

ISO/IEC JTC 1/SC 35 N 1731

DATE: 2010-09-26

ISO/IEC JTC 1/SC 35
User Interfaces
Secretariat: AFNOR

DOC TYPE: Business plan
TITLE: Business Plan of JTC1/SC35
October 2011 – September 2012
SOURCE: Dr Yves Neuville, SC 35 Chairman
ACTION ID: FYI
DISTRIBUTION: P members
MEDIUM: E
NO. OF PAGES: 13

Reply to: Secretariat, ISO/IEC JTC1/SC35: AFNOR, Philippe Magnabosco
11 rue Francis de Pressensé, 93571 La Plaine Saint Denis Cedex, France
Telephone: +33.1.41628502; Facsimile: +33.1.49179305;
E-Mail: philippe.magnabosco@afnor.org

BUSINESS PLAN FOR JTC 1/SC 35 USER INTERFACES

Period covered:

October 2011 – September 2012

Submitted by:

Dr Yves Neuville, ISO/IEC/JTC 1/SC 35 Chairman

Business Plan for JTC 1/SC 35 User Interfaces	2
Period covered:	2
Submitted by:	2
1.0 Management summary	3
SC 35 Meetings	3
Organization within SC 35.....	3
1.1 Chairman's remarks.....	4
Changes to members' list.....	4
Members' list	4
1.2 JTC 1/SC 35 Statement of scope	5
Title:	5
Scope:.....	5
1.3 Project report.....	6
Active projects	6
Recently published standards	7
Standards to be reviewed	7
1.4 Co-operation and Competition.....	8
Liaisons	8
Cultural and Linguistic Adaptability and User Interfaces	9
Accessibility and User Interfaces.....	10
2.0 Period review.....	10
2.1 Market requirements	10
2.2 Metrics.....	11
2.3 Resources	12
3.0 Focus next work period	12
3.1 Deliverables.....	12
3.2 Strategies.....	12
3.2.1 Risks.....	13
3.2.2 Opportunities.....	13

1.0 MANAGEMENT SUMMARY

SC 35 Meetings

Past meetings

The SC35 Working Groups met two times during the period referenced by the previous Business Plan. These meetings took place in:

- Bellevue, WA, USA – 2011-02-21/25, GOM
- Warsaw, Poland – 2011-08-29/09-02, Plenary

Next meetings

- Kyoto, Japan, 2012-02-20/24
- Paris, France – 2011-08-27/31

Organization within SC 35

JTC 1/SC 35 is subdivided in 7 permanent Working Groups and 2 Other Working Groups.

Working Groups :

- **WG1 : Keyboards and Input Interfaces** – Mr Alain LABONTÉ
- **WG2 : Graphical User Interface and Interaction** – Dr Yoshikazu YAMAMOTO
- **WG4 : User Interfaces for Mobile Devices** – Mr Yoshihide NAKAO
- **WG5 : Cultural and Linguistic Adaptability** – Dr Yves NEUVILLE
- **WG6 : User Interface Accessibility** – Dr Jim CARTER
- **WG7 : User Interfaces Object, Actions and Attributes** – Dr Jim CARTER
- **WG8 : User Interfaces for Remote Interactions** – Dr Gottfried ZIMMERMANN

Note:

SC35 resolved to integrate **WG3 (Graphical Symbols)** with WG2 (User Interface Interaction), which was chaired by Dr. Yamamoto. This merger took effect in June 2004 and the title of the new WG2 became "Graphical User Interface and Interaction".

1.1 CHAIRMAN'S REMARKS

Changes to members' list

In the past 12 months, **New Zealand** (SNZ), **Israel** (SII) and **Serbia** (SSI) joined as **O-Members**. **Austria** (ASI) changed form P to **O member**.

So far, **33 national bodies** are **members of SC 35**. Eighteen are P-members and fifteen O-members.

Members' list

JTC 1/SC 35 membership as of 2011-09-26 (ISO Global Directory)

List of P and O Members

P Members (18)

- Canada (SCC)
- China (SAC)
- Denmark (DS)
- Finland (SFS)
- France (AFNOR)
- Germany (DIN)
- Greece (ELOT)
- India (BIS)
- Italy (UNI)
- Japan (JISC)
- Korea, Republic of (KATS)
- Romania (ASRO)
- Russian Federation (GOST R)
- Spain (AENOR)
- Sweden (SIS)
- Ukraine (DSSU)
- United Kingdom (BSI)
- USA (ANSI)

O Members (15)

- Austria (ASI)
- Belgium (NBN)
- Bosnia Herzegovina (BAS)
- Bulgaria (BDS)
- Czech Republic (UNMZ)
- Ghana (GSB)
- Hungary (MSZT)
- Indonesia (BSN)
- Ireland (NSAI)
- Israel (SII)
- Kenya (KEBS)
- Netherlands (NEN)
- New Zealand (SNZ)
- Poland (PKN)
- Serbia (SSI)

1.2 JTC 1/SC 35 STATEMENT OF SCOPE

The current approved title and scope for ISO/IEC JTC 1/SC 35 is:

Title:

ISO/IEC JTC 1/ SC 35 – User interfaces

Scope:

Standardization in the field of user-system interfaces in information and communication technology (ICT) environments and support for these interfaces to serve all users, including people having accessibility or other specific needs, with a priority of meeting the JTC 1 requirements for cultural and linguistic adaptability.

This includes:

- user interface accessibility (requirements, needs, methods, techniques and enablers);
- cultural and linguistic adaptability and accessibility (such as evaluation of cultural and linguistic adaptability of ICT products, harmonized human language equivalents, localization parameters, voice messaging menus...);
- user interface objects, actions and attributes;
- methods and technologies for controlling and navigating within systems, devices and applications in visual, auditory, tactile and other sensorial modalities (such as by voice, vision, movement, gestures...);
- symbols, functionality and interactions of user interfaces (such as graphical, tactile and auditory icons, graphical symbols and other user interface elements);
- visual, auditory, tactile and other sensorial input and output devices and methods in ICT environments (for devices such as keyboards, displays, mice...);
- user interfaces for mobile devices, hand-held devices and remote interactions.

NOTE:

The current wording of the JTC 1/SC 35 Scope was proposed to and accepted by JTC 1 on its 2009 Plenary meeting in Tel Aviv. The new wording was **drafted in Plenary sessions and approved unanimously** (JTC 1/SC 35 Resolution 2009.62).

1.3 PROJECT REPORT

Overview of current standardization projects in the JTC1/SC35 work programme:

Active projects

<i>Reference</i>	<i>WG</i>	<i>Title</i>	<i>Status</i>	<i>PUB target</i>
9995-7:2009 DIS Amd 1	1	Information technology -- Keyboard layouts for text and office systems - - Part 7: Symbols used to represent functions -- Amendment 1	Registration of symbols in progress	2012-10-18
CD 9995-9	1	Information technology -- Keyboard layouts for text and office systems - - Part 9: Multilingual-usage, multiscript keyboard group layouts	WG Work	2013-08-04
NP 9995-10	1	Conventional symbols and methods to represent graphic characters not uniquely recognizable by their glyph on a keyboard and in documentation -- Part 10:	CD ballot pending	2014-02-22
PUB TR 11581-1.2	7	Information technology -- User interface icons -- Part 1: Introduction to and overview of icon standards	PUB underway	2011-04-09
PUB 11581-41	2	Information technology -- User interface icons -- Part 41: Data structure to be used by the ISO/IEC JTC 1/SC 35 icon database	PUB underway	2013-02-11
PDTR 13066-4	7	Information Technology - Interoperability with Assistive Technology (AT) -- Part 4: Linux/UNIX graphical environments accessibility API	PDTR vote underway	2014-02-20
PDTR 13066-6	7	Information Technology - Interoperability with Assistive Technology (AT) -- Part 6: Java accessibility API	PDTR vote underway	2014-02-19
NP 17549	4	Information technology -- User interfaces -- Guidelines on navigation methods for ladder menus with 4-direction devices	WG work	2014-09-13
WD TR 20007	5	Information technology - Cultural and Linguistic Interoperability - Definitions and relationship between symbols, icons, animated icons, pictograms, characters and glyphs	WG work	2013-03-11
PDTR 20071-11	6	User interface component accessibility -- Part 11: Alternative text for images	PDTR vote underway	2014-02-19
NP 24752-2	8	Information technology -- User interfaces -- Universal remote console -- Part 2: User interface socket description	CD ballot pending	2014-02-17

<i>Reference</i>	<i>WG</i>	<i>Title</i>	<i>Status</i>	<i>PUB target</i>
NP 24752-6	8	Information technology -- User interfaces -- Universal remote console -- Part 6: Web service integration	CD ballot pending	2014-03-14
FCD 29136	6	Information Technology - User Interfaces - Accessibility functions for personal computers	FDIS vote pending	2012-09-10
NP 30109	5	Worldwide available personal computing environment	WG work	2014-02-23
PDTR 30112	5	Information technology -- Specification methods for cultural conventions	PDTR vote underway	2014-08-22

Recently published standards

<i>Reference</i>	<i>Document title</i>
ISO/IEC 9995-3:2010	Information technology -- Keyboard layouts for text and office systems -- Part 3: Complementary layouts of the alphanumeric zone of the alphanumeric section
ISO/IEC 11581-10:2010	Information technology -- User interface icons -- Part 10: Framework and general guidance
ISO/IEC 13066-1:2011	Information technology -- Interoperability with assistive technology (AT) -- Part 1: Requirements and recommendations for interoperability
ISO/IEC 15897:2011	Information technology -- User interfaces -- Procedures for the registration of cultural elements
ISO/IEC 11581-40:2011	Information technology -- User interface icons -- Part 40: Management of icon registration

Standards to be reviewed

<i>Reference</i>	<i>Document title</i>	<i>WG</i>	<i>Starting date</i>
ISO/IEC TR 11580:2007	Information technology -- Framework for describing user interface objects, actions and attributes	7	2012-01-15
ISO/IEC 24755:2007	Information technology -- Screen icons and symbols for personal mobile communication devices	4	2012-10-15

1.4 CO-OPERATION AND COMPETITION

Liaisons

SC35 maintains **liaisons** with the following JTC1 subcommittees, ISO, IEC, CEN Technical committees.

ISO/IEC JTC 1/SC 2	Coded character sets
ISO/IEC JTC 1/SC 25	Interconnection of information technology equipment (pending)
ISO/IEC JTC 1/SC 32	Data management and interchange
ISO/IEC JTC 1/SC 36	Information technology for learning, education and training
ISO/IEC JTC 1/SC 38	Distributed application platforms and services (pending)
ISO/TC 159	Ergonomics
ISO/TC 159/SC 4	Ergonomics/ Ergonomics of human system Interaction - Software ergonomics and human - computer dialogues
ISO/TC 145	Graphical symbols
IEC TC 3/SC 3C	Information structures, documentation and graphical symbols
JWG 11 ISO/TC 145– IEC TC 3/SC 3C	Joint working group ISO/TC 145-IEC/SC 3C
CEN CDFG	Cultural Diversity Focus Group
ETSI HF	Human Factors Technical Committee

SC35 also maintains or initiates contacts with the following category C liaisons:

Unicode Consortium	(pending)
W3C	World Wide Web consortium

Cultural and Linguistic Adaptability and User Interfaces

SC 35 has the mission to consider how to integrate the requirements for Cultural and Linguistic Adaptability and User Interfaces (CLAUI) aspects in products standards so that software and hardware be adapted to local cultural and linguistic needs.

JTC 1/SC 35/WG 5, "Cultural and linguistic Adaptability" focuses directly on establishing recommended practices on how to evaluate CLAUI in ICT products. The Technical Report "*Guidelines, methodology, and reference criteria for cultural and linguistic adaptability in information technology products*" issued by SC35/WG 5 both in English and French, is a most relevant tool to ensure CLAUI.

The ISO/IEC 9995 multi-part standard, "*Information technology- Keyboard layouts for text and office systems*" under the responsibility of WG 1, defines important aspects to enable keyboards to enter the full ISO 10646 universal characters set (UCS) and also the allocation of Latin letters to the keys of numeric keypads. It is currently undergoing important revision and additions (part 9 and 10).

An active and fruitful cooperation has been set in this domain with CEN/ISSS WS MEEK on Multilingual Extensions for European Keyboards.

The 11581 series "*Information technology - Icon symbols & functions*" in the hands of WG 2 and WG 7 provides language-independent means of communicating information.

Two WG 6 technical reports published in 2007 cope with the key new topic that is e-Accessibility standardization, which means participation for all citizens worldwide in a knowledge-based economy, and making web content and ICT systems accessible to people with special needs including the children, elderly and disabled. The subject described within those Technical reports are :

- ISO/IEC TR 19765, "*Survey of existing icons and symbols for elderly and disabled persons*;
- "ISO/IEC TR 19766, "*Requirements concerning icons and symbols in IT for elderly and disabled persons*".

Those TRs have CLAUI implications.

As stated in the Cooperation and Coordination of Cross Cultural and linguistic matters (CCCCLM), held in June 2003 in Geneva, Switzerland, the "*particular expertise*" of SC 35 in Cultural and Linguistic adaptability (CLA) was formally recognized and referred to in the following recommendation (R5) "*CCCCLM notes JTC 1/SC 35 has particular expertise in CLA (culture and linguistic adaptability) user interface requirements... and suggests that other SCs take advantage of that expertise when they have questions regarding cultural and linguistic adaptability issues in their work*".

The participation in different international events like WSIS (World Summit on Information Society) or Barcelona Forum also concurred to those aims.

Accessibility and User Interfaces

IT Accessibility matters to an important and growing population around the world. Situations such as handicap persons, ageing populations, people working in noisy environments, limited use of hands (e.g. while driving or typing)... all of these examples may result in specific, permanent or temporary user needs that IT User interfaces help address. Equal access to IT devices, electronic information and interactions is central not only to secure wider products adoption, but also to facilitate employment, and enable all users with means of socialization, business interactions or citizenship rights.

With the creation of WG 6 “User interface accessibility”, SC 35 work now benefits from a full standardization community dedicated to IT accessibility and Design for all. WG 6 works closely with JTC 1 / SWG-A to optimize coverage of IT Accessibility-related issues. Among the main achievements is the development of a Multi-part standard (ISO/IEC 13066) on “Information technology – Interoperability with Assistive technology (AT)” that encompasses all major APIs.

2.0 PERIOD REVIEW

2.1 MARKET REQUIREMENTS

Information and communication technologies (ICT) are used in every conceivable area of life. There is a need, for instance, to secure access to the Internet by all citizens all around the world and to bring everyone, independently from their culture and language, online. There is especially a need to develop market-relevant standards enabling the Cultural and linguistic concept to be implemented in ICT products.

SC 35 is paving the way with its ISO/IEC 18035 International Standard “*Icon symbols & functions for controlling multimedia applications*”, and ISO/IEC 18036, *Icon symbols & functions for World Wide Web browsers* already published.

Besides, the growth of the elderly population of industrialized countries and the growing concern for disabled drive a stream of user's needs and accessibility requirements that can partially be addressed by SC 35 standards in the context of its scope.

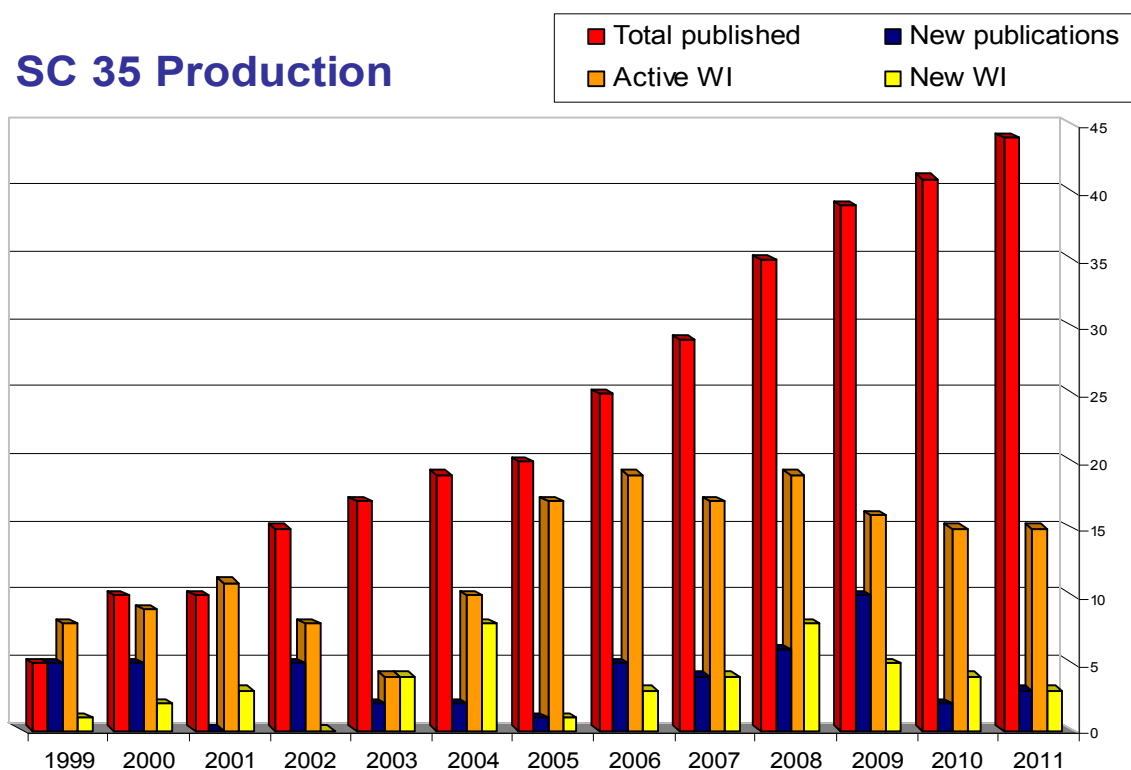
SC 35 is providing an input on icons and symbols for use by people having weak eyesight through the Technical reports, 19765 and 19766 in the hands of WG 6. To help to achieve those goals SC35 is actively participating in JTC1/SWG A on accessibility.

SC 35 further plans to increase its activity in the field of Voice interface through its previous OWG-VC (Voice Command) recommendations.

2.2 METRICS

<i>Metrics</i>	<i>New standards published</i>	<i>Total standards published</i>	<i>Active projects</i>	<i>New projects</i>
1998	0	0	14	0
1999	5	5	8	1
2000	5	10	9	2
2001	0	10	11	3
2002	5	15	8	0
2003	2	17	4	4
2004	2	19	10	8
2005	1	20	17	1
2006	5	25	19	3
2007	4	29	17	4
2008	6	35	19	8
2009	10	39	16	5
2010	2	41	15	4
2011¹	3	44	15	3

SC 35 Production



¹ Data as of 2011-09-26

2.3 RESOURCES

Projects are well staffed and resources are adequate for the current tasks.

JTC 1/SC 35 has participants with substantial expertise. However to cover future necessary developments, it is needed to attract new highly trained experts representing the market players and willing to actively contribute to the development of new projects.

A current consolidation of various member countries' participation to JTC 1/SC 35, involving key software and hardware industry players, reinforces the representation of stakeholder interests and expertise, and is already bringing in highly valuable technical inputs into the standardisation process.

3.0 FOCUS NEXT WORK PERIOD

JTC 1/SC 35 plans to continue to focus on user requirements, product-oriented and market-driven standards and initiating new projects that have clear and well-defined objectives together with concrete specifications.

3.1 DELIVERABLES

A list of ongoing projects and their status is proposed on page 6.

3.2 STRATEGIES

JTC 1/SC 35 is focused on progressing its projects as timely and efficiently as possible. This has already been demonstrated with the important number of IS and TR achieved in the recent years.

To achieve its mission, JTC 1/SC 35 has been actively undertaking the following actions:

- Managing its activities effectively with the help in the past of its ad-hoc Group on SC 35 WG Management;
- Increasing the number of experts within the committee and establishing relationship with users and industry representatives, human factors and cognitive sciences specialists, software designers, vendors and consortia;
- Enhancing flexibility of work to possibly attract newcomers (phone participation especially, experts invitations...);
- Maximizing its contribution to JTC 1 by seeking out New Work Items related to innovative products with well-defined specifications. For that purpose, his WG 5 is working on Taxonomy (ISO/IEC TR 24785 Information technology - Taxonomy of cultural and linguistic adaptability user requirements);
- Offering SC 35 expertise for cross-fertilization with other SCs and TCs especially for CLAUl matters according to the recommendations set up at the JTC 1 Coordination of Cross Cultural and linguistic Matters meeting.

3.2.1 RISKS

A risk may come from the **potential conflicting proprietary and de facto standards**.

A second risk may be raised by the difficulties in supporting standardization efforts for **lack of availability and time from experts**, especially those willing to take part in the writing of projects, and increasing **financial difficulties** to participate.

One of the keys to the growth of the SC membership is to **attract** experts from **companies, research centres, and government agencies** but also to try to **develop** the **participation** of **users and consumers' organizations, unions, family associations...**

Being **more involved in the international cooperation process** (e.g. **WSIS**) could help to increase the number of countries participating especially those unable to join for financial reasons.

National bodies' participation in **new proposals** is crucial to develop standardization programmes. NSB's should realize that the cost of participation in a new project is less demanding than it may appear. JTC 1/SC 35 takes advantage of Internet or various other communication devices like telephone conferencing as recommended at JTC 1 level to encourage more countries to effectively participate in the writing of standards or join the standardization work.

Because of the **rarity of experts in some technical areas** and the **increasing geographical concentration of the industry**, this flexibility is a priority to avoid the decline of ICT standards production in various domains in the near future.

3.2.2 OPPORTUNITIES

SC35 is actively cooperating with SWG A on Accessibility and trying to increase its participation (important SC35 representatives are participating in the meetings and activities). This is fruitful and consequently opens the way to new important projects.

In addition, the work items and published standards concerning icons and the Universal remote console will probably impact major applications in the future.

A major standards series (13066) is now being developed in the field of Assistive Technologies in the different major existing IT environments, and is representing a major step towards more interoperability and more open markets for the benefit of the users.

The continuous development of SC35 activities has recently led to the re-definition of its scope in line with the current technologies progress, especially in assistive technologies, and market evolution.

Liaisons recently established (W3C) or pending (Unicode Consortium) are opportunities to maintain a high relevance and strong industry support for SC 35 deliverables.