development process of more than 1000 individuals, if individual memberships are used by the organization, or 100 companies, if corporate memberships are used by the organization.

The SCOPE of JTC1 is Standardization in the field of Information Technology, where Information Technology includes the specification, design and development of systems and tools dealing with the capture, representation, processing, security, transfer, interchange, presentation, management, organization, storage and retrieval of information. Most information on JTC1 is available on the WEB page: http://www.jtc1.org/

JTC 1 members are National Bodies. There are 24 Participating (P) members and 37 Observer (O) Members. Other organizations participate as Liaison Members. There are 15 Liaison members Internal to ISO and IEC, and 21 External Liaison members, including ITU-T, IETF and ECMA.

The list of P (Participating/Voting) Members is:

AUSTRALIA, AUSTRIA, BELGIUM, BRAZIL, CANADA, CHINA, DENMARK, EGYPT, FINLAND, FRANCE, GERMANY, HUNGARY,IRELAND, ITALY, JAPAN, KOREA, NETHERLANDS, NEW ZEALAND, NORWAY, ROMANIA, SOUTH AFRICA, SLOVENIA, SWEDEN, SWITZERLAND, UNITED KINGDOM, USA.

The list of O (Observer) Members is:

ARGENTINA, BULGARIA, COLOMBIA, CUBA, CZECH REPUBLIC, ESTONIA ETHIOPIA, GREECE, HONG KONG, ICELAND, INDIA, INDONESIA, ISLAMIC REPUBLIC OF IRAN, ISRAEL, KENYA, LITHUANIA, MALAWI, MALAYSIA, MEXICO, MONGOLIA, MOROCCO, PHILIPPINES, POLAND, PORTUGAL, RUSSIAN FEDERATION, SAUDI ARABIA, SINGAPORE, SLOVAKIA, SPAIN, THAILAND, TUNISIA, TURKEY, UKRAINE, VIETNAM, SOCIALIST REP. OF, YUGOSLAVIA.
All JTC 1 standards are made available for voting by all ISO member bodies (93 countries).

ISO/IEC JTC1

JTC 1 is composed of 17 Sub-Committees and 2 Rapporteur Groups. The JTC1 Sub-Committees are grouped within 11 Technical Directions.

Approximate Number of Technical Experts in JTC1

There are approximately 2100 technical experts from around the world that work directly within JTC 1, and many more that contribute at the national level.

3) Has been in operation for 3 or more years at the time of their application.

ISO was formed in 1947. ISO/IEC JTC1 was formed as a joint committee between ISO and IEC in 1987 to focus the work on IT and avoid duplication of work. Within ISO, the work had mainly been carried out within ISO/TC 97 (est. 1960).

4) Can demonstrate that there is significant deployment of its standards on the Internet.

A) The X.500 Directory Standards family is in widespread use as a component of the Internet Directory Service in association with LDAP, increasingly to the Desktop. An estimated 20% of end systems make use of directory based services.

B) ASN.1 is used as the encoding method for fundamental Internet components like the SNMP Network Management protocols.

C) IS-IS routing is in widespread use throughout core of the Internet with an estimated 60% of backbone routers making use of this protocol.

D) The use of MPEG-2 Video and Audio is limited so far on the web since it requires large channel bandwidths compared to MPEG-1. However, there is a possibility to transfer MPEG-2 data using DSM-CC framework.

E) The use of MPEG-4 will soon appear on the web. Some experimental examples can be seen using MPEG-4 system software named IM1.

F) DAVIC specifications standardized by JTC1 handle protocols corresponding to several layers for digital audio and video distribution.

G) PISN Exchanges are now adopting Q-SIG and all PISNs and these will soon be linked via the Internet using these procedures.

H) PISN exchanges are now adopting Computer Telephony Interface (CSTA) applications. The evolution is linked closely to the ETSI TIPHON and IETF
IPTEL work.

I) Significant data that is structured according to an SGML application, HTML, gets moved around the Internet. While not strictly a protocol, this is a major structure for applications over the Internet.

5) The significant protocols controlled by the organization can be implemented without paying a licensing fee to the organization.

No protocol license fee is payable to ISO/IEC. ISO/IEC JTC1 does not license the protocols defined by its standards.

Reason for Choosing ISO/IEC JTC1/SC6 as the technical interface between ISO/IEC and the ICANN PSO.

ISO/IEC JTC1/SC6 is the appropriate first line interface between ISO/IEC and the ICANN PSO because it has been in active liaison with the IETF since 1992 and has contributed to the development of the new Ipv6 protocol through the IETF's IPng Committees.

SC6 is presently considering ways that OSI CLNP networking protocol users can co-exist with users of existing and planned internet protocols and mechanisms that will allow them to plan the eventual migration to Ipv6. As a part of this programme, SC6 already has already adopted a standard that was developed in association with the IETF, which allows existing OSI applications to run over either Ipv4 or Ipv6. Other migration tools are the existing Ipv4 protocol ID parameter which allows IP frames to be tunnelled in CLNP and the NSAP address ID parameter in Ipv6 which allows some types of ISO NSAP addresses to be compressed into Ipv6 frames.

SC6 is also responsible for the IS-IS Intermediate System to Intermediate System (Inter-Domain) Routing Protocol, which is in widespread use between backbone routers in some parts of the core of the Internet. SC6 has just added new IS-IS features, which had been specifically requested by the IETF's IS-IS Routing Working Group.

SC6 is now collaborating with both the IETF and the ITU on advanced Real-Time Multicast Transport protocols that will deliver better quality of service and improved congestion control over multicast environments within a future mixed media Internet. SC6 has adopted the IETF modular approach to the protocol development work and results will enhance the overall suite of Internet Real-Time Multicast Transport protocols.

SC6 is also collaborating with ECMA on the inter-linking of Private Integrated Services Networks (PISNs) through the Internet and will use these to deliver Computer Supported Telephony Applications (CSTA). This is complementary to the IETF IPTEL work.

SC6 is responsible for the key ASN.1 standard, which is used as the encoding method for fundamental Internet components like the SNMP Network Management protocols.

SC6 is responsible for the X.500 Directory Standards family, which is in widespread use as a component of the Internet Directory Service.