### DASC-SC Meeting at DATE 04, Paris, France 19 Feb 2004

# **Attendees:**

(In Person)

Alex Zamfirescu

Adam Morawiec

Tom Kazmierski

Victor Berman

Oz Levia

Dennis Brophy

Gabe Moretti

Alan Mantooth

Peter Ashenden

Stephen Bailey

Yaron Kashai

Alain Vachoux

Jean Mermet

(Via Telecon):

Ron Waxman

Andy Ickowicz

Wolfgang Roething

John Willis

J. Bhasker

John Beatty

• Peter noted that the vote on the P&Ps passed. This addressed Oz's question of which P&Ps the meeting and the DASC are now operating under.

Chair of the SAB advised that we can operate under the new rules P&Ps prior to SAB approval.

Peter will attend the SAB meeting next week.

- Peter called the meeting to order.
- Agenda posted on dasc.org
   Minutes of previous meeting
   Business arising from the minutes
   Report of business conducted by email
   Financial report
   Reports from Liaison representatives

Status reports from WG

Status reports from SG

DASC governance

 Minutes of previous meeting Dissolution of some WGs Approval of SystemC SG

Peter stated the minutes were incomplete but what was recorded was accurate as best could be determined. Instead of approval, the minutes will simply be filed since they are incomplete.

- No outstanding business remaining from previous meeting.
- Report of business conducted by email
  - Election of officers
  - o Discussion of draft P&P
  - o Town meeting via phone (12 Jan) to discuss draft P&P
  - o Ballot on new P&P
  - o Ballot of 1076.1.1 commenced
  - Mike McNamara offered web page source for WG sign-up
  - Vote on disbanding 1497 WG
     Did not pass
     Volunteers for officers sought

Past 1497 WG Chair disavows any current or future responsibility as chair.

Some votes noted that work on 1497 is required for consistency with 1364 Dennis Brophy recommended Ashwini from Synopsys as chair. Oz will check.

- Update to IEEE standards status
- New PAR forms and procedure (PAR submitted by sponsor, not WG chair)
- o 1029.1-1998 (WAVES) administratively withdrawn
- Requested withdrawal of P1577 (OO-VHDL)
   IEEE SA standards board to decide in March
- Proposed ProCom changes relating to amendments multiple amendments up to 3 years if 3 or more by amendments after 3 years, standard must be revised
- SAB next meeting 26 Feb, Savannah, GA
- Financial Report

Chair has been also acting treasurer. Oz will begin responsibility for the financial report starting with the next meeting.

2003 memberships paid in 2003: 67 20004 memberships paid in 2003: 105 total 172 @ \$40 = \$6880

Expenses:

projector and case: \$2,536

meetings: \$734.01 travel: \$4,628.20

Total: \$7,979.21

Deficit: \$1,099.21

Gabe: Are organization's financing on cash basis or accrual basis (2004 membership income differences). Peter: Has done reporting on cash basis.

Oz: Do we need report if the income and expense are handled by Computer Society? Peter: It is helpful for us to know what our income and expenses are. Oz: Is cash basis reporting OK? Peter: I don't know and it is unknown if the CS will cover deficits perpetually / unlimited.

Alan: Does IEEE CS handle the funds? Peter: Yes. Expense reports and membership fees are all submitted to IEEE CS (John Daniel specifically).

Oz: Are we required to keep budget and financial report if our cash flow is under \$25,000? Is it revenue based, accrual based or cash based? As treasurer, these questions are Oz's action items to determine. Peter: It is Oz's responsibility to clarify our financial arrangements with IEEE CS. Peter will seek initial clarification next week at SAB meeting.

Ron: CS pays our bills so the deficit shows up on their books. Peter: If they monitor in that detail. Ron: Believes CS will notice but absorb the deficit (as long as they are reasonable).

- Liaison Representatives
  - o IEC TC93 Design Automation

Peter: Is Alex Zamfirescu in fact our Liaison? Alex: Andy and Alex are both TC93 members and they will determine at the next TC93 who is the DASC liaison.

Alex's report:

4 standards approved by IEC for dual logo standardization. Alex will forward the standards numbers for the minutes.

- o JEITA (Japanese Electronics Industry Trade Association)
  - Satoshi Kojima is liaison with Kaba as vice-liaison

Peter: Should DASC appoint a liaison to JEITA. Victor: Will investigate how often JEITA meets and whether we should have a liaison.

- o DATC (Design Automation Technical Committee)
  - DASC Chair ex officio on DATC EXCOM

DATC Chair ex officio on DASC-SC

John Willis: Confirmed the relationship. Peter: Requested John provide DATC meeting schedule to DASC for the meeting minutes.

- Working Group Status Reports
  - o 1076 VHDL (see presentation)

Peter: Need to submit request to withdraw 1076b PAR and submit a new PAR for revision PAR which includes the 1076b work scope. Andy: We can do it simultaneously.

o 1076.1 VHDL-AMS (see presentation)

Alain: We will need to possibly modify the LRM. Who owns the Frame LRM source for future LRM changes? Peter: Peter has been working with Andy with VHPI editing. IEEE has source available. Peter is working with Andy on creating mechanisms for source configuration control.

Steve: Are the mixed nets analog/digital? Tom: Yes. Steve: I should talk with Ernst about the requirements, etc. to see if 200x work can help feed into the AMS solution.

Peter: AMS errata sheet is unofficial? Tom: Yes. Peter: IEEE has process for doing a corrigenda. Tom: Should we do that when we are working on a new revision? Peter: It is a question of timing. Peter will help with corrigenda process.

Peter: SPICE netlists: Could use a recommended practice could be used instead of including in a standard. Andy: Recommended practices are procedures recommended by the IEEE.

1076.1.1 VHDL-AMS standard libraries (see presentation)
 Ballot completed 76% return.

92% affirmation

Will be addressing comments to improve the standard.

Recirculation: Steve stated to assume they will need to recirculate as IEEE only considers narrowly defined typographical changes as non-material. Andy stated recirculation allows anyone in the balloting group to change or cast a vote.

o 1076.2 (VHDL Math Packages)

No activity recently.

Starting to make plans for reballoting later this year. Main objective of reballoting is to incorporate comments and recommendations received during the last year.

o 1076.3 (VHDL Synthesis Packages)

Alex congratulated new DASC officers.

Alex wants to re-affirm. Peter: Need a balloting group to re-affirm. Alex: Evaluating new floating and fixed point capabilities and other enhancements for a future revision. Wants to see what is coming in upcoming VHDL and Verilog language revisions.

Oz: What is differences between 1076.6 and 1076.3? Alex: 1076.3 defines numeric meaning of bit vectors. 1076.6 defines the synthesizable subset of VHDL (what hardware can be inferred from specific coding styles). 1076.3 is meaningful in synthesis, but is not a language subset.

o 1076.4 (VITAL)

Dennis Brophy left the meeting. Peter: Will ask Dennis for a status, specifically for any need of a corrigenda or amendment vs. a full revision.

o 1076.6 (VHDL RTL)

Approved in 1999

Revision PAR expires 31 Dec 07

Ballot Resolution done

Recirculation in February

o 1164 (VHDL Std\_Logic)

Approved 1993.

Revision PAR expires 31 Dec 04.

Peter wishes to resign as 1164 chair as he is now DASC chair and should not report to himself.

Victor: Is there active work? Peter: Yes, there are specific

requests/proposals that are on the table and he provided short descriptions.

Victor: Merge it with 1076.

Peter: Polled the 1164 WG on possible merger. Concern about requiring 1164 support to be compliant with 1076. Oz: Not valid concern since 1164 is completely implemented in 1076. Alex: Potential roblems with legacy (backward compatibility). Steve: We want to preserve backward compatibility.

Peter: Proposed he continue as WG to facilitate merger into 1076 should 1164 and 1076 WGs approve such a merger.

Oz: Why not merge all 1076-related standards merged into 1076 if they are expressed wholly within VHDL? Alex: The 1076.3 standard may grow to incorporate Verilog. Steve: Such mergers need to be mutually agreeable by both 1076 and the 1076-related WGs. Oz: Suggested that Steve, as 1076 Chair, investigate merger of other WGs. Steve: Agreed to follow-up on Oz's suggestion.

o 1364 (Verilog)

Prepared and duly approved and IEEE has published the 1364-2001 Version C, which has many publication errors fixed.

Prepared and duly approved, and the IEEE has published an errata list for the 1364-2001 Version C, which his the WG's interpretation of ambiguous or incorrect text in the standard.

The Behavioral Task Force has begun work on the 9 donations received to date for IEEE P1364.

Meetings are held multiple days during the week; minutes of meetings, signup forms for new people within to join, and other details are available at <a href="http://www.verilog.com/IEEEVerilog.html">http://www.verilog.com/IEEEVerilog.html</a>

Oz: WG has received a donation that may be "infected" with GNU copyleft impacted source. Peter: Thanked him for noting that.

o 1364.1 (Verilog Synthesis Subset)

Looking at in-progress Verilog 2005 new language features for synthesizability.

Alain: Should synthesis subsets be aligned between VHDL and Verilog? Peter: Same people work both standards. Bhasker: Different people work the different standards. It doesn't make sense to make them the same. Alex: DASC should ensure coordination between 1076.6 and 1364.1. Peter: Bhasker, as chair of both WGs, is the liaison. Bhasker: Yes.

#### o 1481 (OLA)

WG is incorporating OLA spec from Si2 with the original 1481 (delay and power calculation) into a revised 1481 standard. Work is progressing with the merger of the specifications.

Alex: Need for synchronization with ALF. John Beatty: 2 separate languages attacking two different problems. Not sure any synchronization is practical. Alex: Library ontology is basis for synchronization. Peter: How much commonality is there? John: Some commonality. One is primarily an API between a library and an application. ALF is a text based representation that an application can read to understand the technology. OLA works between two program. ALF is a data format. Wolfgang: OLA is an API. ALF is a technology modeling standard. Peter: While you could use both in a system, they can be independent of each other in that use? John: Accurate statement. Alex: Let's move on.

o 1497 (SDF)

Approved in 2001.

Disbandment not approved.

Chair vacancy.

Peter: What interest is there in investigating need for a WG. Need for reaffirmation will come in due course.

o 1499 (OMF)

Jay Lawrence and Victor Berman leading reaffirmation effort. Victor: No progress other than not finding a need to revise. Will begin reaffirmation procedures.

o 1603 (ALF)

Approved.

IEEE Editorial work done.

WG currently quiet (no active issues at this time).

IEC new work proposal has been approved.

Accellera has done derivative work: requirements for the contents of a characterization library for modern silicon technologies and to create a formal cross-reference between ALF and the open source "liberty" format for the description of such a library.

Peter: Asked Andy to pass on Wolfgang's thanks to several contributors including ASC and Alex Zamfirescu for outstanding contributions on the balloting / editing process/

o 1604 (VHDL Library IEEE)

PAR valid to 31 Dec 05

Peter is chair and should also resign as he is now DASC chair. WG has

not been active.

Could be merged into 1076 as well. Peter: Will follow same process as 1164 to see if both WGs approve merger of two WGs.

o 1647 (e Verification Language)

1<sup>st</sup> draft of LRM has been posted with 8 task forces in process of reviewing.

Online issue tracking system being used.

Expectation of more drafts over the year as issues are resolved, etc.

Jean: What is DASC position on e, Vera and PSL standards? Peter: DASC does not filter candidate standards to prohibit multiple standards with overlapping scopes. Yaron: PSL does not overlap e greatly. Vera and e overlap the most. e has a wide installed base. Reality is that multiple [de facto] standards already exist in the field today.

## • Study Group Status

o VHDL High Frequency SG:

John Willis requested to defer any discussion of the SG status. Oz: Weren't we going to determine whether or not the SG will be approved. John Willis: Pointed out the SG was approved about 1 year ago. Peter: Pointed out that the lifetime of SGs is 6 months. He requested a committed deadline for when a PAR would be available for review and approval. John: Within a few days. Peter: Please prepare the draft PAR for SC review and approval via email at your earliest convenience.

Oz: Who's involved in the SG. John: 12-15 people about 50% vendors and 50% users (+/-5%).

Alex: Are there related patents pending or awarded that are relevant to this SG. John: The agreement is to specify what is to be done and not how it is done. Which means that there will not be any patents pending or awarded specifically relevant as any draft standard will not be written to encroach on or require any known patents. Peter: Ensured John is aware of the IEEE and DASC patent policies. John: Yes, he is aware.

Alain: All RF requirements can be met with 1076.1 today. He wants to ensure that the HF SG does not duplicate the scope of 1076.1. Peter: The PAR scope will be reviewed (when draft PAR is submitted) to ensure no duplication of scope. John: Replied that he believes there are sufficient differences and he is coordination with 1076.1.

o SystemC Study Group

Victor: Has worked on draft PAR and awaiting details from group on copyright. He expects to submit draft PAR to Peter for review in a few weeks.

#### DASC Governance

P&P discussion via email and telecon "town hall". Question of whether IEEE membership should be required for WG and DASC members.

Email ballot for approval of new P&P (13 Jan to 13 Feb) DASC to adopt revised P&Ps:

- o 79/128 (62%) return, 9 abstain
- o 94% of votes affirmitive (>75% required)
- 52% of members voted affirmitive (>50% required)
   Oz: 128 members of DASC for 2004. Were all votes recorded from paid 2004 members? Peter: Yes. Non-qualified votes (1) were not considered.
- DASC-SC to use DASC-SC procedures
   79/128 (62%) return, 10 abstain
   96% of votes affirmitive
   52% of members voted affirmitive (>50% required)
- o Both measures passed.
- DASC-SC vote on adopting DASC-SC procedures 12/17 (71%) return, 0 abstain 100% of votes affirmitive (>2/3 required) 71% of members voted affirmitive (>50% required) measure passed

Oz: Shouldn't the WGs be required or recommended to adopt the model WG P&Ps? WGs must have P&Ps approved by the WG and approved by the DASC-SC. Peter: Yes, we agreed that the SC would determine how the WGs would come into compliance with the newly adopted P&Ps. Oz: Disputed what exactly was decided but asked if we can move forward with this now. Peter: We need at least 9 for quorum.

Victor: My understanding is that we have model WG P&P that we would recommend (pre-approved). WGs could adopt them or adopt modified versions. Modified P&Ps would require explicit SC approval. Peter, Oz, Steve: Agreed that is correct.

Peter: Moved that the SC adopt the draft WG model P&P. Yaron: Seconded. Peter conducted quorum check: We have quorum (John Willis, J. Bhasker, Wolfgang Roething, Steve Bailey, Yaron Kashai, Peter Ashenden, Oz Levia, Victor Berman, Tom Kazmierski).

Discussion: None.

Ayes: All

Nays: None (voice vote)

Oz: Need deadline for WGs to adopt WG P&Ps. Peter: WGs need to ensure membership rules are adhered to, WG chair elections for those chairs whose terms are expired, each WG needs a vice-chair and secretary as well as chair (chair and vice-chair must be IEEE or SA members), WG P&Ps.

Need to do this in stages: membership, elections, P&P adoption.

Discussion: WG has 6 months after PAR approval to work under whatever procedures the SC states in order to agree on the WGs P&Ps and chair/vice-chair and secretary elections.

## Planned process

- WG membership: must be reviewed and documented by 31 March.
   (Roster must be submitted to the SC, secretary. Roster to contain: name, affiliation, email address see DASC procedures.)
- Elections: Require nominations for no less than 14 days, ballot period 14 days. Chair and vice-chair must be IEEE or SA members and DASC members. Chair, vice-chair and secretary are required elected positions. Done by 30 May.
- o WG P&P: Submitted to DASC SC for approval by 30 June.
- o Ongoing audits by the SC of WG adherence to P&P.
- Is there a need for a re-blessing of past WG approvals/votes before moving forward?
- Motion to adopt deadlines above for WG membership, elections and WG P&P approvals. Motion carried by acclimation.

Ron: Peter needs to update web site with officers.

• Activities (next meetings)

No time for discussion.

Discuss via email.

Working with other standards organization (Accellera, specifically).

- Other Business
  - stds-dasc-announce: Email list established. Post privileges restricted to DASC officers and to be used only for announcements and not discussions.
- Next meeting: DAC, San Diego. Friday, 11 June 2004.
- Meeting adjourned.