Good Practices of Career Development of Standards Professionals in Industry and Regulatory – Case Study on JTC1/SC36 Expert

Submitted by: i-Scream Edu Co Ltd
Panel 3 - Good Practices of Career Development of Standards Professionals in Industry and Regulatory - case study on JTC1/SC36 expert -

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Section 1

MEMORIES
In 2006, when I participated in ISO meeting for the first time, I was ......
I was just an observer, didn’t understand terminologies and culture, therefore there was nothing to do.
Now, I am Convenor for two WGs in JTC1/SC36 and JWG in JTC1/SC34, liaison officer between JTC1/SC34 and SC36, project editor for over fifteen standards, and member of Technical Advisory Board in *de-facto* STD org.
Section 2

COMPETENCY
What does mean the competency for standard professional?

• **Expertise for Directives?**
  * Rules, process, types of the documents, etc.

• **Expertise for Domain Knowledge or Technology?**
  * R&D or Implementation?

• **Domain Knowledge VS. Language Skill**
  * Which one is more important or urgently necessary?

• **Digital Literacy**
What does mean the competency for standard professional?

(Reality) To be a prominent person in the International Organization for Standardization;

(1) when planning and investigating standardization tasks, you need to demonstrate competency as a R&D expert;

(2) during development of standards, the implementation capability must be demonstrated;

(3) when writing Form 4 to propose New Work Item, expertise for Directives – Part 2 as a professional;

(4) to operate Comment Resolution Meeting and online collaboration improving digital literacy is required.

Note: (1) and (2) are up to personal efforts in their domain, but for (3) and (4) it is very helpful if there is continuous (online) education program.
If there were this document available when I started standardization activity?
If there were these resources available when I started standardization activity?

Developing ISO standards

At the outset, each ISO deliverable is assigned to a standards development track. This track determines the timeframe of the project as it passes through the various stages to publication. We’ve developed a diagram that explains the four different development tracks.

Whichever track is chosen, the development process for ISO standards follows defined stages. These stages, and the main resources required at each stage, are shown in the blue box.

To understand the stages in full detail, visit our page on international harmonized stage codes.

For more information, contact your technical programme manager or send an e-mail to tcsupport@iso.org.

Stages and resources for standards development

* = obligatory stage

- Proposal Stage
- Preparatory stage
- Committee stage
- Drafting stage*
- Approval stage
- Publication stage*

Proposal stage (10)

This first step is to confirm that a new international Standard in the subject area is really needed. (See the Global relevance policy.) A new work item proposal (NWIP) is submitted to the committee to vote using Form 4. The electronic balloting portal shall be used for the vote.

The person being nominated as project leader is named on the Form.

If there are possible implications around copyright, patents or conformity assessment they should be raised at this early stage.

This stage can be skipped for revisions and amendments to ISO standards that are already published (as long as the scope does not change).

Resources for Stage 10

- ISO/IEC Directives Part 1 and Consolidated ISO Supplement, section 2.3
- Form 4 - New work item proposal
- Electronic balloting portal
- Patent policy
- Conformity assessment for standards writers - Do's and don'ts
- Global relevance policy
- Vienna agreement
Section 3

PLANNING
“Interoperability – Optimization of Connection”

<sourse: Learning Technology: Market Opportunities & Enabling Standards (Rob Abel, 2009)>
“Problem definition: Identify the problem you are trying to solve!”

“Hassle map is a collection of anxieties, inconveniences, complications, and potential hazard in customers' experiences ......

Unnecessary steps, meaningless time, and disappointing results correspond to 'friction points' in hassle maps, and we have the opportunity to create demands by eliminating each of these friction points or by reversing the customer's grievances with joy”

<from the 'Interoperability framework for Smart Media' (2012)>
The IMS Global Collaboration

- Large-Scale Adoption Projects
- Ed Tech Interoperability Standards
- Technical Foundation for Distributed Innovation
- Adoption of Innovation at Scale Toward Strategic Goals
- Recognizing Impact on Access, Affordability, Quality of Education

Purposeful Technology Innovation Applied to Improve Education

“Choosing the appropriate timing to initiate standardization!”

[https://en.wikipedia.org/wiki/Hype_cycle]
“ISO Directives (Part 2) – Objectives of STD”

The objective of documents is to specify clear and unambiguous provisions in order to help international trade and communication. To achieve this objective, documents shall:

• be complete within the limits specified by their scope;
• be consistent, clear and accurate;
• be written using all available knowledge about the state of the art;
• take into account the current market conditions;
• provide a framework for future technological development;
• be comprehensible to qualified people who have not participated in their preparation; and
• conform to the ISO/IEC Directives, Part 2.

“ISO Directives (Part 2) – Principles”

• Planning and preparation
• Aim-oriented approach
• Fitness for implementation
• Performance principle (not design principle)
• Verifiability
• Consistency
• Avoidance of duplication and unnecessary deviations
• Accommodation of more than one product size
• Characteristics not specified in a document
“Collaboration and R&R of My Case”

- Develop de-facto standards based on global trends
- Open Source SW Development & Sharing

- Develop de-jure standards
- Internal liaison for collaboration

- International Conference on Machine Learning (ICML)
- Neural Information Processing System (NIPS)
- Learning Analytics and Knowledge (LAK) Conference

- Propose National Standards(KS) and leadership
- Investigate patents and proposal

- National STDs & Patents
- International Organization for Standardization

- Collaboration (de-facto)
- Participation (de-jure)

- i-Scream edu

- R&D regarding AI and trends analysis
- Evaluate reliability and validation

- KATS (Korean National Body)
- Patents (local and PCT)
Section 4

USING ICT
Quick information for first time web meeting participants

The ISO WebEx service allows groups of people to participate in "virtual" meetings over the internet. Before you participate in one of these meetings, you should receive a meeting invitation by e-mail from the meeting organizer. This e-mail will contain a hyperlink to join the web meeting and may contain telephone numbers to join the audio portion of the meeting.

What do I need to participate in an ISO web meeting?

To join this meeting (Now from mobile devices!)
1. Go to https://iso-meetings.webex.com/iso-me

Computer

Headset or Telephone

Participant Meeting Link

Webcam (optional)

To participate in an ISO web meeting, you need the following:

- A computer with a browser and broadband internet connection (384 kbps or faster).
- A computer headset (earphones and microphone) or a telephone.
- The web meeting invitation which you received by e-mail.
- A web camera can be used, but is not required.
- A tranquil work area free of noise and other distractions is recommended.
- If several people are meeting in one conference room, then the use of a single computer with a large display (or projector) and a conference room telephone is advised.
How do I join an ISO web meeting?

1. Before your meeting starts, please test your computer’s ability to join a web meeting here. Enter your name and e-mail address as requested. Note that this test may install required WebEx plugins on your computer.
2. If you plan to use a headset and/or webcam, please test these devices on your computer before your meeting starts.
3. Click on the meeting hyperlink which you received by e-mail. Enter your name and e-mail address as requested, then click the “Join” button.
4. If you are using a computer headset, click the “Use Computer for Audio” link in the Audio Conference window. If you are using a telephone, select “Call me at a new number”, click on the flag icon and select your country, enter your telephone number without your country code, then click the “Call Me” button. You may also select the “I will call in” option and dial the toll or toll-free number listed for your country. (here).
5. If you have a webcam, click on the camera icon next to your name in the participant list to activate your webcam. The camera icon will turn from grey to green to indicate that your webcam is on. To deactivate your webcam, click on the camera icon again.

Connecting to the web meeting audio using voice over IP, telephone callback, or toll-free dial-in

**Voice over IP Audio**
1. Connect your headset to the computer.
2. Click the “Use Computer for Audio” button.

**Call-back Audio**
1. Select the “Call me at a new number” option.
2. Click the flag icon and select your country.
3. Enter your local telephone number.
4. Click the “Call Me” button.

**Toll-free Dial-in Audio**
1. Select the “I will call” option.
2. Use the toll-free numbers or click the “All global call-in numbers” link for more.
3. Enter the access code shown on your screen (this is different for every meeting).
4. Enter the Attendee ID as shown (this can be different for each meeting).

https://connect.iso.org/display/it/First+Time+Participants
How do I participate in a web meeting?

Participant Guidelines for Virtual Meetings

If you are using your computer for the meeting audio you may be able to improve your sound quality by:
- Turning off your video picture
- Turning off the video picture being sent to you by others.

If you are not already muted by the organiser, please mute yourself in WebEx after joining the meeting using the microphone button.

To make a comment or ask a question for everyone to hear or see:
- To speak, please use the Raise Hand button.
- To write, please use Chat to all participants.

You can also use Chat to contact the meeting hosts or other participants directly.
• Once you have joined the web meeting (previous section), please refer to the participant guidelines above. At this point, you will see the windows or desktop shared by the presenter. You can simply watch the presentation and speak into your headset or telephone to others in the meeting.
• During your meeting, you can optionally access your WebEx control panel. Normally it is hidden, but it appears when you move your mouse to the top center area of your screen. Here you can change your audio connection (for example, switch from headset to telephone), see a list of meeting participants, send text messages to meeting participants, or perform other meeting operations. Many of these features are via toggle buttons. That is, to show the list of participants, click on the participants button. To hide the list, click on the participants button again.
• For large meetings (6 or more participants), it is recommended that you mute your audio via the WebEx control panel at the top of your screen.

Activating and deactivating the webcam

1. Click the camera icon (in red circle) to activate the webcam.

1. Click the camera icon again to deactivate the webcam.
You are the host for this online meeting.

Host Key: 679593 (use this to reclaim host privileges)

Meeting information

Topic: 학습분석 프로젝트팀 6/30 온라인 회의
Date: Monday, June 30, 2014
Time: 2:00 pm, Korea Time (Seoul, GMT+09:00)
Meeting Number: 957 926 083
Meeting Password: (This meeting does not require a password.)

To start or join the online meeting

Go to https://iso-meetings.webex.com/iso-meetings/j.php?ED=305694667&UID=450517&RT=MiM1MA%3D%3D

Audio conference information

To receive a callback, provide your phone number when you join the meeting, or call the number below and enter the access code.
South Korea toll free: 00798-14-203-3552

Having trouble dialing in? Try these backup numbers:
Call-in toll-free number (UK): 0800-051-3810
Call-in toll number (UK): +44-203-478-5289

Access code: 957 926 083

For assistance

1. Go to https://iso-meetings.webex.com/iso-meetings/mc
2. On the left navigation bar, click "Support".

To add this meeting to your calendar program (for example Microsoft Outlook), click this link:
https://iso-meetings.webex.com/iso-meetings/j.php?MTID=mac4d4959dc02a1105f2eb1382b360138

To check whether you have the appropriate players installed for UCF (Universal Communications Format) rich media files, go to https://iso-meetings.webex.com/iso-meetings/systemdiagnosis.php.

http://www.webex.com

CCM: +442034785289x957926083#

IMPORTANT NOTICE: This WebEx service includes a feature that allows audio and any documents and other materials exchanged or viewed during the session to be recorded. You should inform all meeting attendees prior to recording if you intend to record the meeting. Please note that any such recordings may be subject to discovery in the event of litigation.
Yong-Sang Cho's meeting

Topic: 1st testing online CRM of MLR part 4 in JTC1/SC36 WG4

Audio Conference
(Connected)

Invite & Remind

Share My Desktop

End Meeting
Document Registry and Electronic Tools

ISO/IEC JTC 001/SC 36/WG 08 "Learning Analytics Interoperability"
Section 5
RECOMMENDATION
“Action Items to Develop Career for International Standardization”

- Skill training for ISO Directives Part 1 & Part 2
- Language (English) training for “International Standardization Meeting and Writing the Documents”
  
  Note: in terms of strategy above both topics may be MOOC type online courseware and tutoring services supported by MOOCs provider, such as EdX or Coursera.

- Brief guideline to use ISO tools and materials located on ISO website
- Knowledge Base to support documentation and procedure for the standardization improving skill set

- In addition, propose a new committee or group for competence requirements in ISO and IEC;

- and provide a reference document for competence requirements and career path particularly for ISO DEVCO and IEC Affiliate members
ISO/IEC JTC1 SC34/JWG7 and SC36/WG4 & WG8 Convenor
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