# ICES2016 報告

# ~産業界から見た標準化の教育と課題~



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産業分野による異なり、ギャップ

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5. まとめ



# ICESとは① ミッションと目的

### Mission of ICES

The mission of ICES is to promote education about standardization and improve its quality and attractiveness for all stakeholders.

## Objective of ICES

- Develop and maintain an interdisciplinary network of people interested in education about standardization
- Facilitate the development of policies and infrastructures to support education about standardization (e.g., in nations, regions, worldwide, industries, companies)
- Seek cooperative relationships with organizations that provide training and education in this area
- Professionalize education about standardization by, for example:
  - Tightening the link between up-to-date standardization research and education
  - Facilitating a repository for curricula
  - Facilitating a repository for educational materials
  - Facilitating peer review of educational materials
  - Stimulating the development of guidelines, innovative approaches, and educational materials
  - Organizing workshops

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# ICESとは②

- ・標準化の教育に関する興味や必要性を認識している個人または組織での集まり
  - →国際標準を開発している国際的組織である

ISO(国際標準化機構)、IEC(国際電気標準会議)、ITU(国際電気通信連合)、 地域標準化団体、各国の標準化機関の他、

欧米の大学、アメリカの標準化団体などが参加している。

・2006年から活動を開始 第1回は東京で開催

### **ICES2016**



IEC ISO 🙀

場 所 : ドイツ フランクフルト (IEC大会と併設) テーマ名:What industry needs from education on standardization







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# ICES Day 1 - 2016-10-10

18:00

**IEC Opening Ceremony** 

### Room - KAP-C1 - Satellit

Time	Topic	Speaker
09:00 - 10:30	Opening	Moderator: Prof. Dr. Knut Blind - TU Berlin & Fraunhofer FOKUS
		Dr. Bernhard Thies - Managing Director DKE, President CENELEC Elena Santiago Cid - Director General CEN and CENELEC Prof. Dr. Hiromichi Fujisawa - IEC Ambassador Cyrill Dirscherl - European Commission
10:30 - 11:30	Coffee break	
11:00 - 12:30	Industry panel	Moderator: Dr. Sandra Drechsler - KIT
		Stephan Fertig - Panasonic
		Dr. Jochen Friedrich - IBM Technical Relations Executive
		Luisa Lazina - Patent Department Volkswagen AG
		Dr. Basak Manders - Philips
		Dr. Michael Meyer - Ericsson
		Markus Reigl - Head of Technical Regulation and Standardization, Siemens
		Dr. Walter Weigel - Vice President of Huawei European Research Institute

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13:30 - 15:30	Short presentation by International SSOs	Moderator: Jan-Henrik Tiedemann - IEC  Young Professionals IEC: Fatima Alkhoori Mauricio Avila Leo Ohtsuka Beer Opatsuwan Dr. Daniele Gerundino - ISO Alessia Magliarditi - ITU	
15:30 - 16:00	Coffee break		
16:00 - 18:00	Individual success cases	Moderator: Jeffrey Strauss - Northwestern University  Deniz Bayramoglu - TU Darmstadt Dr. Sandra Drechsler - KIT Stephan Fertig - Panasonic Luisa Lazina - Volkswagen AG Dr. Basak Manders - Philips Adam Murdoch - Energy Safe Victoria Dr. Tim Pohlmann - IPlytics GmbH Juan Manuel Rosales - MABE Dr. Paul Wakke - DKE Mike Wood - Telstra	





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#### Visionary Competence Ambassador - State Grid





#### Corporate Profile

As the largest utility in the world, State Grid Corporation of China [SGCC] constructs and operates power grids as its core business. Its mission is to provide safer, cleaner, and more economic and sustainable power supply.

SGCC serves over 1.1 billion people, exceeding 420 million households in 26 provinces, autonomous regions and municipalities, covering 88% of the national territory. SGCC shows business diversification in advanced electrical equipment manufacturing and financial sector covering banking, insurance, security and trust business. It has also invests and operates overseas assets in the Philippines, Brazil, Portugal, Australia and Italy, etc. with good performance.

By the end of 2015, the total assets of SGCC exceeded 470 billion US dollars including 38 billion US dollars oversea assets. In 2015, the electricity sales volume of SGCC was 3450.6 TWh and the operating revenue reached 330 billion US dollars. SGCC ranked 2nd on Fortune Global 500 in 2015.



SGCC is now actively promoting China energy interconnection and Global Energy Interconnection through the construction of a strong and smart grid with UHV grid as the backbone and coordinated development of power grids at various scale levels.

SGCC has completed the construction of 4 UHV AC and 5 UHV DC projects. 3 UHV AC and 6 UHV DC projects are under construction. The total length of UHV transmission lines in operation and construction has reached 28,800 kilometers, with a total transformation (conversion) capacity of 294 GVA (GWI. SGCC operates the power grid integrating the world's largest scale of wind and solar generation.

The integrated capacity of wind power and solar power has reached 124 GW and 61 GW, respectively. For smart grid construction, 368 million smart meters have been installed. 2,300 smart substations, 1,537 EV battery charging/swapping stations and 29,600 EV charging poles have been built up.



# ICES Day 2 - 2016-10-11

### Room - KAP-C1 - Satellit

Time	Topic	Speaker
09:00 - 10:30	Keynotes	Moderator: Erik Puskar - NIST
		Dr. Sandra Drechsler - KIT  Demands of the industry on engineers in the field of standardization  Prof. Dr. Henk de Vries - RSM  Impacts of university rankings on education about standardization  Q&A
10:30 - 11:30	Coffee break	
11:00 - 12:30	Short presentation by European SSOs	Moderator: Jeffrey Strauss - Northwestern University
		Ingrid Soetaert - Programme Manager - Innovation   CEN/CENELEC EaS Dr. Hermann Brand - Director Innovation   ETSI Dr. Karl Grün - ASI Director Development   Austria Signe Annette Bøgh - Consultant for education, research and innovation   Denmark Dr. Albert Hövel - DIN - Head of Technical Department 1   Germany Dr. Matthew Chiles - BSI Director   Great Britain Daniel Masso Aguado - Head of Knowledge AENOR   Spain

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13:30 - 15:30	Short presentation by Asian SSOs	Moderator: Jan-Henrik Tiedemann - IEC
		Wenhui Zhao - Associate Researcher, China National Institute of Standardization   China Dr. Bambang Purwanggono - Lecturer, Diponegoro University   Indonesia Dr. Donggeun Choi - Principle Researcher, Korean Standards Association   Korea Dr. Vu Tuan Anh - Deputy Director General, Ministry of Education and Training   Vietnam  Q&A
15:30 - 16:00	Coffee break	
16:00 - 17:00	IEEE Standards Education and the Young Professional	Moderator: Susan Tatiner - IEEE Standards Association  Parshva Bavishi - IEEE MGA, Young Professionals Program James Irvine - Strathclyde University
		Sam Sciacca - IEEE Standards Association Frederic Surre - City University of London Dr. Walter Weigel - Vice President of Huawei European Research Institute



### WSC Academic Day - 2016-10-12

		口华州
Room -	KAP-C1	- Satellit

Time	Topic	Speaker
09:00 - 09:10	Welcome	Prof. Dr. Hiromichi Fujisawa - IEC Ambassador
First session		Introduction to the theme, with views from IEC, ISO and ITU
		to sustainability, considering in particular the SDGs 2016-2030 and the outcome of standardization fits into the picture
09:10 - 09:30	ISO view	Dr. Daniele Gerundino - Director, ISO Academy Standards contributing to the SDGs, general perspective
09:30 - 09:50	IEC view	Jack Sheldon - IEC Standardization Strategy Manager Disruptive Technologies and Sustainability
09:50 - 10:10	ITU view	Alessia Magliarditi - Programme Coordinator, ITU ICTs and achieving the Sustainable Development Goals
10:10 - 10:45	Coffee break	
	n	University programmes covering standardization and sustainability

10:45 - 12:00 Panel Jeffrey Strauss - Northwestern University, USA

Analyzing and Mitigating Critical Sustainability Problems: Climate Change

and the Energy-Water-Food-Public Health Nexus

Luca Mari - Carlo Cattaneo University - LIUC, Castellanza, Italy, and Chair of

IEC TC 1, Terminology

Prof. Dr. Knut Blind - Technical University of Berlin, Germany

The role of standardization in the new Master Innovation Management,

Entrepreneurship and Sustainability

Ada Minotti - Project manager at British Standards Institution (BSI) and University of Geneva graduate, Master of Arts on Standardization, social regulation and

sustainable development

Erik Puskar - National Institute of Standards and Technology (NIST, USA) Presenting the experience of the Environmental and Energy Systems Management Graduate Certificate program, George Washington University



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#### Third session

#### Stakeholder perspectives

Views and experiences from stakeholders: panelists will present views and experiences of various players - such as companies, government agencies, international organizations, NGOs - of collaboration with universities on subject areas combining sustainability and standardization, followed by general discussion

13:45 - 15:15 Panel

Prof. Dr. Hiromichi Fujisawa - IEC Ambassador

Karla McKenna - Director of Market Practice and Standards, Citi Markets and

Securities Service and Chair of ISO/TC 68 Financial Services.

Thomas Willson - Policy Officer, European Environmental Citizens' Organisation

for Standardisation (ECOS)

Chiara Giovannini - Senior Manager, Policy and Innovation, ANEC (European

consumer voice in standardization)

Lorenza Jachia - Secretary, Working Party on Regulatory Cooperation and

Standardization Policies (UNECE)

Topic	Speaker
Update	Cooperation between standards bodies and universities: an update
	Dr. Daniele Gerundino - Updates on the initiatives conducted in the recen past - results achieved and lessons learned from international organizations and standards institutes
	Updates from North America: Erik Puskar - National Institute of Standards and Technology (NIST) NIST's grants supporting the development of undergraduate and graduate-level curricula that integrate standards and standardization
	Updates from Iran Mojdeh Rowshan Tabari - Iranian National Standard Organization (ISIRI); The Students' Standards Society

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