Facing the Challenges of the Computer Society's Future

Benjamin W. Wah, IEEE Computer Society President

This month, the IEEE Board of Directors (IEEE BoD) will address two issues of critical importance for the future of the Institute and the Computer Society. The first issue is the adoption of a new financial model for the Institute, and the second is the implementation of a governance reorganization plan. I want members to be informed about these issues and know the concerns of Computer Society leaders.

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IEEE FINANCIAL SITUATION

Last month, 24 IEEE society and council presidents wrote to IEEE President Joel Snyder expressing concern about the Institute's financial situation. The societies represented included Computer, Communications, Electron Devices, Lasers and Electro-Optics, Power Engineering, Reliability, and Signal Processing, to name a few. Together, these societies represent more than half of IEEE members. The society presidents requested that the IEEE BoD appoint an independent consultant to conduct a programmatic audit of IEEE Headquarters operations and recommend fiscal improvements to the Board.

In the past four years, the IEEE Board has approved funding for special investments, particularly IT initiatives to improve its technology. Using reserve funds for such purposes is not an unreasonable action by any board, since most societies have benefited from investments made in IEEE's Xplore digital library and in infrastructure improvements. The problem is that the funding commitments were multiyear, adding cost and staff support and raising the overall level of corporate expenses.

The IEEE BoD supported these efforts by drawing on the Institute's general reserve fund and by approving deficit budgets. Initially, the surpluses of societies and strong investment returns masked the deficit spending of the corporate budget. However, the situation came to a head last year with the drop in the stock market.

In 2000, the Institute had a deficit budget of $15.2 million, and it used society reserve funds to cover the loss because the general reserve fund had essentially been depleted. The fund may be reduced an additional $18 million or more because of the projected 2001 central IEEE deficit. The $18 million represents an estimated 17 percent reduction from the $107.6 million final fund balance of 31 December 2000. The Computer Society's share of this loss was $1.08 million in 2000, and it may be $2.4 to $2.6 million or more this year.

Given that the global economy is in a period of recession, it is unlikely that the Institute's financial situation will improve in the next one to two years. This means there is a continuing drain on Computer Society reserves and restriction of our funding pool for future investments.

IEEE infrastructure charges

In addition to charges against its reserves, the Society faces additional expenses for IEEE infrastructure charges.

All societies are entities within the IEEE Technical Activities Board (TAB). Societies receive services from IEEE corporate staff for membership application processing, financial management, IT support, and other activities.

In 2002, TAB faces an estimated $18.7 million bill for corporate infrastructure, more than a 400 percent increase over its current infrastructure allocation of $3.6 million. The new total was derived from algorithms proposed in the as yet unapproved Overhead Administration Recovery Committee (OARK) model to reallocate corporate expenses. This total represents a combination of a reallocation of core expenses, loss of TAB's allocation from IEEE dues, and a tax on income from the society's intellectual property packages.

Societies have also been mandated to relinquish the first 6 percent of interest income from their reserves to pay for corporate infrastructure. The OARK model may be phased in over the next one to two years, or it may be implemented in its entirety next year. Another model also under consideration would distribute the allocation in proportion to the level of society reserves. Using any model, the final charge to our Society's annual budget bottom line is enormous—as much as $3.6 million. This represents more than 10 percent of our yearly operating revenue.

Bottom line impact

TAB had already contributed $6.9 million in operational budget savings to attain a zero-based 2002 IEEE budget. TAB bore the largest burden of any IEEE program board or IEEE corporate department in the 2002 budget exercise. TAB attained its $6.9 million target with considerable sacrifice on the part of its soci-

eties, including the reduction or elimination of planned initiatives and member services. The additional $18.7 million infrastructure allocation threatens not just programs, but the very existence of many societies.

Allocating corporate expenses

The society presidents are very concerned that such corporate allocation costs endanger not just individual societies, or TAB, but the Institute itself. All of the presidents agree that they should pay for their fair share of corporate support expenses. Some type of reallocation is necessary to distribute core expenses. But the presidents also want to know that these expenses are reasonable and that all efforts have been made to manage budgets efficiently.

Because societies generate the majority of IEEE intellectual property and revenue, by directing funds to cover continuing central IEEE deficits, societies will lose their ability to provide new product developments and exploit emerging opportunities. The Computer Society is facing such a challenge because it is now severely hampered in its ability to stay ahead by investing in initiatives to benefit members such as online learning and the brand new and very exciting Total Information Provider.

We believe that there are other implications to the corporate allocations. Control over spending may be moving away from volunteer control to a corporate infrastructure managed by staff. The Institute faces the serious risk of discouraging volunteer participation.

IEEE BoD CHANGES

Volunteer participation and governance is at the heart of another key IEEE issue. A Presidential Blue Ribbon Committee (PBRC) led by former IEEE President Wally Read was tasked with examining the composition of the Board, the terms of Board members, and the structure of organizational units and committees reporting to the Board. The committee is part of an effort dating back to 1992 intended to "prepare IEEE for the fast-paced changes forecasted for the turn of the century." The committee recently issued its report, and its recommendations will be reviewed at the November IEEE BoD meeting.

The PBRC recommends reducing the IEEE BoD from 31 voting members to 20. Twelve directors-at-large will replace the current 10 TAB and 10 Regional Activities Board members. Existing IEEE BoD positions for the vice presidents for Educational Activities, IEEE-USA, and Publications would be eliminated. TAB would be renamed "Technical Activities Support," incorporating some activities from EAB and chapter support. The IEEE Executive Committee would be reduced to eight members, and most of the members would not be directly elected by the IEEE membership.

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IMPACT OF CHANGES

In principle, reducing the size of a large board may be reasonable. However, we have concerns about the impact of changes for societies and councils and for the Institute as a whole. TAB division directors, elected by society members, now only participate in the IEEE Assembly. Two division directors are elected from the Computer Society's ranks. They, like other division directors, would be removed from the primary decision-making body. We are concerned that the loss of Board slots for all division directors would further erode the voice of societies within the Institute.

The Computer Society forms its Board by electing governors from the membership at large. However, the Institute is a larger and more complex organization, with many competing interests. Given the Institute's difficult financial situation, it is essential that technical societies not be disenfranchised from active participation.

In the PBRC proposal, we are further removed from the center of authority. This is compounded by the fact that the Computer Society seat on the IEEE Executive Committee would be eliminated. We gained that seat by virtue of being the largest society within the IEEE and because we contribute the greatest share of publications and conferences. Our Executive Committee members have been able to represent our views on many key issues that affect the Society and its members.

We also see the negative effect of more decision making concentrated in a smaller number of individuals. An IEEE Nominations Committee will nominate the new members at large. This replaces the current system in which societies and individual regions select directors.

The IEEE Board has stated that it wishes to empower its entities by decentralizing control. The PBRC proposal has the opposite effect. Indeed, we believe that the Institute can only face the challenges of the future and keep pace with emerging technologies if it gives power to its entities. It will only be successful if it draws from broad and diverse groups to retain its technical leadership. The Institute could become a highly efficient organization that does little.

Both the large financial charges and the loss of IEEE Board slots are serious challenges that will directly affect the Computer Society's ability to serve its members and the profession. I believe it is important for members to understand these challenges and their impact on the future of the Society.

The 2002 Computer Society President, Willis King, and I will continue to update you as these issues develop. I encourage you to write to me and to IEEE President Joel Snyder and IEEE President-Elect Ray Findlay to express your opinions. I will distribute member responses to IEEE and Computer Society leaders, and some letters may be published in *Computer*. I look forward to hearing from you. ✸

***Benjamin W. Wah** is the Robert T. Chien Professor of Electrical and Computer Engineering at the University of Illinois, Urbana. Contact him at b.wah@computer.org.*