IFIP WORKING GROUP 10.5

REPORT OF ACTIVITIES SEPTEMBER 2004 - AUGUST 2005

1. New events

A new Workshop in Education (EduTech), in the context of electronic systems, chaired by Carlos Delgado-Kloos (Universidad Carlos III, Madrid), was held together with the IFIP World Congress in Toulouse, France, in August 2004. Support and co-sponsorship from WG 3.6 on Distance Learning have been obtained. The second edition of this workshop will be held in Perth, Australia, in October 2005, together with VLSI-SoC'05, and will be chaired by Achim Rettberg (University of Paderborn, Germany) and Christophe Bobda (University of Erlangen, Germany).

The organizers of EUC'05 – International Conference on Embedded and Ubiquitous Computing (http://euc05.euc-conference.org), to be held in Nagasaki, Japan, in December 2005, asked for main co-sponsorship from IFIP Working Group 10.5. The conference is cosponsored by the Nagasaki Institute of Applied Science (NiAS), Japan, and will be held in cooperation with IEEE Computer Society and IEICE – The Information and System Society. Conference chairs will be Laurence Yang (St. Francis Xavier University, Canada) and Franz Rammig (Paderborn).

The organizers of PDES'05 - The International Workshop on Parallel and Distributed Embedded Systems (http://juliet.stfx.ca/~lyang/icpads05-pdes), held in Fukuoka, Japan, in July 2005, asked for main sponsorship from IFIP Working Group 10.5. The workshop was co-sponsored by the IEEE Computer Society. Conference chairs were Edwin Cha (University of Texas at Dallas), Vipin Chaudhary (Wayne State University, Detroit), and Laurence Yang (St. Francis Xavier University, Canada).

2. Sponsored events

Following main sponsored events have been held in the past 12 months:

DIPES'2004 – Workshop on Distributed and Parallel Embedded Systems, sponsored by the WG and organized by SIG-ES, was held in Toulouse, France, from August 22nd to 27th 2004, together with the IFIP World Computer Congress.

EduTech – 1st Workshop on Education in Computer-Aided Design of Electronic Systems, was held in Toulouse, France, from August 22nd to 27th 2004, together with the IFIP World Computer Congress, with support from IFIP WG 3.6 on Distance Learning

PDES'05 - The International Workshop on Parallel and Distributed Embedded Systems was held in Fukuoka, Japan, from July 20th to 22nd. It has been co-sponsored by the IEEE Computer Society.

3. Co-sponsored events

Following co-sponsored events have been held in the past 12 months:

SBCCI'2004 – 17th Symposium on Integrated Circuits and Systems Design was held in Porto de Galinhas, Brazil, from September 7th to 11th 2004. It has been sponsored by SBC – Brazilian Computer Society and SBMICRO – Brazilian Microelectronics Society and cosponsored by WG 10.5, IEEE Circuits and Systems Society, and ACM SIGDA. Proceedings have been published by ACM Press.

CODES+ISSS'2004 – 2nd IEEE/ACM/IFIP International Conference on Hardware/Software Codesign and System Synthesis was held in Newport Beach, USA, from September 8th to 10th 2004. It has been co-sponsored by the IEEE Circuits and Systems Society (CAS), the IEEE Computer Society (CS), the ACM Special Interest Groups on Design Automation (SIGDA) and Embedded Systems (SIGBED), and IFIP WG 10.5. Proceedings have been published by IEEE Computer Society Press.

FDL'2004 - Forum on Specification and Design Languages was held in Lille, France, from September 13th to 17th 2004. It has been organized by ECSI and co-sponsored by WG 10.5. Papers have been published on a CD-ROM.

DATE'2005 - Design, Automation and Test in Europe was held in Munich, Germany, from March 7th to 11th 2005. It has been co-sponsored by the European Design and Automation Association, the EDA Consortium, the IEEE Computer Society - TTTC, ECSI, RAS, and ACM SIGDA. Proceedings have been published by the IEEE Computer Society Press.

All these events have been co-sponsored by Working Group 10.5 without financial involvement (except for CODES-ISSS, which has financial involvement).

4. Future events

Following main sponsored events are already planned:

CHARME'2005 – 13th Advanced Research Working Conference on Correct Hardware Design and Verification Methods (http://www.charme2005.com), which is organized by SIG-CHARME, will be held in Saarbrücken, Germany, from October 3rd to 6th 2005.

VLSI-SoC'05 – 13th International Conference on Very Large Scale Integration (http://vlsi2005.ecu.edu.au), which is the flagship event of WG 10.5, will be held in Perth, Australia, from October 17th to 19th 2005.

EduTech – 2nd Workshop on Education in Computer-Aided Design of Electronic Systems (http://www.iess.org/edutech05.html) will be held in Perth, Australia, from October 20th to 21st 2005, together with VLSI-SoC'05, with support from IFIP WG 3.6 on Distance Learning.

EUC'05 – International Conference on Embedded and Ubiquitous Computing (http://euc05.euc-conference.org) will be held in Nagasaki, Japan, from December 6th to 9th 2005.

VLSI-SoC'06 – 14th International Conference on Very Large Scale Integration will be held in Nice, France, from October 16th to 18th 2006.

5. Meetings

Following meetings have been held in the past 12 months:

- Toulouse, France, on August 26th 2004, during the IFIP World Computer Congress, together with two events sponsored by WG 10.5 DIPES and EduTech.
- Munich, Germany, on March 7th, during DATE Design, Automation and Test in Europe.

The next meeting will be held in Perth, Australia, on October 19th, together with VLSI-SoC and EduTech.

6. Special Interest Groups

The Working Group has two Special Interest Groups attached to it: the Special Interest Group on "Embedded Systems" (SIG-ES), which is also bound to WG 10.3 and WG 10.4, and the Special Interest Group on "Formal Design and Verification Methods for Correct Hardware-like Systems" (SIG-CHARME). Chairs of these SIG's are Bernd Kleinjohann (C-Lab, Germany) and Steve Johnson (Indiana University, USA), respectively.

6.1 Report from SIG-CHARME (by S.Johnson)

On November 17, 2004 a business meeting was held in Austin, Texas at the conclusion of the FMCAD'2004 conference. This meeting was attended by a quorum of SIG-CHARME members. A motion was passed supporting in principle the formal merger of the FMCAD and CHARME conferences. A number of details concerning organization remain to be resolved, possibly at a business meeting for the CHARME'2005 conference on October 3-6 in Saarbrücken, Germany.

Preparations for the CHARME'2005 Conference are progressing on schedule. The organizers report that submissions were up substantially from 2003 and they believe that registrations will similarly be higher, due to the more central location and timing of the meeting. Exact numbers are not yet available at this time.

6.2 Report from SIG-ES (by B.Kleinjohann)

In 2005 the IFIP SIG-ES had one official meeting on May 18th in Seattle, Washington, USA, during ISORC 2005. A main topic for this meeting was the preparation of IFIP Working Conference on Distributed and Parallel Systems (DIPES 2006).

DIPES 2006 will be held during the first two weeks of October 2006 in Portugal. General Chair is Bernd Kleinjohann, C-LAB, Germany. PC-Co-Chairs are Carlos Eduardo Pereira, UFRGS, Brazil and P.S.Thiagarajan, National University of Singapore, (http://www.comp.nus.edu.sg/~thiagu) as Asian representative. However, his definite agreement is still pending. The organization committee is chaired by Ricardo J. Machado, University of Minho, Portugal.

Furthermore the TC 10 chair Franz Rammig initiated a discussion concerning future cooperation between DIPES and the EUC and PDES conference/workshop (http://euc05.euc-conference.org/ and http://juliet.stfx.ca/~lyang/icpads05-pdes/) with positive resonance.

Another important point discussed at the SIG-ES meeting was the cooperation of SIG-ES members, resp. their institutions, with regard to the field of embedded systems. A first idea was to initiate projects e.g. for the EU Framework Programme.

7. Changes of membership

Two members resigned in this period, because of their professional retirements: Kurt Antreich and Karl-Heinz Diener, both from Germany.

The WG has now 63 members, with the following distribution:

North America - 21 Europe - 31 Asia / Pacific - 9 South America - 2

The WG members, during the last meeting in Munich, considered that refreshing the membership, by attracting new and young active members, is very important for the future of the WG. Dormant members should be removed, while members who have given a valuable contribution to the WG in the past, but who are now inactive, should be offered a status of "honorary members". WG officers will prepare a proposal for membership revision.

8. Officers

Elections have been conducted in the last meeting in Munich, on March 7th 2005. Flávio R. Wagner (UFRGS, Brazil) has been re-elected for a second term, which will run until March 2007. He will appoint new vice-chairs, to be confirmed at the next meeting in Perth.

9. Home-page

The WG 10.5 home-page is located at http://www.inf.ufrgs.br/ifip10-5