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Report on **SIIT'99 conference** (IEEE Conference on Standardisation and Innovation), held in Aachen, Germany, 99-09-15/17. (sponsored also by the EU, RWTH and). K. Jakobs, R. Williams (Eds.), SIIT'99 Proceedings, published by IEEE, ISBN 0-7803-9935-8. For copies also contact: kai.jakobs@i4.informatik.rwth-aachen.de

The conference was attended by an international audience of about 70 people from standards organisations, academia and some industry. Following a keynote address by the CEU on the role of standards in the information society, several invited papers provided an overview on the situation in standardisation with emphasis on the role changes of Standard Development Organisations (SDOs) and industry consortia which develop informal and de facto industry standards. Main arguments for the establishment of industry consortia: a much more common interest on the subject to be standardised than can be expected in the standardisation organisations. This is especially the case for IPRs (Intellectual Property Rights). Therefore the consortia standardisation process becomes much faster, is less expensive, and its results are more predictable than in SDOs.

Five conference sessions covered organisation aspects, the process, the role of innovation, economic issues and specific standards and applications. Highlights:

1. *K. Blind, et al, Influence of innovation and standardisation on macro economic development: the case of Germany.* The technical progress as the result of the national R&D activity and the import of technology know-how is analysed for the German economy from 1960 to 1996. The analysis shows a decrease of the contribution from patents beginning in the 80s, coinciding with the increase of informal industrial standardisation.
2. *C.F. Cargill, Consortia and the evolution of IT standardisation.* The struggle between industry consortia and SDOs for hegemony in the standardisation arena has been overtaken by the market that does not care where the standard comes from, as long as there is a standard. Specific highlights:
3. *K. Kretchmer, Technical communication standards: new directions in standardisation.* A standards taxonomy of four levels is proposed which consists of 1. unit and reference standards, 2. similarity standards, 3. compatibility standards, 4. etiquettes. The last one is a new form of standards applicable for interoperability of adaptable systems by providing a protocol of protocols to allow systems to select the common mode of interoperation in heterogeneous environments. Example: the Group 3 facsimile standard, which allows communication between fax machines of different capabilities.
4. *C. Blank Purper, An environment to support flexibility in process standards.* Standards on software processes should be used as guidelines rather than only being applied as a checklist to gain software certification. However this requires continuous up-date in order to incorporate emerging proved solutions. The paper presents an environment to support the required flexibility through a process model which is stored in a rather well structured database. In the course of the work many inconsistencies in the paper versions of the standard could be identified.
5. *M. Jarke, et al, CAPE-Open: Experience from a standardisation effort in chemical industries.* A common structure for chemical process simulators has been developed in an EU project, which integrates the different tools required in the process simulation. The concept may have evidence in business process simulation as well.

For the project work the groupware technology BCSW (Basic Support for Co-operative Work) has been used, BCSW is available from the GMD (German national centre for information technology). Information from <http://www.gmd.de>

Panel discussions and a workshop on electronic tools to support standardisation with 4 presentations complemented the presentations. The tools are thought to be used in collaborative standards development.

- *M. Spring, Usability of a collaborate authoring system for standard developments: preferences, problems and prognosis.* CASCADE (Computer Augmented Support and Collaborative Authoring and Document Editing) is a development of the University of Pittsburgh, USA supported by NIST. Software is available as shareware. Information from <http://www.sis.pit.edu/~cascade>.
- *S. Downe, Progress towards web-based electronic committees in the CEN/INES project (Internet Network for European Standardisation).* An EU project carried out jointly by CEN and 10 National Standardisation Bodies (NSBs).
- *J. Iorio, IEEE: an evolving collaborative environment.* Cascade (see above) is envisioned to be added to the IEEE support system.

- *C.F. Cargill, A proposal for a web based standardisation process.* Proposals for standardisation are to be placed on the web for comments in order to increase awareness, involvement and the validation base of the standard.

New Literature:

K. Jakobs, *Information Technology Standards and Standardisation: A Global Perspective*, Idea Group Publishing, 1999, ISBN 1-878289-70-5.