

IEEE Education Society Standards Committee Report

(FIE 2015 Conference)

Recall

IEEE Education Society Standards Committee was established by IEEE Education Society AdCom in 2010 in Louisville, Kentucky. The case was presented by Rob Reilly, AdCom Secretary at that time and Hamadou Saliah-Hassane, member at large of EdSoc AdCom.

The appointed members of IEEE EdSoc Education Standards committee are now:

STANDARDS COMMITTEE MEMBERS

- Hamadou Saliah-Hassane, Chair, Canada
saliah@teluq.ca (Founding member of this committee)
- Pablo Orduna, Vice-Chair, Spain, porduna@tecnologico.deusto.es
- Johann Marquez-Barja, Ireland, johann@marquez-barja.com
- Cecelia Wright Brown, USA, uofbalt@yahoo.com
- Manuel Castro, Spain, mcastro@ieec.uned.es (Founding member of this committee)
- Raul Cordeiro, Portugal, cinel.raul@gmail.com
- Martin Llamas, Spain, martin@det.uvigo.es
- Jose Manuel Fonseca, Portugal, jmf@uninova.pt
- Denis Gillet, Switzerland, denis.gillet@epfl.ch
- Dabipi K. Ibibia, USA, ikdabipi@umes.edu
- Kai Pan Mark, Hong Kong, kp.mark@alumini.cityu.edu.hk
- Pablo Orduna, Spain, porduna@tecnologico.deusto.es
- Rob Reilly, USA, reilly@media.mit.edu (Founding member of this committee)
- Miguel Rodriguez Artacho, Spain, miguel@lsi.uned.es
- Elio San Cristobal Ruiz, Spain, elio@ieec.uned.es
- Janusz Zalewski, USA, zalewski@fgcu.edu
- Danilo G. Zutin, Austria, D.GarbiZutin@fh-kaernten.at

All the steps required to start Working Groups sponsored by IEEE Education society are followed and properly carried on:

1. IEEE EdSoc Policies & Procedures Date of Submittal: 23 June 2011 Date of Acceptance: 10 September 2011
2. A Study Group, Worked on the theme of “Networked Smart Educational Devices” from January 2012 to April 2012;

3. April 27th 2012: A Project Authorization Request (PAR) for P1876 submitted to NesCom for the 7 Jun 2012 NesCom meeting that took place in China approved the Working Group P1876 (tm) on “Standard for Networked Smart Education Learning Objects for Online Laboratories”.
4. On September 19th 2011 IEEE-SA issued a Call for participation to IEEE Edsoc, Computer Society and Industrial Electronics Members.
5. Today more than 250 individuals has shown interest to join the first EdSoc **Standards Working Group on Standard for Networked Smart Education Learning Objects for Online Laboratories** and 117 are already registered on our IEEE-SA WG Central Desktop Collaborative Work Online Environment.

The P1876™ Working Group Activities

All the EdSoc Standards committee members are also members of the first Working Group sponsored by EdSoc. Almost each member of the standards committee attended one or more of the following P1876™ Working Group ongoing activities:

- IEEE-SA P1876 Preconference Workshop at IEEE EDUCON-2013, Berlin, Germany March 13-15, 2013
- IEEE-SA P1876™ Working Group Meeting at IEEE EDUCON-2013, Berlin, Germany, Thursday March 14th 8:00 – 10:00
- IEEE-SA P1876 Working Group Meeting at EDUCON 2014, Istanbul, Turkey, April 3, 2013, 2:00-3:30pm
- IEEE-SA P1876 Working Group Meeting at FIE 2014, Madrid, Spain, October 22, 2014, 1:00-3:00pm
- IEEE-SA P1876™ Subgroup meeting at EDUCON 2015, Tallinn, Estonia, March 17th
- IEEE-SA P1876™ Subgroup meeting at Exp.at’2015, Ponta Delgada, Azores, Portugal, June 1st 2015

The Chair of the WG was also invited to take part of WEEF-IGIP workshop (September 20-24, 2015, Florence) on “**Building Remote Labs for Online Scientific Experimentation**” organized by FORGE and Go-Lab projects.

The first draft is written and will be presented to the whole working group for discussions (October 23, 2015 at FIE 2015 in El Paso). An editor (Prof. Miguel Rodríguez Artacho) one of the WG member was proposed to help the WG Chair to achieve the task during his stay in Montreal (September to November 2015). A team composed of Denis Gillet, Miguel Rodríguez Artacho and Hamadou Saliah-Hassane finalized the proposed first draft in Montreal (October 20-21, 2015).

Roadmap & Milestones

- Exp.at 2015 Conference → June 1st (Azores Islands): Subgroup P1876™ meeting
- IEEE FIE 2015 → 21-24 Oct 2015 El Paso (Texas, USA): an official P1876™ WG meeting

- REV2016 → February 2016 in Madrid; An official P1876™ WG meeting followed by a Workshop
- EDUCON 2016 → April 2016 Abu Dhabi: Official P1876™ meeting and Special Workshop

The P1876™ is gaining an interest from Online laboratories stakeholders including from some members of the leading groups and industries such as the European Go-Lab Project, the Global Online Laboratory Consortium (GOLC), Next Generation Network Research Group (e-NGN) and the research group called “Experimental centric based engineering curriculum for HBCUs” where HBCUs stands for United States Historically Black Colleges and Universities.

We are also envisioning to participate to special joint workshops with potential groups sharing our interest.

Detailed reports of our activities are posted on our collaborative working group virtual environment and can be sent upon request.

We are engaged in a business demanding and exciting for the community of educators and all the stakeholders engaged in Education. For our Working Group to be more efficient, we need to carry on some face to face meetings and workshops. In order to properly build a bond of trust between actors in the process we need a subsequent budget to cover costs relating to our communications, production of promotional material as well as travel grants.

Hamadou Saliah-Hassane
Chair of EdSoc Standards Committee

ANNEX A: Workshop @ IEEE EDUCON-2013

Berlin, Germany March 13-15, 2013

CALL FOR PAPERS

Standard on Networked Smart Learning Objects for Online Laboratories (P1876)

This special track is the first face-to-face meeting of our IEEE Working Group sponsored by the IEEE Education Society. It aims at collecting experiences of researchers and practitioners being users or managers of online laboratories deployed for education and training. The focus is on the exploitation of and the interplay between educational technology and networked devices for learning.

For more information about the scope of the working group, access the link:

http://standards.ieee.org/email/2012_09_cfp_P1876wg_web.html

Topics are, but not limited to, the following:

Pedagogically Driven Remote Laboratory Experiments; Online Laboratory Repositories and Learning Objects Standards; Aggregation of Remote Laboratory Components; Remote Laboratory Learning Scenarios; Instructional Design for Online Laboratories; Context Based Online Laboratory Experiments; Ontologies, Social Networks, Smart; Technologies, Cloud Laboratories and Online Laboratories; Online Laboratories and Miniaturized Networked Devices (Measuring Instruments, Microcontrollers, Educational Robotics, etc...); Mobile Laboratories, Laboratory at Home & Internet of Things

Session Chairs:

Hamadou Saliah-Hassane, P. Eng. Ph.D.
Professor, TELUQ | University of Quebec
E-mail: saliah@teluq.ca

Dr Denis Gillet, Associate Professor (MER)
Email: denis.gillet@epfl.ch

IEEE-SA P1876™ Special Session: Standard on Networked Smart Learning Objects for Online Laboratories

5E: Special Session - Standard on Networked Smart Learning Objects for Online Laboratories: IEEE-SA P1876	
When: Thursday March 14th 11:30 – 1:00	
Location: @ Technische Universität Berlin, Room MA 043	
Chairs: Hamadou Saliah-Hassane & Denis Gillet	
Attendance: Public	
11:30-11:50	A Network and Repository for Online Laboratory, based on Ontology Saliah-Hassane, Hamadou; Correia, Raúl Cordeiro ; Fonseca, José Manuel
11:50-12:10	Exploring complex remote laboratory ecosystems through interoperable federation chains Orduña, Pablo ; Lerro, Federico; Bailey, Phil; Marchisio, Susana; DeLong, Kirky; Perreta, Emmanuel; Dziabenko, Olga; Angulo, Ignacio; López-de-Ipiña, Diego ; Garcia-Zubia...
12:10-12:30	Smart device paradigm, Standardization for Online Labs Salzmann, Christophe ; Gillet, Denis
12:30-12:50	Contribution to Online Laboratory Implementation and Standardization Deaky, Bogdan-Alexandru

ANNEX B: Example of Minutes of the IEEE-SA P1876 Working Group Meeting

EDUCON 2014, Istanbul, Turkey, April 3, 2013, 2:00-3:30pm

**Taken by Janusz Zalewski
Draft Submitted on May 4, 2014**

Those Present

The list of attendees is included as Appendix 1.

Agenda

1. Call to Order and Introductions – WG Chair: Hamadou Saliah-Hassane
2. Review and Approval of the Agenda – WG Secretary: Janusz Zalewski
3. Approval of Previous (Berlin) Meeting Minutes: WG Chair and WG Secretary
4. Administrative Issues: WG Chair
 - Disclosure of Affiliation FAQs – IEEE-SA Staff Liaison Patricia Gerdon
 - Call for Patents - WG Chair
5. Developing a Draft IEEE Standard – IEEE-SA Staff Liaison Patricia Gerdon
6. P1876™ WG Progress Report – WG Chair, WG Secretary, & Berlin 2013 Subgroups Members (Pablo Orduña, Elio San Cristobal, Denis Gillet, Hamadou Saliah-Hassane, Raul Cordeiro, Laurence Lam and Danilo Zutin)
7. Next WG Steps (including date for next WG Meeting)
8. Any Other Business.

1. Call to Order and Introductions

The meeting was opened by the WG Chair at approximately 2:00pm, with introductions of all those present, who stated their names and affiliations.

2. Review and Approval of the Agenda

The WG Secretary presented and reviewed the proposed Agenda, and asked for comments. No issues were raised and it was agreed that the meeting can proceed as planned.

3. Approval of Previous (Berlin) Meeting Minutes

The WG Secretary read, paragraph by paragraph, through the minutes of Berlin Meeting, which were distributed to those present, asking if there were any comments on the contents regarding their accuracy. Only one comment was made by Danilo Zutin requesting deletion of an item on OWL from the outline of his presentation. With no other comments made or corrections requested, except of some typos, the Secretary moved to approve the Minutes, with the above mentioned correction. This was seconded by the Chairman and the Minutes were approved unanimously as a true and correct record of the Berlin Meeting.

4. Administrative Issues

Call for patents was issued by the Chairman, asking if anyone was aware of any pending or forthcoming patents overlapping with the scope of the standard, but none were claimed.

Then Patricia Gerdon, representing IEEE Standards Association (SA), proceeded briefly on explaining the formal understanding of affiliations, as viewed by the IEEE SA. Her slides are included as Appendix 2 to these minutes. The full explanation is included on the IEEE-SA FAQ page: <http://standards.ieee.org/faqs/affiliation.html>. The following paragraph is quoted from this site (as of April 26, 2014):

“What is the difference between an employer and affiliation? An affiliation, as defined in the IEEE-SA Standards Board Bylaws, 5.2.1.5, is an individual deemed *affiliated* with an individual or entity that has been, or will be, financially or materially supporting that individual’s participation in a particular IEEE standards activity. This includes, but is not limited to, his or her employer and any individual or entity that has or will have, either directly or indirectly, requested, paid for, or otherwise sponsored his or her participation. An employer is typically the entity that would be reporting an individual as an employee for tax purposes.”

5. Developing a Draft IEEE Standard

Patricia Gerdon educated the group on several issues related to standard's development under the auspices of IEEE Standards Association. Slides of her presentation titled "The Editorial Process" are included as Appendix 3 to these minutes. The major issues she discussed include:

- Mandatory Editorial Coordination (MEC)
- the role of the Editor (it is essential that each standard document had an Editor)
- normative and informative references
- legal and safety review of the standard's potential impact
- verb usage (*shall, should, etc.*)
- standard template.

Additional issues discussed included Patricia's response to questions from the attendees:

- distinction between IEEE Education Society Standards Committee (oversight role, sponsoring the standard) and the Working Group developing the standard
- the balloting process, after completion of standard's development: WG is level 1 balloting, then the standard goes to the Sponsor's vote (Education Society)
- there are several kinds of standard documents: the Standard proper, a Guide, and Recommended Practice; they differ by the types of requirements they impose on those applying them
- while this particular meeting involves substantial material of explanatory nature, meetings are normally held for the purpose of making decisions (by voting) what to include in the standard document
- IEEE Education Society has Policies and Procedures document regarding standard development (attached to these minutes as Appendix 4).

Note added by the Secretary. Members of the IEEE Standards Association have easy access (after logging in to their account) to all documents outlining the standard development processes, which include:

1. Initiating a Project
2. Mobilizing a Working Group
3. Drafting a Standard
4. Balloting a Standard
5. Approving a Standard
6. Maintaining a Standard

6. P1876™ WG Progress Report

The WG Chair summarized the recent activities of the group, leading to the development of Draft 0.01 of the standard. At this time, it is essentially a template with empty contents, plus several contributions from various WG members with intention to become parts of the standard document. A discussion, which evolved, included the following items:

- assigning the Editor to keep updates of the Draft Standard
- developing the Table of Contents of the Draft Standard
- filling the contents of standard's regular sections, such as Terminology, References, etc.
- establishing a liaison with the standards group on Learning Technologies, P1484
- designate P1876 as a standard for services, including scenarios for use
- using Central Desktop as a tool for the WG to communicate and store documents.

In this regard, the following action items were assigned:

- Cecelia Wright Brown: help in the development process by leading the Editorial Team; determine what the Editorial Team is supposed to do
- Denis Gillet: develop the standard's Table of Contents and submit it to Cecelia
- Janusz Zalewski: develop the Terminology Section
- Danilo Zutin: send GOLC definitions to Janusz Zalewski
- Hamadou Saliah-Hassane: developing the Informative References section, and Janusz Zalewski – develop the Normative Reference

- Igor Titov: deployment of some Central Desktop's features such as public and private web sites or wikis and activating the Project Management tools (task to be carried on with Younes Karam proposed by Hamadou Saliah-Hassane, however Igor would like to evaluate his role before committing himself)
- Hamadou Saliah-Hassane: maintain liaison with Learning Technologies Standards Committee WG Groups and xAPI initiatives (Tyde Richards)

7. Next WG Steps

In addition to action items listed above, dates and modes for the next meetings were considered. The following actions have been determined:

- organize teleconference, some time in July (to be investigated by Patricia Gerdon and Manuel Castro)
- hold the next face-to-face meeting at the Frontiers In Education (FIE) conference, in Madrid, in October 2014, possibly using a separate time slot, not overlapping with core conference activities (responsible: Hamadou Saliah-Hassane).

8. Any Other Business

Dr. Kaynak from the local organizing committee pointed out that due to apparent mis-communication, he had not been fully aware of the full needs for this meeting, regarding the size of the group and the exact required for technology.

Amine Berqia suggested to take formal note on disbanding the Subgroups and restructure the WG to assign individual actions. The group discussed it briefly and agreed, as a statement of facts, without taking a formal vote. The meeting adjourned around 3:30pm.

ANNEX C: Central Desktop Collaborative Environment

The screenshot shows a web browser window with the URL <https://iee-SA.centraldesktop.com/1876/>. The page header includes the IEEE Standards Association logo, a search bar for workspaces and files, and user navigation options for 'Create', 'Help/Resources', and 'Hamadou Saliah-Ha...'. Below the header is a grid of workspace thumbnails. The main content area is divided into two sections: '1876 Working Group People' and 'Recent Discussions'. The '1876 Working Group People' section displays a row of 15 circular profile icons, with a 'Manage' button to the right. The 'Recent Discussions' section lists four discussion threads with their respective dates and authors:

- Next IEEE-SA P1876™ (Standard on Networked Smart Learning Objects for Online Laboratories) @ 2015 Frontiers in Engineering Education Conference** (Oct 15)
Author: Miguel Rodriguez Artacho
Text: Dear P1876 members, We have now room for the meeting: "Boardroom". See details at [http://fie2015.org/meetings-fie-IEEE-SA-P1876™-\(Standard-on-Networked-Smart-Learning-Objects-for-Online-Laboratories\)-El-Paso-Working-Group-Meeting-Agenda-@-2015-Frontiers-in-Engineering-Education-Conference-\(www.fie2015.org\)](http://fie2015.org/meetings-fie-IEEE-SA-P1876™-(Standard-on-Networked-Smart-Learning-Objects-for-Online-Laboratories)-El-Paso-Working-Group-Meeting-Agenda-@-2015-Frontiers-in-Engineering-Education-Conference-(www.fie2015.org)) Date: Friday, October 23, 2014, 2:30-4:30 PM Place: Boardroom ...
- Next IEEE-SA P1876™ (Standard on Networked Smart Learning Objects for Online Laboratories) @ 2015 Frontiers in Engineering Education Conference** (Oct 4)
Author: Hamadou Saliah-Hassane
Text: Dear P1876(m) WG Members, Please find below the agenda of our next Meeting at FIE 2015. Your contributions can be sent to either Hamadou Saliah-Hassane, WG Chair (hsaliah@iee-SA.org) Janusz, WG Secretary (kswelacz@gmail.com) Miguel Rodriguez Artacho, Editorial Committee Chair, (miguel@isi.uned.es) You can also access to the Central Desktop and upload your contribution in the Contribution folder. Regards Hamadou IEEE-SA P1876™ (S...
- USE CASES** (Mar 16)
Author: Miguel Rodriguez Artacho
Text: Dear all, In order to prepare our next meeting in Azores Islands in the scope of exp.at conference, I consider appropriate to collect different approaches and issues concerning P1876 topics. I have created a folder USE CASES under the Documents folder and this thread to collect documents and opinions from all of you. I suggest to leave a period of one month to prepare a PDF and upload to the folders from all stakeholders. The idea would be to have a view of the (possibl...
6 comments
- Meeting in EDUCON '15?** (Mar 12)
Author: Johann Marqu Barja
Text: Dear all, EDUCON '15 (Estonia) is just next week. Based on the minutes of the last meeting hold in FIE14 (Spain) the item 7 states that first draft should be ready by then. Is it? Moreover, are going to held a meeting over there? If so, who is attending? when and where can we meet? Cheers, Johann Dr. Johann M. Marquez-Barja ----- CTVR / the telecommunications research centre, Trinity Coll...
4 comments