IUPAC Finance Committee Meeting

Monday, 25 February 2002, 9:00 AM - 5 PM Offices of Reber Rechtsanwälte, Dufourstrasse 43 CH-8034 Zurich, Switzerland

Minutes

Present: Dr. E. P. Przybylowicz (Chairman), Dr. C. F. Buxtorf (Treasurer),

Dr. G. Martens, Dr. J. Miyamoto, Dr. H.-L. Senti, Dr. A. Hartmann (Guest)

Secretary: Dr. J. W. Jost

1. Introductory Remarks & Finalization of Agenda

Dr. Przybylowicz welcomed the members of the Finance Committee to the meeting and reviewed the agenda. There were no additions or changes to the agenda as circulated.

2. MINUTES OF 2001 MEETING

The minutes were approved as published.

3. FINANCE COMMITTEE MEMBERSHIP

Dr. Przybylowicz noted that two potential new members of the Finance Committee had been identified. He noted that the Committee was at its authorized size and the Executive Committee at its meeting in Stellenbosch had decided not to temporarily increase the size of the Committee. He also reported that the Executive Committee had decided to extend the term of the Chairman through 2005, an additional two years beyond the limit prescribed by the Standing Orders.

4. ITEMS FROM MEETINGS OF EXECUTIVE COMMITTEE AND BUREAU

Dr. Przybylowicz reviewed the items in the Agenda Book extracted from the minutes of the EC and Bureau. There was some discussion of the IUPAC Chemical Identifier project. The suggestion was made that IUPAC should copyright the term *IUPAC Chemical Identifier* and consider the possibility of charging a licensing fee for its use.

5. FINANCIAL REVIEW

5.1. STATEMENT OF ACCOUNTS – 2001

Dr. Jost reviewed the Accounts as prepared by the accountant based on preliminary information. The audit of the 2001 accounts was scheduled for 4-6 March 2002. Dr. Jost reviewed the new format for the Division and Standing Committee reports. These now show both operating expenses for the Divisions and Standing Committees as well as the commitments made to projects during the biennium. A new report has been added called the project portfolio report that shows the expenditures for each current project.

5.2. Comparison of Accounts to Budget – 2001

The net of Expenses and Commitments and income shows a deficit of

USD 135772, before realized and unrealized gains on investments. This deficit is due to unbudgeted expenses for various ad hoc committees, the General Assembly in Brisbane, and the Secretariat. The latter mainly for expenses related to developing and printing of special brochures for publicizing the work of the Union.

5.3. RESERVES AND SPECIAL FUNDS

The proposal to use USD 100 000 from the Southern Hemisphere Sinking Fund was approved. This reduces the deficit for the biennium to USD 35 772. The use of USD 60 000 from the Endowment Fund to pay for the IUPAC Prize and support for conferences in Developing Countries was also approved.

It was noted that the Operating reserve was apparently calculated incorrectly. It should be the Biennial expense budget minus the expenses for *PAC*. The Executive Director will have this corrected for 2002 by the accountant.

After some discussion, it was agreed to revise the structure of the Funds that make up the Union's reserve. A revised draft of the Fund Policy Statement is attached. The main changes are as follows:

- The Southern Hemisphere Sinking Fund is renamed the General Assembly Special Fund to better express its purpose.
- The Young Scientists Award Fund is combined with the Endowment Reserve into a single Fund to be called the IUPAC Endowment Fund.

The Endowment Fund will be treated as an Endowment, that is only the income will be available for use. The amount of the Fund will be recalculated each biennium based on the amounts needed for the Biennium Operating Reserve and the General Assembly Special Fund. This amount will be used to calculate the amount available as income, based on an average bond yield, available for use to fund the IUPAC Prize and other special activities.

5.4. FINANCIAL RESULTS FOR SELF-PUBLISHING PAC IN 2001

Dr. Jost reviewed the results for self-publishing PAC in 2000 and 2001. Overall this has been a success, with higher net income than had been provided by the Blackwell contract. However, net income was lower in 2001 than 2000. This was due both to higher costs (up ~USD 17 000) and lower subscription revenue (down ~USD 31 000) for a net decrease in income of ~USD 48 000. Projected net income for 2002 is higher mainly due to higher subscription revenue, offset to some extent by higher expenses. The higher expenses in 2001 and 2002 are due to the addition of another contractor to help produce PAC in a more timely fashion. The higher subscription income in 2002 is due to a one-time increase of subscribers in China. The long-term trend for subscription income is expected to continue down in agreement with the general decrease in library subscriptions to general chemistry journals.

Concern was expressed about the need to replace the income from PAC as the expected decrease reduces income from this source.

5.5. CAPITAL BUDGETS

No capital budget needs are planned for the coming biennium.

6. SUBSCRIPTIONS

6.1. 2000-1 NATIONAL SUBSCRIPTION PAYMENT STATUS

Dr. Jost reported that with the payment of its arrears by Pakistan there were no NAOs in arrears for more than 2001 subscriptions. These were expected to be paid in 2002.

6.2. 2002 AND 2003 NATIONAL SUBSCRIPTION CALCULATIONS

Dr. Jost reviewed the calculation of subscriptions for the 2002-3 biennium. The National Subscriptions for a number of NAOs would have increased dramatically due to the use of more current data to replace old Chemical Turnover data. In those cases, the old and new Chemical Turnover data had been averaged to reduce the size of the increase. In a number of other cases, there had been a dramatic increase in Chemical Turnover due to increases in economic activity. The Treasurer has written to those NAOs offering to discuss their situation and make adjustments as necessary.

6.3. SPECIAL SITUATIONS

As was noted above, the Pakistan Chemical Society has now paid its arrears through 2001.

6.4. SPECIAL WORKING PARTY ON NATIONAL SUBSCRIPTIONS AND RELATED FINANCIAL MATTERS

Dr. Buxtorf reviewed the material that had been prepared for the meeting of the Working Party, to held the day after the Finance Committee meeting. He noted that the meeting had to meet two objectives, to address the serious concerns of many NAOs regarding the amount of their national subscriptions and the need to protect IUPAC's financial situation and prevent a repetition of the crisis of the 1979s and late 1980s and early 1990s.

Dr. Hartman, who joined the Finance Committee during the oil crisis of 1974, cautioned that reserves which had been built up over the past few years, not be used to reduce the National Subscriptions. This, he noted, would lead the Union back into financial difficulties. Any adjustments to the income level, he advised, should not have an impact of greater than a few percent.

The recommendations of the Working Party would be reviewed first by the Executive Committee at its meeting in April and then by the Bureau at its meeting in September. Recommendations for Council action would then be made for the Council meeting in Ottawa in 2003. Any proposals that could be accepted by the Bureau and implemented without Council action would be implemented before the General Assembly.

7. REVIEW OF BUDGET -2002 - 3

Dr. Jost reviewed the budget for 2002-3. No changes were necessary in the budget.

8. ALLOCATION TO IUPAC BODIES - 2002 - 3

Dr. Buxtorf reviewed the allocations to Divisions and Standing Committees for 2002-3. He noted that a large unallocated reserve, divided between a Division reserve, to be allocated by the Treasurer and Secretary General, and a fund to be allocated by the Project Committee had been incorporated in the budget. This provided flexibility to fund good projects wherever they might occur in the organization. Dr. Buxtorf reported that he had asked the Division Presidents to adhere to a budget allocation of 25 % for operations and 75 % for projects.

The current allocations to Divisions are based on historical allocations and the Treasurer suggested that this procedure should be modified in the future. One possible modification is to take into account the success of Divisions in obtaining funding for projects from the reserve. This would provide more funds for the use of the more active Divisions.

9. INVESTMENT PORTFOLIO

9.1. INVESTMENT TRANSACTION HIGHLIGHTS

Dr. Przybylowicz reviewed the major transactions in the portfolio during 2001. These fell into three categories, the sale of equities as a result of decisions taken at the Finance Committee meeting in 2001, the purchase of bonds to increase the proportion of bonds in the portfolio, and the purchase of new bonds to replace maturing bonds. He noted that no new funds had been transferred from operations to the portfolio. The ratio of equities to bonds in the portfolio had decreased due to both the sale of equities and the purchase of bonds and the fall in the market value of equities. He commented that the sale of the Union's holdings in the Janus fund had been made before the dramatic decline in the value of the fund.

The table below shows the percent of the portfolio in equities and bonds and in US and European investments.

Date	% Europe	% U.S.	% Equity	% Fixed Inc.
Jan 2001	38	62	60	40
Jan 2002	37	63	44	56

9.2. Performance 2001

Dr. Przybylowicz reviewed the performance of the IUPAC portfolio versus a number of market indices. While the overall yield was significantly lower than in the recent past, the performance of the portfolio was better than the broad market indices. This was due to the conservative position taken as a result of the decisions made at the last Finance Committee meeting. The Committee

recommended no changes in the composition of the portfolio.

9.3. UPDATE OF INVESTMENT AND FUND STRATEGIES

The Committee reviewed and approved the revised Investment Policy Statement (Attached). The Committee then reviewed the proposed changes to the Fund Policy Statement. The major changes involved the change from four funds to three. This change was expected to make the nature of the Funds that made up the investment portfolio more understandable to IUPAC's constituents. See item 5.3 for a discussion of the new Fund definitions. The revised Fund Policy Statement is shown in Attachment 2.

10. Investment Process Discussion – Shadow Portfolio

Dr. Przybylowicz noted that the IUPAC portfolio continued to outperform a shadow portfolio based in index funds. He therefore recommended that the current mix of equity funds and bonds remain unchanged.

11. OTHER BUSINESS

There was no other business.

12. DATE AND LOCATION OF NEXT MEETING

The next Finance Committee meeting will be on 17 February 2003 in Zürich at the offices of Reber Rechtsanwälte.



International Union of Pure and Applied Chemistry

INVESTMENT POLICY STATEMENT

1.0 PURPOSE

The purpose of this document is to identify a set of investment objectives and constraints, asset allocation parameters, performance measurement benchmarks, and guidelines for the International Union of Pure and Applied Chemistry (IUPAC) long term investments. The investment policy statement is intended to assure the Officers, Executive Committee and Bureau of IUPAC that reserve assets are being invested in accordance with the best long-term interests of IUPAC, given the following considerations:

- IUPAC's risk tolerance, or its willingness to withstand substantial losses due to adverse market conditions.
- IUPAC's need to obtain real, or inflation-adjusted, growth in its asset base.
- IUPAC's requirement for current income to support IUPAC programs and activities.
- IUPAC's liquidity requirements, or its need to maintain adequate cash balances to accommodate withdrawals from the long term portfolio when needed.

2.0 INVESTMENT OBJECTIVES AND CONSTRAINTS

2.1 Objectives

The primary objective of having reserve funds is to provide continuity in the programs set out in the IUPAC Strategic Plan regardless of short term financial discontinuities and disruptions. With this objective, the reserve funds must (1) provide protection for biennial operating expenses, (2) provide for periodic, planned extraordinary expenses (such as moving the Secretariat), (3) provide for extraordinary expenses in connection with General Assembly and Congress meetings held in regions of the world which would increase the normal expenses, and (4) support endowed programs of the organization. It is expected that under normal circumstances, the National Subscriptions plus other annual sources of operating income will cover normal operating expenses.

To meet these objectives the reserve funds of IUPAC must earn an annual real, or inflation adjusted (OECD), total return of 4.5%. It is recognized that the real return objective may not be achieved during each year, however, the fund will be structured to enhance the probability of earning an annualized real return of 4.5% over the long term.

The risk tolerance of the organization should be viewed as moderate. Volatility in the fund's returns can be tolerated provided that there are reasonable expectations that the fund will achieve its desired return over the long term. The reserve portfolio will not be structured to incur unnecessary risk. On an overall portfolio basis, risk shall be controlled through the use of more than one asset class as well as a regional distribution of investments throughout the world, consistent with the investment objectives.

2.2 Constraints

The liquidity requirements of the reserve funds are minimal. At least 2% of the fund shall be available on short notice (30 days) for conversion into liquid assets without significant penalty.

Since IUPAC's 501 (c)(3) tax-exempt status extends to the reserve funds, tax considerations are not a constraint in the management of this fund.



3.0 ASSET CLASSES AND ALLOCATION

In order to minimize the total risk of the reserve funds, three asset classes will be utilized in order to derive the benefits of diversification. Accordingly, the investment portfolio will be managed as a balanced fund consisting of mutual funds, bonds, and cash equivalents.

Asset allocation will be structured to achieve the primary objective of an inflation-adjusted annualized return of 4.5% over a full market cycle. The following are the annual total returns, in real terms, and standard deviations for stocks, bonds and Treasury Bills for the twenty five-year period from 1975-1999 inclusive:

Asset Class	Annual Real Return	Standard Deviation of Real Return
Equities (Large Companies)	13.2%	14.4%
Bonds (Long-term Corporate)	5.4%	13.8%
Cash Equivalents	2.0%	2.6%

SOURCE: Stocks, Bonds, Bills, and Inflation: 2000 Yearbook, Chicago, Ibbotson Associates, 2000.

Given these historic returns, it is apparent that some percentage of the reserve fund assets must be invested in equities in order to achieve a real return of 4.5%. The remainder of the portfolio will be invested in bonds and cash equivalents in order to meet the stated return objective and accomplish an appropriate level of diversification The proposed asset allocation for the reserve funds is:

	Percent of	<u>Annual</u>	<u>Weighted</u>
Asset Class	Total Assets	Real Return	Real Return
Equities	50%	13.2%	6.60%
Bonds	48%	5.4%	2.59%
Cash Equivalents	2%	2.0%	0.04%
Total	100%		9.23%

The Weighted Real Return of the reserve fund portfolio based on <u>historical performance</u> is somewhat higher than the target of 4.5%, however, the weighted standard deviation of the historical return is 14.0%.

The balance between stocks and bonds will be determined by prevailing capital market conditions and the relative valuations between asset classes.

4.0 PERFORMANCE MEASUREMENT

4.1 Total Return

The primary objective of the fund is to achieve an annualized total return, in real terms, of 4.5% over the long term. In terms of relative performance, the objective will be to outperform a benchmark portfolio. The return on each asset class will be that of its respective market index (i.e. – MSCI-North America, MSCI-Europe, Lehman Brothers Aggregate Index, etc.). Analysis of the actual return of the reserve fund as compared to the benchmark portfolio will determine if adjustments need to be made to the portfolio. While this analysis will be done on a quarterly basis, adjustments to the portfolio shall be made on an annual basis after review and discussion of the portfolio performance at the Finance Committee meeting early in the year.



5.0 REPORTING

The Chairman of the Finance Committee and the Treasurer will report on the performance of the reserve funds at each meeting of the Executive Committee and as appropriate at the Bureau and Council meetings.

• Year 2001 Performance

For the year 2001, the long-term portfolio showed the following performance in comparison with the relevant indices.

	Percent of	<u>Annual</u>	<u>Annual</u>
Asset Class	Total Assets	Total Return	Weighted Return
	(Ave. during Yr.)		
Equities	47%	- 13.6%	-6.4%
Bonds	52%	7.4%	3.8%
Cash Equivalents	1%	2.5%	0.1%
Total	100%		-2.5%
			- a
MSCI-North America	37%	-13.6%	-5.0%
MSCI-Europe	25%	-21.2%	-5.3%
LBCB Index	37%	8.4%	3.1%
Total			-7.2%

Key:

MSCI is the Morgan Stanley Capital Index that is reported country by country as well as by region. The LBCB Index is the Lehman Brothers Corporate Bond Index, which is reported annually.

Annual Weighted Return is the Percent of Total Assets (Average during the Year) in a given Asset Class multiplied by the Annual Total Return

It is interesting to note that the IUPAC Total portfolio performed close to the weighted total portfolio predicted by the indices (0.7% vs. 0.8%). However, the equity portion of the IUPAC portfolio performed better than the indices for Europe and North America whereas the IUPAC bonds under-performed the Lehman Bond Index.

International Union of Pure and Applied Chemistry



<u>Biennium Operating Reserve Fund</u> This fund shall contain an amount of money equal to the currently approved biennium budget minus the operating funds for the publications. It is the prime financial protection for the Union in the event of a severe worldwide economic downturn.

General Assembly Special Fund This fund is to be used to supplement the expense of holding General Assembly meetings in locations where the costs are considerably more expensive than the norm. General Assembly meetings such as the recently held one in Brisbane, Australia and the upcoming 2005 General Assembly in Beijing, China will draw on this fund.

<u>IUPAC Endowment Fund</u> This will be treated as an "endowment fund", that is, only the interest earned on the principal in this fund will be used for special projects of a broad nature that enhance the stature of the Union. For example, the recently established IUPAC Prize for Young Chemists will be supported by the proceeds from this fund. Other projects approved by the Executive Committee and the Finance Committee may be supported by this fund.

2.0 INVESTMENT OF FUNDS

The aggregate of the three funds is managed as a single long term portfolio according the IUPAC Investment Policy and the guidelines contained therein.

3.0 ALLOCATIONS TO FUNDS

Biennium Operating Reserve Fund This fund shall contain an amount equal to the total approved budget for the next biennium.

General Assembly Special Fund The level of this fund shall be set by the Finance Committee at its annual meeting. The maximum held in this fund is \$250,000 USD. (At the present time, 1 March 2002, it totals \$150,000 since \$100,000 was approved to be used to support the higher expenses of the 2001 General Assembly in Brisbane, Australia

<u>IUPAC Endowment Fund</u> The level of this fund shall be the residual long-term portfolio after allocations for the Biennium Operating Reserve Fund and General Assembly Special Fund are subtracted

4.0 DISBURSEMENT GUIDELINES FROM FUNDS

Disbursement of funds from these accounts must be approved by the Finance Committee, or the Treasurer and Chairman acting on behalf of the Finance Committee.

As needed funds from the Biennium Operating Reserve Fund and General Assembly Special Fund may be approved for disbursement, decreasing these funds until new levels are established at the annual Finance Committee meeting.

The IUPAC Endowment Fund will maintain its principal and the funds available for disbursement will not exceed the annual yield on this fund at the fixed interest rate (bonds and fixed funds). Currently that is 6.0%.