

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

Coordinator: Vladimir Katić (Serbia and Montenegro)

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 \rightarrow 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, ...



The 97th IEEE Region 8 Committee Meeting

IEEE R8 TAB committee TC Liaison activities in 2011:

1. Goal: To establish links with the TAB New Technology Directions Committee

- New initiatives: Links are established with the Life Sciences New Initiative lead by Moshe Kam, which has the long-term goal of establishing the Life Sciences as a key field of interest to IEEE
- Very good links with the IEEE Smart Grids and IEEE Transaction on Sustainable Energy

Some links with NTDC and the FDC Technology Working Groups have been established:

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. Goal: Inclusion of FDC topics into the R8 Conferences:

The topics of Electrical Energy and Energy Efficiency (especially Smart Grids, Wind Power, Solar Power-PV) and Electric Transportation are now present or soon will be in all major IEEE R8 flagship conferences

3. Goal: To get involved with the major conferences in the FDC area:

Some results achieved: V. Katić is a member of the ITPC of the IEEE PES Innovative Smart Grid Technologies-Europe, Manchester, Dec. 2011); V. Katić is organizing an International Symposium on Power Electronics, where topics of Renewable Energy Sources and Electric Vehicles are present.

4. Goal: FDC topics as activity of the Educational Activities Subcommittee (EASC):

Although the FDC topics are very attractive, they are present in the program of the EASC in low scale. Some presentations available on <u>IEEE TV</u>.

5 Goal: Industry Relations Subcommittee (IRSC):

The IRSC is very active in some new fields, especially in Renewable energy sources. The ISBIR is driving force in entering new fields, particularly associated to students.



6. Goal: Activity in Standards Committee:

There is opportunity to get involved, but no visible activities in FDC topics so far (within R8).

Further goals:

1. To set a list of Distinguished Lecturers in the new topics.

2. To establish connection with other IEEE Committees (GEOSS...) and develop interactions or synergy between existing (or new) works between such committees and governmental level.

3. To increase activity within existing goals.