Global Perspectives and Strategies for Education about Standardization – European Perspective
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Overview of Education in Standardization at German Universities and Colleges

Univ.-Prof. Dr.-Ing. Wilfried Hesser
Department of Standardization and Technical Drawing
Helmut-Schmidt-Universität / Universität der Bundeswehr Hamburg
CONTENTS

1. Problem Analysis
2. Questionnaire on Standards Education
3. Academic Education on Standardization
4. Further Education on Standardization
5. Vision of Education
1. PROBLEM ANALYSIS

**EFFECTS**

- No uniform European image of the standardization system. No link between European law and EU standardization system.
- Dominance of Japan/USA.
- Lack of qualifications for future management personnel.

**CAUSES**

- Europe-wide consultancy in European Standardisation System.
- Europe-wide education and training in European Standardisation System.
- Japan and USA are well organised in promoting and implementing their Standardisation Systems (i.e. co-operation with the NSBs in Asia).
- Requirements of employment market are not taken into account (high export rate).
- EU trains within NSBs and economy, not at universities.

Consultants:
- DIN
- BSI
- AFNOR
- SIS
- Other NSBs
2. QUESTIONNAIRE ON STANDARDS EDUCATION

Evaluation: January, February 2008

- Of 360 addressees (230 SIIT mailing list members and 130 EURAS mailing list members) 27 answered questionnaire.

- Of 27 responses **10 came from Germany**, 3 from the Netherlands, 1 from France, 1 from Italy, 4 from Greece, 1 from Sweden, 1 from UK, 3 from the USA, 1 from Canada and 1 from India.

- 23 responses came from universities, 1 from a Ministry, 3 from other institutions, none from colleges or related institutions.

SIIT – mailinglist Dr. Kai Jakobs
3. ACADEMIC EDUCATION ON STANDARDISATION

Evaluation (continued): Germany
Does your institution teach standardization?

10 came from Germany

Answers:

- 7 Yes
- 3 No
3. ACADEMIC EDUCATION ON STANDARDIZATION

Results of Questionnaire – An Overview - Lecture/Course

- Master Course – Standard diffusion, standardisation governance, standardisation in SMEs, standardisation in networks. Applications: E-business standards, Web Services and SOA. Every winter semester, 4 hrs/week; 40-50 students.

- Standardization part of Innovation Economics and Policy courses -strategic aspects of standardisation, 2 hrs/week, 20 students

- Law of technics – Standardisation - 6 hrs/week, 100 students

- Course on E-Government - technical and organisational interoperability - standardisation 5 hrs/week, 20 students

- Development of IT Standards and E-Business Applications, Electronic Business, 4 hrs/week, 20 students

- Course option in Master degree – Standardization in Companies and Markets. Two trimester 2hrs/week; 10 – 15 students
In academia:

Example: DFG wants to set up a research network in standardization in Germany in February, 2008

- 24 professors have expressed an interest to participate
- 9 answered my questionnaire
- 7 hold lectures on standardization

Standardization research more important than standardization education

DFG - The Deutsche Forschungsgemeinschaft (German Research Foundation) is the central, self-governing research funding organisation that promotes research at universities and other publicly financed research institutions in Germany.
4. FURTHER EDUCATION ON STANDARDIZATION

NSB (DIN):

- Carries out further education activities in the current budget year
- Target market for activities: industry and commerce, government organizations, continuous professional development (CPD),
- The further education activities carried out include: Web site information, publication, research and certified standardization course, for industry and commerce

(Report on a Survey of other NSBs Educational Activities, BSI 2001)
4. FURTHER EDUCATION ON STANDARDIZATION

Further Education and German SBs:

A lucrative business

• German SBs limited support of education initiatives in standardization at academic level in the past
• Due to recent (web-based) dynamics in standardization education, this approach not viable anymore

→ New approach to standardization education required
4. FURTHER EDUCATION ON STANDARDIZATION

Other providers of training in standardization:

GTZ (Gesellschaft für Technische Zusammenarbeit)
- International cooperation enterprise for sustainable development
- Worldwide operations
- Owned by German Federal Government

PTB (Pysikalische Technische Bundesanstalt)
- National metrology institute providing scientific and technical services
- Measures with highest accuracy and reliability
- Metrology as core competence
- Owned by German Federal Government

TÜV (Technischer Überwachungsverein)
- International service group
- Operating in INDUSTRY, MOBILITY and PEOPLE business segments
- Engaged in optimizing technology, systems and know-how
- Worldwide operations

Further education worldwide in STANDARDIZATION
5. VISION of EDUCATION

Online-curriculum “Standardization in Companies and Markets” set up in 2007:

Objectives

• To deliver comprehensive, didactically enhanced and up to date knowledge of standardization to all target groups

• To save time and money by self-qualification in blended-learning course

• To ensure personalized tuition through modular structure

www.asia-link-standardization.de
www.pro-norm.de
5. VISION of EDUCATION

Standardization textbooks & Reference materials

With:

- interdisciplinary content
- Law
- Information technology
- E-business
- Economic strategies
- etc
5. VISION of EDUCATION

A sustainable e-learning approach in standardization education needs

- a sound financial basis
- high level of technical infrastructure
- ongoing commitment of all parties involved
- constant updating of contents

HOW SHOULD A Viable BUSINESS MODEL BE SET UP?
Thank you very much for your attention!

Please feel free to ask questions and make comments!
Univ.-Prof. Dr.-Ing. Wilfried Hesser
Department of Standardization and Technical Drawing
Helmut-Schmidt-Universität
Universität der Bundeswehr Hamburg
Holstenhofweg 85
22043 Hamburg
Tel: +49 (0)40-6541-2861
Fax: +49 (0)40-6541-2092
Wilfried.Hesser@unibw-hamburg.de