Institute of Electrical and Electronics Engineers
Board of Directors

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At this point in time, my position is that the *IEEE in 2030* Committee has not completed their evaluation of all aspects this topic. I support the objectives from which the *IEEE in 2030* Committee operates, but I have questions and concerns about its current direction.

I have some comments and I have some non-trivial concerns.

Here are my comments:

Comment 1: In regard to the question of "What changes must we make now…?" If I could make one change it would be to re-engineer the structure and function of a Chapter. While we are focused on our corporate functions, it's the professional organization side of the IEEE that needs attention.

Comment 2: In regard to the "Four Strategic Objective Topics": the conversation is focused on the concept of "structure" (*e.g.*, "governance e structure," "structural changes") when the conversation should be about 'processes' and 'function,' which should be preceded by an evaluation of all the functions of the processes in the current structure and what roadblocks exist.

> *"Structural change! It seems like the panacea for all organizational problems…until the business tries to operate. While it is true that heavy and costly organizational structure and inefficiency is inevitably one element of the problem, it is generally a symptom, not the cause."*
> Leadership: The Lost Art, Scott Neilson

Comment 3: I agree with the statement that large boards "when properly structured" can be meaningfully functional and accomplish all the things that the *IEEE in 2030* Committee seeks to accomplish. But the overarching concept seems to focus-on 'structure' and this diverts focus away from exploring the various functions and processes.

Comment 4: In regard to the "Some things won't change" portion of the proposal, it states that the "current operational organizational structure (OU structure) IEEE operating units remains the same." The OU structure may not need to change (too much) but many of the activities that need to be reinvigorated are in this part of IEEE, the place where (mainly) professional activities occur (in the Societies, in the Sections and Chapters). For example, the current structure and function of a Chapter needs to expand a great deal, there must be a joint MGA-TAB committee to oversee the operation and management of Chapters. Currently the IEEE MGA is the sole authority for

Chapter activity/policy; this is not a structural change, it's a process change. We need to have a new function for Chapters so they can effectively provide many services to members in the field.

Comment 5: A key factor in the "rationale" for restructuring the Board of Directors is that the "Organizational structure should support the Board's effective handling of this increasing strategic complexity." Except it's the processes that are being bogged down with semi procedural matters, thereby leaving no room for important matters for discussion/action; it's an organizational issue not a structural issue, no need for a structural change.

Here are my concerns:

Concern 1: While there is a need to make a number of existing processes meaningfully functional and a need to establish some processes (and committees) where none currently exist, there is no justification to fundamentally reorganize the IEEE.

"Any structure can work! It is the processes used within that structure that determine the effectiveness of your operation."
Leadership: The Lost Art, Scott Neilson

This is a Rubik's Cube exercise, there will be little, if any, meaningful change as a result of shifting processes into a new structure(s). This is classic '*throwing the baby out with the wash water,*' which is all-to-common a corporate business practice as their *Plan A*;

> "the CEO will either try to reorganize the Board, or start long term planning (usually beyond his/her life expectancy...) or look at improving/changing organizational structures (rather than correcting structural deficiencies, Carly Fiorina at HP is the best example). In all cases, the strategy does not work because time is very cruel, problems must be solved not delayed. Lucid examples are Lehman's (for the Yankee corridor), Enron (Texan and southern folks), VW (for the European Teutonic contingent), Parmalat (for the Italian crowd), FIFA (for the soccer/football avid fans)" [Professor Fabrizio Lombardi, Board of Governors, IEEE Computer Society]

The existing faulty/nonexistent processes can be made meaningfully functional by focusing on the processes and not automatically linking better process with a need to create a new structure to handle the revised/new process!

Concern 2: The *IEEE in 2030* initiative does not appreciate the functions and interactions of each of the 2 Faces of the IEEE. The '2 Faces' are co-mingled and regularly codependent upon each other.

The 2 Faces of IEEE:

1. IEEE is a **corporation**, a very large corporation;
2. IEEE is a **professional organization**, a huge professional organization;

The upper level activity of the IEEE structure is, more characteristically that of a corporation. At the other end of the IEEE structure, activity is more characteristically that of a professional organization; and operating units are a mixture of both corporate actions and professional activities.

Paid professional IEEE employees and unpaid professional are found in both the corporate structure and in the professional organization and both groups provide terrific leadership. However, the paid professional employees and the unpaid professional volunteers have <u>very different</u> perspectives in regard to their function, and, from a practical reality, have a different amounts of time that can be brought to bear on tasks. Changes in the IEEE in 2030 proposal seem to create a need for more corporate activity, which means more paid professional staff, which will close our profit margin that is now within $0.5M to $1M.

These are major considerations when revising or creating new processes and/or new structures. The *IEEE in 2030* initiative seems to view the IEEE as having a single face not 2.

> "I have never seen a two-branch organization that undergoes drastic changes on one side and leaves the other intact, to remain efficient and strong for long. Changes create at best transient instabilities, so the unchanged part will likely affect the changed part due to its inherent strength. This is also applicable to the roles of the President and CEO: the IEEE President changes every year, the CEO remains the same." [Professor Fabrizio Lombardi, Board of Governors, IEEE Computer Society]

Concern 3: The Board of Directors exercises **no meaningful oversight** of any of the 5 major IEEE boards (*i.e*., Technical Activities Board, Member and Geographic Activities Board, IEEE-USA Board, Standards Board, PSPB).

The IEEE has a number of processes to accomplish its mission and goals and there are structures to support those processes. When developing the operational policy that will drive existing processes it is far less common to create new structures. Again, this is classic '*throwing the baby out with the wash water*,' which is all-to-common a corporate business practice as their Plan A.

> *"The correct approach is to evaluate your key processes, systematically improve those processes to eliminate waste and improve quality, and then build the structure to support those processes."*
> Leadership: The Lost Art, Scott Neilson

The '*IEEE in 2030*' initiative proposes to fundamentally change the structure of the IEEE, to become, among other things, more agile. However the proposed changes, by derivative effect, will, among other things, create more administrative processes, which will pose roadblocks to agility. But at the end-of-the-day the boots on the ground that implement meaningful agility will be the unpaid professional (the volunteers) supported by the paid professionals. If agility is really our goal, then the processes that are underperforming, which tend to be located further away from the IEEE Board of Directors level, need to be the primary focus.

Concern 4: IEEE is an organization that is governed by democratically <u>elected representatives</u> from various <u>geographical areas</u> and representatives from various <u>technical areas</u>, which, by the way, is rarely found in a corporation! This form of governing is found at all levels of IEEE (*e.g*., in Societies/Councils, Sections, Chapters).

Changing the method the IEEE Board of Directors members are selected/elected is an issue that meaningfully reduces the democratic-representative nature of the IEEE. Currently the IEEE is governed by democratically <u>elected representatives</u> from various <u>geographical areas</u> and

representatives from various <u>technical areas</u>, which is rarely found in a corporation! The proposed changes will severely and needlessly diminish our democracy!

Former IEEE Board of Directors member, and past IEEE Computer Society President James Isaak observes that:

> "Today I ballot for officers as follows:
> - IEEE President Elect (will go to a two year election),
> - Regional Director (every other year, remains the same as Regional Assembly member),
> - various Directors now Assembly members based on my society memberships (again every 2 years for any one),
> - Some IEEE USA and other officers.
>
> Under the new system I vote
> - less often for IEEE President, and
> - every year have three new candidates on the ballot for the Director seats ...
> - so a total of two additional decisions to make (where most of the decision has already been made by the Assembly/N&A process)"

While the *IEEE in 2030* initiative speaks of "strengthening the "voice" of the membership… [to] reflect the diversity of the IEEE" having those who will hold high office "elected by the full membership" defeats this purpose of diversity. I am also very concerned the process of selecting those who will be candidates for various positions is not a **democratic** process! The process is that the <u>IEEE Nominations & Appointments Committee, a small group of people, will select candidates based upon a very rigid and detailed set of specifications</u>.

In closing let me state the IEEE is an enormously successful organization. It is an honor to be in a position where I can have a wide impact. I expect to be part of this organization for many years, and offer my perspective and general support for *IEEE in 2030* as an initiative (just not the current proposal).

If you have any question or comments please do not hesitate to contact me.

Sincerely,

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Suggested reading: http://www.scottneilson.com/?p=1158

IEEE Division VI is composed of: Education Society, Industrial Electronics Society, Product Safety Engineering Society, Professional Communication Society, Reliability Society, Society on Social Implications of Technology, and the, Technology & Engineering Management Society