International Mathematical Union

Circular Letter #5/2006

Date: May 30, 2006

To: Adhering Organizations Committees for Mathematics Delegates to the 15th General Assembly

From: Executive Committee of the International Mathematical Union

Re: International Mathematical Union 2007-2010 Budget

A responsibility of the 15th General Assembly delegates is to determine the budget that will guide the activities of the International Mathematical Union (IMU) through 2010. In order to prepare the delegates for the budget discussion and the subsequent vote, the Executive Committee (EC) has carefully thought about the goals and future activities of the IMU and has worked to outline a proposed budget that will maximize the impact of its limited resources. The budget includes both a percentage increase in the unit contribution and an increase in the number of units paid by Groups IV and V.

As background for the budget presentation, below are highlights of the activities that the IMU EC has undertaken since the 2002 General Assembly and the pursuits that it is planning for IMU as an organization committed to strengthening mathematical activity throughout the world.

- Following the mandate put forth by the 14th General Assembly Resolution #9, the EC has significantly enhanced its commitment to the developing world by expanding the work of its Commission on Development and Exchanges (CDE) through the newly-formed Developing Countries Strategy Group (DCSG). The DCSG now receives a greater number of grant applications from developing countries than it has in the past and distributes more grants.
- The CDE/DCSG has established a centralized office with a half-time employee located at ICTP in Trieste, which has succeeded in leveraging dues support significantly by obtaining outside funding for mathematics in developing countries, especially in Africa. This office has also developed an online application system, which has simplified the process for mathematicians seeking funding to attend the ICM.
- The EC has continued to encourage its Committee on Electronic Information and Communication (CEIC) to develop guidelines regarding electronic communication. In June 2005 *Best Practices for Retrodigitization* was adopted, and the CEIC also has drafted the document *Digital Mathematics Library: A Vision for the Future* (<u>www.ceic.math.ca</u>).
- The IMU has improved its website by expanding the information available and by providing links to other mathematical societies.

- The IMU EC has engaged in further activities including adding an additional prize, the Carl Friedrich Gauss Prize for Applications of Mathematics, funded by the surplus from the Berlin ICM, and administered by the IMU.
- It has informally established two Nominating Committees in response to Resolution #8 of the 2002 General Assembly, with corresponding changes to the Procedures for Election that the 2006 General Assembly will be asked to approve.
- To guarantee ICM site selection equity, the EC appointed an ICM Site Advisory Committee that visited the countries that submitted ICM proposals and reported their findings to the EC.
- IMU has also continued to support the work of its International Commission on Mathematical Instruction (ICMI).
- The IMU EC has further worked to improve media coverage related to the International Congress of Mathematicians and to the work of IMU.
- So as to improve communication with mathematicians, IMU now sponsors IMU-Net, a monthly electronic update for the mathematical community.

In order to balance its budget, the EC has looked inward to reduce its operating costs, but the scope for doing so is very limited if current activities are to be sustained.

- IMU's staff is much smaller than that of several national mathematical societies, and is the minimum the organization can run with.
- Eliminating, for example, physical meetings of the Program and Fields Medal Committees, or of CEIC, would make some small savings but would compromise quality decision making in key areas.
- The EC did vote to eliminate the World Directory of Mathematicians and instead asked the CEIC to explore the feasibility of an electronic alternative to replace the traditional hard copy. In response, the CEIC created the Electronic World Directory of Mathematicians (http://www.mathunion.org/ewdm/), and is working to establish the Federated World Directory of Mathematicians (http://projects.cs.dal.ca/ddrive/fwdm/index.shtml), which will be presented at the GA.
- The IMU EC has elected to make Bulletins available online and to send hard copies only to organizations requesting them.

Even with these cost-saving modifications, the IMU has incurred a 2005 deficit of US \$39,651 and an expected 2006 deficit of US \$68,000 -- a trend that cannot be sustained. The EC recommends that the IMU continue at least its current level of activities, including those that benefit the mathematical communities in the developing world. In order to do so, the IMU must increase its revenue by seeking outside funding and by increasing its dues, which currently are among the lowest of any of the scientific unions.

At the General Assembly, the EC will propose increasing the yearly dues unit by 5% each year for 2007-2010. We will also propose changing the number of units paid by Group IV from seven (7) to eight (8) and by Group V from ten (10) to twelve (12).

As required by the IMU Statutes, a dues group unit change must be approved by the General Assembly. (The EC previously proposed a dues group unit change in Circular Letter #3 sent on April 21. After consultation, the EC agreed to amend the information in that letter and will propose that Group IV pay eight times a single dues unit and Group V pay twelve times a single dues unit.)

The attached proposed budget includes the per unit increase of 5% each year for 2007, 2008, 2009, and 2010. Please note that even with the dues increase, the IMU will draw funds from its reserves for 2007-2009 in order to balance the budget.

Group	2007	2008	2009	2010
I – 1 unit	1386	1455	1528	1605
II – 2 units	2772	2910	3056	3210
III – 4 units	5544	5820	6112	6420
IV – 8 units	11088	11640	12224	12840
V – 12 units	16632	17460	18336	19260

Proposed Dues for 2007-2010 in Swiss Francs

The Executive Committee would like to point out that the IMU dues are still lower than most other scientific unions. In comparison, the International Union of Physiological Sciences (IUPS), an organization of similar size and scope to the IMU, charged US \$33,825 (40,132 CHF) in dues in 2004 for countries comparable to IMU's group V countries, and the International Union of Pure and Applied Physics (IUPAP) charged US \$33,642. Each of these organizations' 2004 dues exceeded the IMU's by nearly 29,000 Swiss Francs.

The detailed budget for 2007-2010 will be presented at the General Assembly. Below is a list in Swiss Francs of the proposed yearly IMU expenditures:

IMU Operating Expenses

	76,188	Basic IMU expenses (secretary & president secretarial assistance, accountant, office expenses, including postage, audit fee, Web site support, IMU bulletin)		
		support, into bulletill)		
	30,900	EC expenses		
	9,785	ICSU dues		
	4,120	General assembly expenses		
	19,340	Travel expenses for ICM program committee and for prize committees		
	28,840	ICM subvention		
	2,060	Contingency		
IMU Expenditures in Support of Commissions				
	41,200	ICMI expenses		

· 177,180 CDE expenses

•	15,450	CEIC expenses
•	20,000	Other conference support
•	61,000	ICM travel grants
•	3,500	Other costs such as media relations

The EC concluded that the IMU must increase its dues revenue. Otherwise, the IMU will be forced to significantly curtail and quite possibly eliminate its developing countries program and some other activities.

The EC has worked hard to increase IMU's presence and importance in the international mathematical community through programs and policies that benefit not only the developing world but all mathematicians. To sustain these efforts, the IMU EC has obtained and continues to search for support from outside funding sources to supplement dues revenue.

In summary, the IMU realistically faces two choices: 1) to continue the current level of activity including the support of mathematics in developing countries and the CEIC, or 2) or to return to a minimal set of activities that would eliminate the ones as outlined above.

We encourage you to read the documentation carefully and to support the work of the IMU.

Sincerely, Phillip A. Griffiths Secretary imu@ias.edu