# Ad-Hoc Coordinator: Technical Activities Board (TAB) Committees [TC] Liaison

Coordinator: Vladimir Katić (Serbia and Montenegro)

## REPORT for the R8 Meeting, London, 24-26 March 2011

A new AdHoc appointment within IEEE Region 8 TA:

Champion our links to "new" committees established within the IEEE Technical Activities Board (TAB) - TAB Strategic Planning Committee → TAB New Technology Directions Committee, i.e (new name) IEEE Future Directions Committee (FDC), a standing committee of the TAB Strategic Planning Committee (http://www.ieee.org/about/volunteers/tab/tab 507.html)

- Special attention to links with IEEE Smart Grid initiative, Cloud computing, IEEE's Committee on Earth Observations (ICEO), etc.
- Special EU-IEEE or initiatives (EMEA-IEEE), for example: EuroGEOSS

#### Aim:

Develop synergy between "higher level" TAB committees and Region 8 organizational units, including sections. Seek out future technologies and related issues of potential interest to IEEE TAB and encourage the investigation of emerging technologies.

### Scope:

The main topics regarding the FDC are:

- Electrical Energy and Energy Efficiency: Smart Grid\*, Wind Power, Hydrogen Economy and Alternative Fuels, (Renewable Energy, Photo-Voltaic/Concentrating Solar Power, Energy Storage, Smart Home (Smart Building), Smart City)\*\*
- Electric Transportation (new): Electric Vehicles\*, Plug-In-Hybrid EV, Electric Ship
- Computing: Cloud Computing\*, Networked Multimedia\*
- Environment: Earth Observation, Electronic Recycling
- **Health Care:** Health Care and BioScience\*, Distributed Diagnosis and Home Healthcare, Electronic Health Record
- Communications: Wireless Fidelity (WiFi), Terabit Networks, RFID, Remote Sensing
- Hardware: Next Generation Computer Architecture\*, Portable Information Devices (PID),
  Display Technologies, Organic Electronics
- Digital Society: Biometrics, Digital Rights Management (DRM), Fingerprinting, (Computational Semiotics)\*\*

\* Established Working Groups, \*\* Added by V. Katić

The major activities are within topics of the Smart Grid, Electric Vehicles, Cloud Computing, Networked Multimedia, Health Care and BioScience, and Next Generation Computer Architecture, where FDC Technology working groups have been established.

Other important issues (outside the FDC):

• IEEE's Committee on Earth Observations (ICEO): The Global Earth Observation System of Systems (GEOSS), EuroGEOSS, ...

### Case of IEEE R8 TAB committee activities:

a) Chapters: The chapters of the main Societies that are dealing with the FDC topics are active in R8. Example: IEEE R8 Power Chapters Technical & Leadership Joint Workshop, (Budapest, Bratislava, Žilina, 21-26 May 2010)

b) Conferences: The R8 conferences are organized geographically, except the Energycon. Overview of the R8 conference topics regarding major FDC topics is represented in table below. It can be concluded that the New emerging technologies are not well covered in the R8 conferences.

/FDC Topic	Smart Grid	Electric	Cloud	Next Gen.	Networked	Healthcare &
R8 Conference		Vehicles	Computing	Computer Arch.	Multimedia	Bioscience
EUROCON 2011						
27-29 Apr. 2011						
Lisbon, PT						
MELECON 2010						
26-28 Apr. 2010						
La Valeta, ML						
SIBIRCON 2010						
11-15 July 2010						
Irkutsk, RU						
AFRICON 2011						
13-15 Sep. 2011						
Livingston, ZA						
ENERGYCON						
2012						
9-12 Sep. 2012						
Florence, IT						
HISTELCON 2012						
Sep. 2012						
Pavia, IT						

Legend: ■ NO such topics, ■ Some aspects are covered, ■ Fully covered

- c) Education: FDC topics are not present in the program of the EASC.
- d) Industry relations: The IRSC is active in some new fields, especially dealing with Energy Renewable energy. The ISBIR is driving force in entering new fields, particularly associated to students.
- e) Standards: There is opportunity to get involved, but no visible activities in FDC topics so far.

### **Plan for 2011:**

1. To establish links with the TAB New Technology Directions Committee and the FDC Technology Working Groups:

Working Group	Co-Chair(s)	Email	Status
Smart Grid	Wanda Reder	wreder@sandc.com	Linked
Next Generation Computer Architecture	Doug Burger	dburger@microsoft.com	(to be established)
Healthcare and BioScience	Gudrun Zahlmann	gudrun.zahlmann@roche.com	(to be established)
Networked Multimedia	Naohisa Ohta	n.ohta@ieee.org	(to be established)
Cloud Computing	Steve Diamond	s.diamond@COMPUTER.ORG	(to be established)
Electric Vehicles	Russ Lefevre	r.lefevre@earthlink.net	(to be established)

- 2. To include topics of FDC into the R8 Conferences
- 3. To get involved with the major conferences in the FDC area (Some results achieved, already: V.Katić is a member of the ITPC of the IEEE PES Innovative Smart Grid Technologies-Europe, Manchester, Dec. 2011).
- 4. To set a list of Distinguished Lecturers in the new topics.
- 5. To establish connection with other IEEE Committees (GEOSS...) and develop interactions or synergy between existing (or new) works between such committees and governmental level.