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| **TELECOMMUNICATIONSTANDARDIZATION SECTOR**TSB DIRECTOR'S AD HOC GROUP | **June 2014** |
| **English only****Original: English** |
| **Subject:** |  | Saint Petersburg, Russian Federation, 2 June 2014 |
| **Education about Standardization AHG – Document 021** |
| **Source:** | TSB |
| **Title:**  | **Report of the third AHG-SE meeting (Saint Petersburg, Russian Federation, 2 June 2014)** |

# 1 General

The third TSB Director’s Ad hoc Group on Education about Standardization (AHG-SE) meeting took place in conjunction with the [Joint ITU-IEICE-IEEE Workshop on Education about Standardization](http://www.itu.int/en/ITU-T/academia/kaleidoscope/2014/Pages/Joint-ITU-IEICE-IEEE-Workshop-on-Education-about-Standardization.aspx), in the Bonch-Bruevich Saint-Petersburg State University of Telecommunications (SPbSUT), Russian Federation, 2 June 2014. The list of participants is found in Annex A.

It was chaired by Malcolm Johnson, Director of the ITU Telecommunication Standardization Bureau, who welcomed the participants to the meeting. He opened the meeting and said that the most important point, as already mentioned in the Workshop, was the closer collaboration between the different actors working on education about standardization and the objective is to discuss how to create and promote harmonized education on globalized standardization.

# 2 Approval of the draft agenda

The agenda in [AHG-SE-015](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/3rd%20Meeting-20140602-St.Petersburg/015_AHG_SE_Draft_agenda.docx) was approved.

# 3 List of Documents

The documentation for the meeting was listed in Annex A of draft agenda and found at <http://itu.int/go/standardseducation/docs>

* [AHG-SE-012](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/2nd%20Meeting-20130425-Japan/012_AHG_SE_Final_Report.docx) - Report of the 2nd meeting of the TSB Director’s Ad hoc Group on Education about Standardization
* [AHG-SE-014](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/3rd%20Meeting-20140602-St.Petersburg/014_AHG_SE_Action_plan_13-05-14.docx) - Action Plan
* [AHG-SE-016](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/3rd%20Meeting-20140602-St.Petersburg/016_AHG_SE_ITU-T_Technical_Journal.docx) - ITU-T Technical Journal
* [AHG-SE-017](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/3rd%20Meeting-20140602-St.Petersburg/017_AHG_SE_Action%201306-04_Matsumoto.doc)- Proposed Questionnaire to collect information on courses on standardization currently offered worldwide – Action 1306-**04**
* [AHG-SE-018](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/3rd%20Meeting-20140602-St.Petersburg/018_AHG_SE_Action%201306-05_Talamo.doc) - Action 1306-**05** “Identify leading academic institutions interested in education about standardization and explore collaboration efforts”
* [AHG-SE-019](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/3rd%20Meeting-20140602-St.Petersburg/019_AHG_SE_Action%201306-06_Krechmer.doc) - Action 1306-**06** “Identify gaps, once seen the above”
* [AHG-SE-020](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/3rd%20Meeting-20140602-St.Petersburg/020_AHG_SE_Action%201306-09_Simunic.doc) - Action 1306-**09** “Develop a strategy towards the development of materials for education about standardization, as well as identification of common requirements”

# 4 Approval of the Report of the 2nd meeting

The Report of the 2nd meeting ([AHG-SE-012](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/2nd%20Meeting-20130425-Japan/012_AHG_SE_Final_Report.docx)) was noted.

# 5 ITU-T Technical Journal ([AHG-SE-016](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/3rd%20Meeting-20140602-St.Petersburg/016_AHG_SE_ITU-T_Technical_Journal.docx))

The proposal for the creation of an ITU-T Technical Journal was introduced by Alessia Magliarditi (ITU-T).

Mr Krechmer said that just publishing isn’t enough for academic authors. They need to publish in journals that are referenced. The process of being referenced takes some years to be attained. The trends in academic journals is to more open distribution (without undue costs) and publishing on the Internet. Prof. Simunic asked how it will be decided: the whom; and how of the journal? The Chair suggested to inform all ITU academia members about the possibility of contributing to the Journal and depending on responses received over time we may continue. Prof. Simunic suggested an invitation letter could be sent to all ITU members and narrow the subjects of interest. She also highlighted that launching a publication isn’t as difficult as maintaining it.

# 6 Action Plan ([AHG-SE-014](http://www.itu.int/en/ITU-T/academia/Documents/stdsedu/3rd%20Meeting-20140602-St.Petersburg/014_AHG_SE_Action_plan_13-05-14.docx))

The revised Action plan was introduced by Alessia Magliarditi. Seven areas of actions were identified (to reflect also the ToR):

1. Promotion (Actions 1306-**01**; 1306-**02;** 1306-**03)**: three areas: activities of the AHG; importance of international standards; academic membership of ITU.
2. Action 1306-**04** “Collect information on courses on standardization currently offered worldwide”
**Leader**: **Mitsuji Matsumoto** (Waseda University, Japan)
Vice leader: Hiroshi Nakanishi (Osaka University, Japan)
Contributor: Radosveta Sokullu (Ege University, Izmir, Turkey)

Prof. Matsumo presented the questionnaire drafted by Waseda University. The Chair pointed out that some editing is needed and also suggested to make the questionnaire more general, more global, and asked members to propose some amendments. Mr Krechmer mentioned that terms “standards” and “standardization” cover a very broad area, different for different people/organizations, standards being documents or concept and standardization the process, and added that in order to make the questionnaire useful it would need a preamble to set the stage with one or two introduction paragraphs explaining what is requested. Mr Krechmer agreed to draft some text: A draft preamble: We are surveying academic institutions around the world to understand their educational activities relating to standardization (the development of new standards) in any field. By standardization we include industrial, national, regional, and world-wide standardization. Your contribution to a broader understanding of this important field is greatly appreciated.

I suggest that the questionnaire also include questions on:

A possible replacement for question 2): Who the educational material or course is directed to (users, manufacturers/software developers, standards developers)? Check all that apply.

What standards does the educational material or course address: symbols, metrology, similarity (including process, entity, social), ICT (compatibility), or meta standards (e.g., XML)? Check all that apply.

As was noted in the meeting, questions specific to the ITU or other SDO should be avoided.

1. Action 1306-**05** “Identify leading academic institutions interested in education about standardization and explore collaboration efforts”
**Leader**: **Maurizio Talamo** (Tor Vergata University of Rome, Italy)

Prof. Talamo introduced his contribution. His basic idea is to start with a vertical standardization methodology: the importance of standards for communicating among students and between students and university in order to help students move in the world marketplace. He mentioned three goals: the first one is to give ITU the strategic role to drive the process of education about standardization; second goal is to define a first framework where it’s important and innovative to teach standards; third goal is to define a minimum set of standards to teach, which are related to the above described framework, around the following topics: Digital Identity and technology; Privacy protection; Interoperability.

He mentioned the idea of developing case studies but focusing on these topical issues that will be of interest to students. Prof. Irvine said that we should try to avoid suggesting that we are developing a curricula, as this may be perceived as doing academics jobs for them and as such may encounter opposition. A better approach would be to provide resources for academics in the form of case studies they could use. Prof. Talamo agreed that this was the intent of his contribution.

Prof. Sanghamitra De (Future Institute of Engineering & Management Kolkata, West Bengal India), contributor of Action 1306-**09**, participated remotely and provided the following comments:

* How may the process of involving universities begin? Hint: by sending letters inviting papers for the journal launch including the questionnaire with the preamble for the Universities (as suggested by various members of the Ad-Hoc group) and setting the foundation for future collaboration projects and workshops in collaboration with ITU-T; by sending recommendation/guideline for establishing mandatory theory paper on Isology including but not limited to the topics as would be listed in ITU-T course syllabus on Standardization with topics/broad areas customized as per respective departments/trades (e.g. Electronics & Telecommunication Engineering, Computer Science & Engineering, Electrical Engineering etc.).
* Additional topics such as: Information Security Management Systems (ISMS) and Cloud Computing for consideration.
* Inclusion of standardization bodies as ISO, IEC for their inputs in developing University Curricula or inclusion of variety of case studies for creating opportunities for Problem based learning (as suggested by Prof. Simunic) and not Theory only. Case studies for students (as suggested by Prof. Irvine) can be instrumental towards enabling them to take up further research or undertake internship to assist in live conformance assessment/audit exercises/projects. Thus combining theory with case studies for problem based learning can add value to a student profile during placement considerations.
1. Action 1306-**06** “Identify gaps, once seen the above”
**Leader**: **Ken Krechmer** (University of Colorado, USA)

Mr Krechmer mentioned that considering the widely used range of different meanings of the words standard and standardization, it does not seem practical to survey a broad group on their opinion based upon these words.  The first step is thus to define the terminology sufficiently that we can ask questions that are likely to be understood.

He also mentioned the Massive Open Online Courses (MOOCs) as a new tool for education.  He believes that presenting a core academic isology curriculum, basic to all standardization courses, as a MOOC, could enhance the value of both existing and new standardization courses.

The biggest gap is that many existing technical courses do not recognize standardization as "important."  Current physics texts consider standardization arbitrary.  It seems unlikely that students will find the field of isology important, if their professors do not.  This may be the biggest reason to disseminate the theory that supports isology.

Being the ITU the world's preeminent standardization organization, he believes that it should instigate more standardization courses world-wide, and also use its leadership role to develop academic materials for better isology courses, in parallel, if not first.

He also suggested to include courses on the importance of standards in the ITU academia website.

The Chairman informed the meeting of the newly launch ITU Academia website where remote learning courses can be hosted, and suggested its use for such a course.

1. Action 1306-**09** “Develop a strategy towards the development of materials for education about standardization, as well as identification of common requirements”
**Leader**: **Dina Šimunić** (University of Zagreb, Croatia)
Contributors: Sanghamitra De (Future Institute of Engineering & Management Kolkata, West Bengal India) and Hiroshi Nakanishi (Osaka University, Japan)

Dina Šimunić suggested to distinguish among different types of education like engineering, economics, social sciences, and also among scientists, experts and students. The approach would be different whether it concerns development of a new product, process and/or service or promotion and sales. This implies that one would need a flexible and dynamic approach to the development of strategy towards the development of materials for education about standardization, as well as identification of common requirements.

She believes that the strategy should take into account a global perspective, integrated regional and national perspectives.

In developing new university curricula, it is very important to involve national standardization bodies in the process.

Related to the whole process, Prof. Simunic suggests that in the first phase the letter is sent to all ITU Academia Members, asking them for their active cooperation in answering the (proposed) questionnaire, as well as to all ITU national standardization institutions and relevant companies. Taking into account the results of the questionnaire, the materials for education about standardization, will be developed. Furthermore, it is the intention to make the results from the questionnaires available to all the ITU Academia Members. This implies that the respondents have to be made aware that the results of the analysis of the answers will be subject to a possible wider use. The results will also form a basis for developing generic material for education about standardization.

# 7 Next steps and future meetings

Alessia Magliarditi to send the Draft Report to the participants on Tuesday 3 June while they are attending the ITU Kaleidoscope 2014 conference for comment and approval.

The Ad-hoc group will work by electronic means and will meet again back to back with the next Kaleidoscope 2015.

# 8 Closing

The Chairman thanked all participants for the constructive discussions and closed the meeting at1800 hours.

**Annex A
List of participants**

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| Prefix | Family Name | Given Name | Entity | Country |
| Mr | Akyildiz | Ian | Georgia Institute of Technology | USA |
| Ms | Barclay | Corlane | University of Technology | Jamaica |
| Mrs | Bogdanova | Elena | Institute of international business and law NRU ITMO | Russian Federation |
| Mr | Brand | Hermann | ETSI |   |
| Mr | Ibarrola | Eva | University of the Basque Country | Spain |
| Ms | De | Sanghamitra | Future Institute of Engineering and Management | India |
| Mr | Irvine | James | IEEE |  UK |
| Mr | Kodate | Akihisa | Tsuda College | Japan |
| Mr | Komashinsky | Vladimir | SPbSUT | Russian Federation |
| Mrs | Kirichek | Ruslan | Bonch-Bruevich Saint-Petersburg State University of Telecommunications | Russian Federation |
| Mr | Krechmer | Ken | University of Colorado | United States |
| Mr | Matsumoto | Mitsuji | Waseda University | Japan |
| Mr | Merella | Daniela | University of Rome Tor Vergata | Italy |
| Mr | Nakanishi | Hiroshi | Osaka University | Japan |
| Mrs | Sharag | Gleb | Institute of international business and law NRU ITMO | Russian Federation |
| Mr | Talamo | Maurizio | University of Rome Tor Vergata | Italy |
| Mr |  Tanaka | Yasuhiro | University Senshu | Japan |

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