



SB3(Nürnberg/Sec)8
For IEC use only

2003-09-18

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SECTOR BOARD 3: INDUSTRIAL AUTOMATION SYSTEMS

Meeting: date: 2003-09-18; place: Nürnberg, Germany; time: 9:00

SUBJECT

Day report of the SB 3 meeting held in Nürnberg on 2003-09-18

1 Opening and welcome

Mr Schott of Siemens welcomed members and guests to Nürnberg, the world headquarters of the Automation and Drives division. Dr Birla also greeted those present, and expressed his pleasure at being able to be of service as the new Chairman.

2 Approval of the revised draft agenda

Document: [SB3\(Nürnberg/Sec\)2A](#)

No changes were proposed. Lunch was scheduled for 12:45-14:00, the end of the meeting for 16:30, and the Secretary would try to “pace” the timings for the various agenda items.

3 Matters arising from the approved minutes of the last meeting

Document: [SB3/92/RM](#)

3.1 Matters arising from the minutes not covered elsewhere on the agenda

No such items were identified.

3.2 TCs' Steering Group (TCSG) Convenership

Mr Ulrichs, Convener of the TCs' Steering Group, was retiring from standardization (and from Siemens) at the end of 2003, and SB 3 and the TCs in the automation sector needed a new Convener. The Chairman proposed that the TC chairmen present should consult and propose a candidate to SB 3, whose responsibility it was to elect the new Convener; Mr Ulrichs agreed to organize this consultation.

3.3 Review of SB 3's actions from the actions list of the *Principles* document

Document: [SB3\(Nürnberg/TCSG\)7A](#)

Dr Birla introduced the preparatory work done the previous day by TCSG, contained in a meeting document. He first drew attention to action 1.3, calling for a unified new work proposal form in IEC and ISO, and explained that the TCSG discussions had suggested that for SB 3 to take the initiative to work on a concrete proposal for this would advance matters. He therefore asked for volunteers, from both ISO and IEC; the group would be taking into account the two existing forms, IEC's AC/127/2001 and ISO/TC 184/SC 4's additional criteria. Messrs Brückner, Mason and delaHostria volunteered, with Mr Brückner leading the *ad hoc* group and Mr delaHostria taking responsibility to distribute the starting information to

members. It was planned, within the constraints of time and agenda, to mention the issue to the IEC TC Chairmen gathered at the IEC General Meeting in Montréal (per Mr Brückner).

SB 3 decided to set up an *ad hoc* group, led by Mr delaHostria and involving Messrs Lefebvre, Brückner and Mason, to draft a possible unified new work item proposal form, taking into account the current forms, ISO's Standards Value Assessment Tool (and possibly ISO/TC 184/SC 4's guidance on it), AC/127/2001 in IEC and the additional criteria applied in ISO/TC 184/SC 4.

Recommendation 0309/1 – New work item criteria

SB 3 recommends the SMB to encourage IEC TC Chairmen to consider the issues involved in setting criteria for new work item proposals, and in particular the advantages if the criteria were identical in IEC and ISO. To this end, SB 3 has set up an *ad hoc* group to draft a possible unified new work item proposal form.

Actions 2.1 and 4.1 were dealt with together, and the Chairman asked for an industrial member of SB 3 to put himself or herself forward to be the collection point for the market relevance “criteria” concerned. Mr Deken offered to take on this role, and Mr Jancik would support him, as well as Dr Bünger and Mr Schott. Dr Birla felt that anything which took a long time would not get done, so he proposed the first collection of criteria to be done within a week (by e-mail to Mr Deken by 2003-09-26).

3.4 Review of actions taken since the last meeting and not covered elsewhere on the agenda

In the future, actions would be tracked and reported on in each meeting's agenda.

4 Standardization Management Board (SMB) matters

The report to the SMB and comments made on it were mentioned. Approval of the *Principles* for publication as an ISO/IEC Guide was currently under vote; the Secretary explained that the *Principles'* declaration concerning an IEC Mark of Conformity could in no way be considered a reason not to approve publication, since the CAB had definitively approved the use of an IEC Mark or Marks in principle.

5 Work of Technical Committees in the sector

5.1 Report of the TCs' Steering Group (TCSG) after its meeting the previous day (2003-09-17)

Documents: [SB3/97/INF](#), [SB3\(Nürnberg/Sec\)4](#), [SB3\(Nürnberg/France\)5](#),
[SB3\(Nürnberg/TC184SC4\)6](#)

Mr Ulrichs made a full report, contained in a meeting document; steps recommended for SB 3 to take are dealt with under items 11.2 and 11.3 below.

The Chairman congratulated Mr Ulrichs for his nomination to receive the IEC's Lord Kelvin Award, emphasizing Mr Ulrich's many achievements and how well-deserved the Award was. All those present applauded. On behalf of SB 3 and the TCs in the sector, he also thanked Mr Ulrichs very much for his convenership of TCSG and tireless efforts on SB 3's behalf.

5.2 Results of the work on Device profiles

Document: [SB3/94/INF](#), [65/314A/NP](#), [65/328/RVN](#)

Mr Hans-Peter Otto had been invited to present the Device profiles work, and made a presentation. The results of the “preliminary” group (which had done a great deal of work) was now an approved NP and PAS, and the status was that this would be further developed by

an established joint working group. The result would be a published Technical Report, voted in parallel in ISO and IEC and possibly with a joint logo and 80 000 series number. A brief discussions took place, including the possible usefulness of IEC 61360 and ISO/TC 184/SC 4 description approaches to help express the evidently useful results in device profile guidelines.

Dr Birla pointed out that SB 3 had never, in its 6-year history, reported succinctly on its performance or successes. He commended the Device Profiles work for its success, and also pointed out that SB 3 was also meritorious in having identified the need and launched the efforts. At his request, Mr Otto shared some of his thoughts and experiences from the work. It had been helpful to start with a small group of representatives from a few, specifically identified existing working groups which were relevant, rather than launching a universal call for interest, experts or approval. Now the work was well-advanced and clearly useful, the official approval had just been successfully obtained. The hardest part had been the initial agreement on definitions and approaches (object-oriented, function-block-oriented, ...) so as to create mutual understanding and a single way of working (paradigm). He identified potential convergence of different existing profile approaches as a result of this work; it could for example usefully form a framework for more specific efforts inside a consortium.

This project seemed to constitute a good case study for industry, to show the progress and success of a standardization project; if it was documented somewhat formally, identifying critical success factors, it would be available for future learning. Dr Birla asked whether a volunteer could be found, probably from outside the existing project, to undertake this documentation; Dr Bünger offered to attempt this, and estimated a result approximately three weeks later.

- 5.3 Presentation/workshop on ISO/TC 184/SC 4's work; plans for future TC Workshops
Document: [SB3\(Nürnberg/Mason\)9](#)

Mr Mason made a presentation on his subcommittee's work programme and its applications, recorded in a meeting document, and answered questions.

- 5.4 Safety standards for industrial automation: consistency and coordination: see 11.4

6 **Proposal for an ISO/IEC Guide “for the specification of product properties and families”**

Document: [SB3/96/INF](#), [SB3/96A/INF](#)

Mr Mason's committee considered this proposal from Germany to be an excellent idea; he informed those present that the ISO/TMB was currently considering a proposal to appoint an *ad hoc* group to develop the draft somewhat in view of publication. Mr Barta explained that the question currently before the IEC SMB was rather more categorical: a “Yes” vote would have the effect of immediately issuing the current draft (without further development) to IEC National Committees for approval to publish unchanged as an ISO/IEC Guide. Mr Brückner believed that the German proposers did not think the current draft to be ready for publication, and would therefore consider it normal for it to be further developed. A brief discussion ensued on the purpose of the German proposal (which was explanation and help for all TCs in use of IEC 61360 and ISO 13584) and that of ISO/IEC Guides in general. Members then identified the central issue for SB 3 as deciding whether industry saw a need for such a document if its purpose was to help all standards specifying product properties to use a consistent description method.

Recommendation 0309/2 – Proposed ISO/IEC Guide on specification of product properties
SB 3 believes that all sectors of industry have a need for standards which treat product properties compatibly, and therefore supports the proposal to publish an ISO/IEC

Guide to the specification of product properties. Before publication, the text submitted by the German National Committee will require some work from experts, and review by the industry sectors represented in IEC and ISO. Among other issues, the future Guide should provide for taking into account and recording for future use the learning obtained in TCs by applying the Guide, and provide for coordination with other relevant new work items (such as one in ISO/TC 37).

The question of whether (and how) such guidance might already or soon apply to the Device Profiles work was left open; the Secretary would communicate the question to TC 65, and the answer to SB 3. Mr Deken and Mr Ulrichs thought that the link was rather indirect. A second such “case study” might be constituted by an item in ISO/TC 2. Dr Büniger would also consider these issues in his report on the Device Profiles work.

7 Other contributions from members and officers on necessary new work, for the Sector Board and for the sector Technical Committees

No further contributions, beyond items covered under other points, were proposed.

8 *Equipment modules: to receive a report from Dr Büniger in follow-up of the recommendations of the last meeting*

Dr Büniger reported on the e-mail contacts among members of the *ad hoc* group and the resulting recommendations. Questions were put on the proposed *Guide to standardizing control functions by formal specifications*; Mr delaHostria mentioned IEC 61131 and IEC 61439 (?) (Function blocks) and asked about their relevance. Dr Büniger responded that these did involve control functions, but did not extend to full or formal specifications of them. Mr Devold warned that such a task was enormous: ABB had just finished a similar one, and even internally it had consumed very large resources. Mr Schott wondered whether a full, final description of actual control functions was meant, which would indeed be enormously long, or more a method, platform, set of recipes or generic objects, which those willing to invest the resources for themselves could use. The latter could still be very useful in that they would make the exhaustive description easier to do, and more compatible with other full descriptions.

To clarify, Dr Birla qualified the proposal as an extension of the Device Profiles work to *control functions*—not to build the corresponding libraries, but to specify profiles. He asked how this proposal went beyond Device Profiles or IEC/PAS 61499, and Dr Büniger explained that control functions were not included in such existing publications. How a controller should be used for example to control a motorised pump was not represented in Device Profiles, which profiled the pump and the controller separately. However, IEC 61499 according to Dr Birla *did* provide the possibility of describing both the physical objects and their encapsulation in control scenarios. Mr Devold thought that what was in effect lacking was a *single* methodology to include both the properties, and the encapsulation of control functions, and moreover according to an industry-wide standard rather than using each company’s own tools.

In summary, members saw value in the proposal, without having reached the point of a common understanding of exactly what it represented. The Chairman therefore thought that SB 3 was not yet in a position to approve a specific recommendation, but wished to encourage reflection in the direction described. Dr Büniger explained that he needed other input to progress; Mr Devold would provide him with ideas, a number of standards and initiatives had been mentioned which could provide elements (e.g. Foundation Fieldbus), and any draft produced could be circulated to the Sector Board. Mr Deken and Mr Jancik proposed areas for further discussion, and Dr Büniger expressed his intention to learn from the

successful Device Profile approach. Dr Birla thanked Dr Bünger and looked forward to further refinement of the recommendation.

9 Discussion and recommendations on the TCs' Strategic Policy Statements (SPS)

Document: [SB3/100/INF](#)

No points were raised.

10 Liaisons

10.1 Sector Board 1, High-voltage substation equipment

10.2 Sector Board 4, Infrastructure of telecommunications networks

10.3 ISO-IEC-UN/ECE-ITU Memorandum of Understanding on Electronic Business

The Secretary would distribute the draft agenda for the next meeting of the MoU Management Group (23-24 Nov. 2003, Detroit), and agendas and minutes in future; IEC TCs were permanently encouraged to take their relevant roles in the MoU.

10.4 SCORE - Supply Chain Oriented Robotic Industry in Europe (EU 6th Framework Prog.)

Document: [SB3/98/INF](#)

Mr Müller described ISO/TC 184/SC 2's work, and expressed himself surprised that the SCORE project did not seem sufficiently familiar with it. The Secretary would suggest to Mr Brantmark, Chairman of SC 2, to make sure that SCORE was informed of the international standards work in this area.

11 Any other business

11.1 TCSG Convenership: approval

For the next two years, the TC Chairmen proposed Mr de la Hostria as the TCSG Convener; SB 3 approved unanimously and with appreciation.

11.2 Possible recommendations concerning ISO-IEC standards work: consistency of presentation of joint publications; distribution of ISO NWIs to IEC (SB 3, TCs)

Unsynchronized voting dates for joint publications affected industry, in that many TC/SC secretariats were actually managed by industry. Without more effort to unify procedures the TC secretariats and therefore industry suffered.

Recommendation 0309/3 – *Synchronized voting on joint publications*

SB 3 recommends SMB to consult with the ISO/TMB to agree on a procedure which ensures identical dates for voting on joint publications.

Recommendation 0309/4 – *Coherent presentation of jointly developed publications*

SB 3 recommends SMB to consult with the ISO/TMB to ensure coherent logos (single, double) and numbering (e.g. 80 000 series) for different parts of a series of jointly developed standards.

Recommendation 0309/5 – New ISO work items relevant to industrial automation

SB 3 recommends SMB to consult with the ISO/TMB to agree that new work item proposals made in ISO TCs, where the proposed work is relevant to industrial automation, be distributed to IEC SB 3 and sector IEC TCs for information and possible comment.

11.3 Reconsideration of *boundaries* for automation work between TCs, ISO-IEC, ...

Dr Birla asked members to consider carefully for the next meeting the various items raised in the meeting and in the TCSG report concerning the difficulties with current allocation and joint execution of work on inter-institutional boundaries. He particularly asked Mr Ulrichs (who agreed) to generate some ideas before his departure.

11.4 Safety standards for industrial automation: consistency and coordination

12 Date and place of the next meeting

12.1 Preliminary planning of the date, place and agenda for the next meeting

A nine-month interval was preferred, and 26 (TCSG) and 27 May 2003 was decided, for the GM Technical Center in Warren (MI, USA) on the Chairman's invitation. A presentation on ISA S95 (SB3/99/INF) would be made at that meeting, and Mr Ulrichs would invite Ms Johnsson.

13 Close of the meeting