



## Presidential Task Force on SIG Overhead

Report to SGB  
29 April, 2022




Association for  
Computing Machinery  
*Advancing Computing as a Science & Profession*



## Outline

- [You already received 2 backup documents]
- Why we're meeting
  - SIGs are doing well financially, but the overhead calculation method isn't covering SIG-related costs
  - Other ACM groups have had to "subsidize" the SIGs
  - President charged SGB to update the calculation for FY23
- How the discussion is organized
  - Some important context
  - How we approached the task
  - What we recommend and general discussion
- After this meeting, you'll each need to
  - Consider the impact of 2 methods on your SIG
  - Vote on which method should be used going forward



Association for  
Computing Machinery  
*Advancing Computing as a Science & Profession*

2




# WHY WE'RE MEETING




Association for  
Computing Machinery  
*Advancing Computing as a Science & Profession*

3



## PTF Role and Timeline

- Presidential Task Force
  - Final step in multi-year effort to improve processes so that finances are clearer for volunteers
  - Our charge: Review how SIG overhead is handled and make recommendations for adjusting the process
- Process & timeline
  - Jan-Feb: PTF formulates initial ideas
  - March-April: iterate to arrive at one or two proposed methods; involve more SIGs as needed
  - April 11: draft recommendations to EC for review & comment
  - **April 29: recommendations presented to SGB for questions & discussion**
  - **Early May: SGB votes on new method**
  - Early June: EC reports to Council as part of FY23 budget discussion



Association for  
Computing Machinery  
*Advancing Computing as a Science & Profession*

4

## Task Force Members

- Only some SIGs, but considered impact on all (including future SIGs)
  - SIG representatives
    - Adrienne Decker (Chair, CSE)
    - Falko Dressler (Vice Chair, MOBILE)
    - Jeff Foster (Chair, PLAN)
    - Andrew Kun (Treasurer, CHI)
    - Brad Lawrence (Treasurer, GRAPH)
    - Wei Wang (Chair, KDD)
    - John West (Chair, HPC)
  - Ex officio
    - Cherri Pancake (chair; Past President)
    - Jens Palsberg (SGB Chair)
    - Donna Cappo (SIG Services) and Pat Ryan (COO)



Association for  
Computing Machinery

*Advancing Computing as a Science & Profession*

5

## SOME IMPORTANT CONTEXT



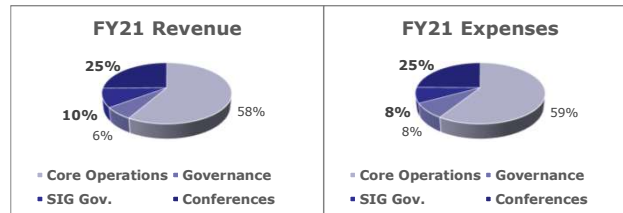
Association for  
Computing Machinery

*Advancing Computing as a Science & Profession*

6

## The Context of SIG Finances

- SIGs and their Conferences account for roughly 1/3 of ACM's revenues/expenses
  - Most recent complete year is FY21 (July 2020 – June 2021)

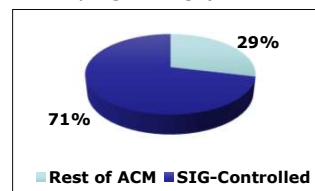


- Historically, the picture is remarkably consistent
  - Proportions haven't changed significantly for at least a decade

## Context (2)

- SIGs may only be 1/3 of each year's revenue/expenses – but that's just part of the picture
- Proportions of reserve \$\$ ("money in the bank") are the opposite
  - At end of FY21, SIGs control over 70% of ACM's operating reserves
  - SIG portion currently ~\$70M
- Historically, this has been changing
  - 2/3 of SIGs have a pattern of "accumulating wealth"
  - SIG fund balances grow even during lean years
  - SIGs' proportion of overall reserves keeps growing (and at an increasing rate)

**ACM's Operating Reserves  
at end of FY21**



## 1-on-1's with All 38 SIG Chairs

- In terms of your SIG, were FY21/FY22 a blip, or a new trend?
  - Unanimous that it's a blip, not a new pattern
  - Only a handful actually lost \$\$, though most just "broke even"
  - All are transitioning back to in-person, though many want to keep having some virtual component
- What are biggest challenges for your SIG over next 5 years?
  - Recruiting members, esp. those who will help as volunteers
  - Becoming more inclusive, esp. people from the "global south," or who do computing but in other disciplines
- Any concerns about your SIG's financial situation?
  - Unanimous "no"
  - Many said they're more concerned about how to spend (not earn)

**You were right: latest FY22 financials show SIGs are well on the road to recovery already**



Association for  
Computing Machinery

Advancing Computing as a Science & Profession

9

## THE PROBLEM



Association for  
Computing Machinery

Advancing Computing as a Science & Profession

10

## So What's the Problem

- SIGs are doing very well, but that's not the full picture
  - SIGs and their conferences spend >\$13M in direct costs (expenditures with receipts)

FY21 Conference direct costs	9.843M
FY21 "SIG Governance" (non-conference) direct costs	3.332M
<b>FY21 SIG direct costs</b>	<b>13.175M</b>

- There are also indirect (operational) costs (costs ACM incurs on behalf of SIGs)
  - SIG services staff and associated costs
  - Financial services, membership systems and records
  - IT infrastructure for SIGs & conferences
  - Financial and legal indemnification of volunteers, conferences, etc.
  - SGB participation in ACM-wide boards and councils
  - Elections, ethics/plagiarism/harassment violations, etc.
  - Backup document (SIG-related Cost Analysis) has more info



Association for Computing Machinery *But not the Digital Library – that generates revenue for SIGs, not costs*

Advancing Computing as a Science & Profession

## SIG Operational Costs Add Up

- HQ conducted detailed analysis of SIG-related costs last Fall
  - Results are included in the backup materials

<b>FY21 SIG-Related Costs (indirect costs)</b>	<b>4.091M</b>
--	---------------

- To cover these indirect costs, SIGs and Conferences are charged overhead

FY21 SIG direct costs	13.175M
FY21 SIG-related indirect costs	4.091M
<b>Total Cost of "Doing SIG &amp; Conference Business"</b>	<b>17.266M</b>



Association for Computing Machinery

Advancing Computing as a Science & Profession

## Why Is Action Needed Now?

- Existing overhead method hasn't been updated since 2001
  - Doesn't generate enough \$\$ to cover ACM's SIG-related costs
- Shortfall occurred 5 times in past 10 years, with the worst case in FY21

FY21 SIG-related costs	4.091M
FY21 overhead recovered using formula	1.633M
<i>Initial shortfall</i>	2.458M
Covered by \$\$ in Overhead Reserve Fund (ORF)	0.409M
<b>Final shortfall</b>	<b>2.050M</b>

**Task Force looked into why this is happening**

## What Has/Hasn't Changed 2001-2021

- SIG-related costs *haven't* gone up much (less than inflation)

Prior analysis of annual SIG-related costs (2001)	2.586M
Recent analysis of annual SIG-related costs (FY21)	4.091M
<i>20-year increase</i>	1.505M
<b>Increase expressed as APR</b>	<b>2.32%</b>

<b>Increase due to simple CPI inflation 2001-2021</b>	<b>2.36%</b>
---	--------------

- What *has* changed is the pattern of SIG spending
  - 10% of SIGs now account for 1/2 the overall expenses of 37 SIGs
    - End up paying overhead at "effective rate" of just 7-8%
  - On the other end, 20% of SIGs have minimal expenses
    - Essentially don't pay anything (the minimum DL distribution covers the minimum overhead of \$10K)

**Net effect: proportionately less overhead \$\$ collected, even as spending went up**

## Shortfalls Are a Trend (not a “Blip”)

- Schembari presented latest FY22 projections at EC meeting
  - SIGs will have a surplus again this year (despite gloomy budget)

	FY22 Budget	Projected Actuals
FY22 SIG & Conference Revenue	25.863M	24.504M
FY22 SIG & Conference Expenses	28.050M	21.807M
<b>FY22 SIG Net</b>	<b>2.187M</b>	<b>2.697M</b>

- Even so, there will be another overhead shortfall

FY22 SIG-related costs	4.214M
FY22 overhead recovered using formula	2.088M
<b>Overhead shortfall</b>	<b>2.126M</b>

- The problem has become urgent**
  - Once again, other ACM programs will be subsidizing >50% of the services used by SIGs

## HOW WE APPROACHED THE PROBLEM



## What We Did

- First step was getting everyone at same level of understanding about SIG finances
- Brainstormed what kind of method might work
  - If we tweaked the existing method
  - If we started over again using a different approach
  - All in all, we considered 15 different methods, in 4 rounds of discussion
- Two different types of analysis
  - Retrospective ("what if this method had been in effect since FY17)
    - Actual annual expenses for 37 SIGs\*
  - Forward projections ("what's likely to happen FY23-FY27?")
    - Taking into account the need to recover after pandemic
    - Used input from SIG chairs on "the outlook for my SIG"
- Now recommending to you how SGB can solve "the overhead problem"

## Our Recommendations

Written recommendations will be sent out after this meeting

- Clarify the function of the Overhead Reserve Fund
- Improve the transparency of the overhead process
- Update the minimum overhead fee
- Update the overhead calculation method to solve the problem
  - ⇒ We'll go over the options, but you will decide by email vote

## Update the Minimum Fee

- Minimum fee hasn't been updated in 20 years

RECOMMENDED CHANGE: A minimum \$25,000 overhead will be assessed to each SIG annually.

- Our rationale for setting it at 25K
  - Financial: the 2022 equivalent of the 2001 minimum is \$10K (original) + \$10K (to offset min. DL distribution) + \$6K (inflation) = \$26K
  - Conceptual: the minimum fee is a call for a minimum level of SIG activity
    - Setting it too low means no incentive for an inactive SIG to decide whether to increase activity or to close

## CHOOSING A NEW CALCULATION METHOD

## Update the Overhead Calculation Method

- After studying 15 methods, our consensus is that it's best to tweak the existing formula in one of two ways:
  - Method 1: keep the previous method but apply a multiplier to the rate scale, so the target overhead amount is met
  - Method 2: like #1, but increment changes to \$250K, which reduces the multiplier needed to meet target overhead amount

Method	Increment Size	Rate Scale
Original (2001)	\$125K	16% on first 125K; each subsequent 125K pays .08% less
Proposed method 1	\$125K	1.6 * the original rate at each increment
Proposed method 2	\$250K	1.26 * the original rate at each increment

- It's up to you to choose which is used

## Caveat: "Fairness"

- Conceptually, fairness is simple
  - Each SIG should pay "a fair share" of the total SIG-related costs
- In practice, impossible to be fair to all
  - SIGs are just too heterogeneous (there's no typical SIG)
- Analyzed 37 SIGs over past 5 years (FY17-FY21)

	Min	Max	Median
Membership (prof + SIG-only)	85	2,103	381
Funded activities (SIG governance + conference expenses)	\$ 5,546	\$6,786,000	\$262,297
Fund balance	\$20,500	\$5,827,000	\$844,000

- Although we looked at several factors, there are no correlations
  - E.g., Membership is completely unrelated to activities or funds
- There is no such thing as a "typical SIG" - each is unique

## How We Compared Methods

- Grouped the SIGs into cohorts, based on FY17-FY21 history

Cohort	Conferences*	Other Activities	# SIGs	SIGs
1	small or none	very few or none	7	ADA, CAS, DOC, SAM, ITE, MIS, LOG
2	small	few	12	ACCESS, ACT, AI, APP, BIO, ECOM, EVO, METRICS, MICRO, SIM, SPATIAL, UCCS
3	medium	few	10	ARCH, BED, CSE, MOBILE, MOD, MM, OPS, SAC, SOFT, WEB
4	medium	many	5	COMM, DA, IR, KDD, PLAN
also 4	large	few or some		
5	large	many	3	CHI, GRAPH, HPC

\* Sponsored or co-sponsored

**See where your SIG falls**



23

## Impact Varies under the Two Methods

Method	Increment Size	Rate Scale	Who's Affected Most
Original (2001)	\$125K	16% on first 125K; each subsequent 125K pays .08% less	Significantly favored active SIGs (those with high expenses)
Proposed method 1	\$125K	Multiplier needed = 1.6	Relatively even-handed
Proposed method 2	\$250K	Multiplier needed = 1.26	Shifts burden to the 3 most active SIGs

Average increase under each method, by cohort

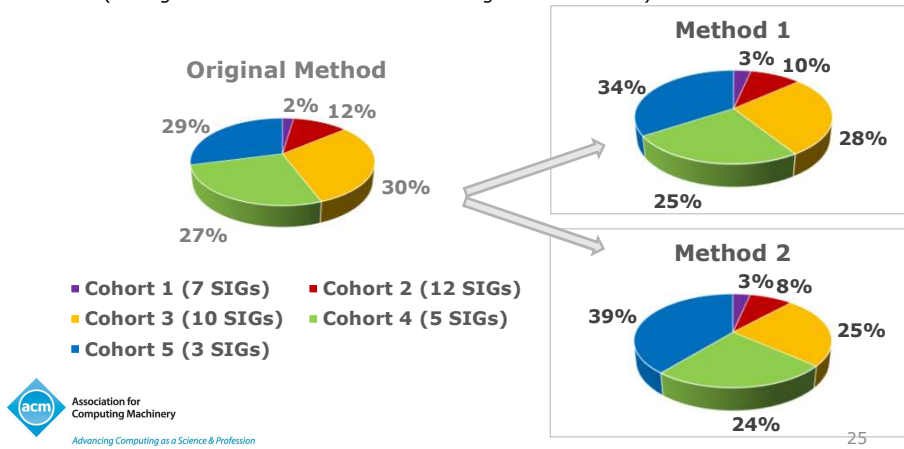
Cohort	# SIGs	Expenses, Minimum	Expenses, Maximum	Avg Increase, Method 1	Avg Increase, Method 2
1	7	\$5,546	\$69,404	Unaffected by method (will pay minimum regardless)	
2	12	\$83,354	\$262,297	50%	25%
3	10	\$304,093	\$856,683	58%	39%
4	5	\$887,283	\$1,919,222	61%	56%
5	3	\$3,445,095	\$6,785,748	53%	77%

You'll want to know what the cost differences are for your SIG – calculators will be sent after meeting

24

## What Share Will Each Cohort Pay

- Considering total overhead \$\$, which cohorts will be footing the bill?
  - Method 1: similar to past for Cohorts 1-3, but Cohort 5's share increases substantially
  - Method 2: Cohort 5 subsidizes the services other cohorts receive
  - (Changes for Cohort 1 are due to the larger minimum fee)



## What You'll Get after Meeting

- Copy of these slides
- Calculator spreadsheet so you can compare what it would cost your SIG using each method
- Document (showing both methods for now) to be approved when method is voted on




# QUESTIONS & DISCUSSION




Association for  
Computing Machinery  
*Advancing Computing as a Science & Profession*

27



## A Big Thank-you to the PTF Members

- Adrienne Decker (Chair, CSE)
- Falko Dressler (Vice Chair, MOBILE)
- Jeff Foster (Chair, PLAN)
- Andrew Kun (Treasurer, CHI)
- Brad Lawrence (Treasurer, GRAPH)
- Wei Wang (Chair, KDD)
- John West (Chair, HPC)
- Jens Palsberg (SGB Chair)
- Donna Cappelletti (SIG Services) and Pat Ryan (COO)



Association for  
Computing Machinery  
*Advancing Computing as a Science & Profession*

28