Products & Services PPC
Periodicals Package Committee

Net Revenue Distribution Methodology Update

John Barr, PPC Chair
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2003 Periodicals Package Committee

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PPC Charter

“The Periodicals Packages Committee (PPC) shall identify and recommend to the Products & Services Committee new or enhanced technical services of benefit to IEEE technical entities and individual members.”

Including “Review the distribution of TAB periodical package revenue to the TAB entities, and recommend modifications to the distribution formula, as appropriate.”
What is “Periodical Package Revenue”

• Revenue from Institutional Packages
  – IEL, ASPP & POP -- printed and on-line

• Total Net Revenue $47M (budgeted for 2003)
  – 50% distributed by “Book Broker” algorithm (CPC)
  – 50% distributed by “ASPP” algorithm (PPC)
    • Factors are page count and Non-Member publication subscription price
PPC’s Proposal

• PPC has developed a new algorithm that it believes closer relates to the “value” a periodical contributes to the overall package

• Address only the IEL/ASPP On-line portion
  – 2003 Budgeted amount $13.7M
  – Approximately 25% of total “package revenue” or
    Approximately 50% of total “periodical package revenue”
  – Continue using ASPP algorithm for printed revenue
    • Buffer impacts of change
    • Expect with time ASPP Print portion will decrease & On-Line portion will increase

• Understand this is initially a zero-sum game
  – Sensitive to the present financial issues
  – Initial changes mean - winners/losers in financial sense

• Desire to motivate the right behaviors
Issues with Present ASSP Algorithm

• Viewed as “unfair”, “out-dated”
  – Based principally on Page Count & Non-Member Subscription Price (75%)
    – Page count may not fit future content
  – Non-Member Subscriptions (25%)
    – Non-Member subscription base is shrinking
  – Algorithm is complicated to administrate

• Hard to relate publications’ performance to distribution

• New packages will further stretch the algorithm
Other Motivations For A Change

• A significant shift from print to electronic distribution is occurring
• Non-text based content is beginning to appearing
• New methods of “packaging” are being developed
  – Ontology-based packages
  – Article based sales
• Desire to find a approach to cover both periodicals and conference material
• Provide a clearer set of incentives for S/Cs to increase the “value” of the IEEE IP offering while still fulfilling our role to our profession
What is “Value”

• Reason(s) purchasers pay for the package

• While “value” may be hard to measure, we can measure other proxies for “value”
  – On-line Usage – how often is material accessed

• Additionally, there is “value” to increasing breadth of the package the IEEE is offering
  – Great breadth is seen as greater value for present users and increases the chance of attracting new subscribers
Algorithm Factors

• Three factors to be used in algorithm
  – Base factor – a portion based on being an entity contributing to the Xplore database – a breadth factor
  – Content Contribution factor – a portion based on amount of content in the Xplore database
  – Usage factor – a portion based on the usage / access of the content provided
**Base Parameter**

- Recognition of the breadth all society / councils bring to the package

- Equal distribution to all societies / councils
  - A factor based on individual publications, rather than S/Cs that have publications, might encourage proliferation of publications, an undesired behavior
  - The entity basis is a better fit for later generalization to conference material

- Provides funding for each S/C to have a base publication
Content Contribution Factor

• A portion of the distribution will be based on the amount of content (“articles”) contributed to Xplore

• Publication’s portion is proportional to its share of the total periodical article content
  – 1% of “contributed content” ➔ 1% of “contributed content” distribution

• Measure content over a multi-year (3 year) window
  – Smoothing factor
  – Approximate equal to half-life of usage
  – Based on publication date (not date submitted to database)

• Will need to eliminate non-technical magazine content
  – do not include in content totals
Usage Parameter

• Usage defined as “Article Views” for on-line material
  – Access of articles’ full content (i.e. PDF), not abstracts or search hits
  – Previous calendar year’s access of all articles in the database
    • not just past 3 years articles

• “Usage” driver needs to relate to the actual package and it’s use
  – Usage only by institutional package users (IEL/ASPP OnLine), not usage in other venues (i.e. member subscription pick-up)

• Publication’s portion is proportional to its share of the total institutional periodical package usage
  – if 1% of total hits ➔ 1% of “usage” distribution
Relative Weighting Factors

• Tentative Proposal
  – 15% Base
  – 50% Usage
    • Largest factor but balanced by other factors
  – 35% Content

  – Note: these weighting factors are levers that TAB can adjust to get a desired result
New Algorithm Results

• First the ground rules are:
  – Based on 2002 Institutional IEL/ASPP on-line Usage (the only full year data available)
  – Based on Content with publication date of 2000, 2001 and 2002
  – Compared to Budgeted 2003 ASSP On-Line distribution (this is the present plan)
• Note – this is just a simulation, we are not proposing changes for 2003 (actually none until 2005)
## Budgeted 2003 distribution versus New Proposal

| 01 SP | $54,079 | 6.9% | $778,359 | $832,439 | 28 SMC | -$122,367 | -37.1% | $329,562 | $207,195 |
| 02 BT | $43,317 | 106.2% | $40,793 | $84,110 | 29 GRS | $47,731 | 28.9% | $165,018 | $212,749 |
| 03 AP | $55,379 | 20.0% | $276,228 | $331,607 | 31 PE | -$1,937 | -3.0% | $64,349 | $62,412 |
| 04 CAS | -$19,863 | -3.1% | $634,319 | $614,455 | 32 DEI | $4,336 | 3.0% | $143,784 | $148,120 |
| 05 NPS | $206 | 0.1% | $368,084 | $368,289 | 33 MAG | $317,228 | 147.5% | $215,119 | $532,347 |
| 06 VT | $79,594 | 59.3% | $134,237 | $213,831 | 34 IA | $28,905 | 14.3% | $202,597 | $231,503 |
| 07 R | -$7,515 | -7.6% | $99,374 | $91,859 | 35 PEL | $36,434 | 25.6% | $141,775 | $178,119 |
| 08 CE | $94,898 | 131.6% | $72,108 | $167,006 | 36 LEOS | $210,295 | 41.5% | $507,112 | $717,407 |
| 09 IM | -$17,937 | -7.8% | $230,281 | $212,344 | 37 SSC | $304,665 | 172.4% | $176,717 | $481,382 |
| 10 AES | -$28,057 | -11.5% | $244,433 | $216,375 | 38 ITS | -$23,110 | -26.1% | $88,678 | $65,568 |
| 11 NN | -$120,528 | -28.2% | $427,202 | $306,675 | 39 SEN | $145,078 | 97.4% | $148,907 | $293,985 |
| 12 IT | $101,424 | 51.7% | $195,992 | $297,416 | 40 ASC | -$22,947 | -28.2% | $81,380 | $58,433 |
| 13 IE | $11,061 | 6.9% | $160,654 | $171,715 | 41 TMI | -$52,307 | -34.0% | $154,017 | $101,710 |
| 14 EM | -$19,608 | -17.9% | $109,519 | $89,911 | 42 JLT | $59,306 | 30.7% | $193,137 | $252,443 |
| 15 ED | $178,428 | 48.8% | $365,349 | $543,777 | 43 DIV 1 | -$39,108 | -51.3% | $76,292 | $37,184 |
| 16 C | -$1,319,176 | -52.3% | $2,523,362 | $1,204,186 | 44 SCM | $60,025 | 58.7% | $102,213 | $42,188 |
| 17 MTT | $147,328 | 37.1% | $396,578 | $543,906 | 45 MEMS | -$26,631 | -24.1% | $110,441 | $83,811 |
| 18 EMB | -$43,370 | -13.8% | $314,306 | $297,936 | 46 NET | -$35,265 | -29.2% | $120,681 | $85,416 |
| 19 COMM | $390,278 | 49.0% | $795,688 | $1,185,966 | 47 VLSI | -$59,347 | -46.1% | $128,815 | $69,468 |
| 20 UFFC | $20,558 | 15.5% | $132,807 | $153,364 | 48 MECH | -$75,997 | -67.7% | $112,217 | $36,220 |
| 21 CPM | -$137,352 | -40.8% | $336,664 | $199,311 | 49 MM | -$76,658 | -70.8% | $108,221 | $31,564 |
| 22 OE | $26,843 | 42.6% | $63,030 | $89,874 | 50 DMR | $9,982 | $0 | $9,982 | $0 |
| 23 CS | $47,948 | 12.2% | $392,893 | $440,840 | 51 MC | $6,197 | $0 | $6,197 | $0 |
| 24 RA | -$65,203 | -30.4% | $214,721 | $149,518 | 52 PVC | $16,223 | $0 | $16,223 | $0 |
| 25 Ed | $25,378 | 31.8% | $79,715 | $105,097 | 53 TNB | $0 | $0 | $0 | $0 |
| 26 PC | $16,942 | 29.5% | $57,499 | $74,441 | 54 ITB | -$32,453 | -56.3% | $57,684 | $25,231 |
| 27 EMC | $8,927 | 9.1% | $97,827 | $106,754 | 55 D&T | -$78,349 | -65.0% | $120,444 | $42,095 |

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Products & Services PPC - Periodicals Package Committee
June 2003 Board Series
**Additional Thoughts**

- Due to impact of changes, propose a multi-year (3?) transition from present algorithm to new algorithm.
- Propose dropping 3 year delay for new publications for On-Line portion of the distribution.
  - Content & Usage factors provides a build-in ramp-up for new publications.
- No Opinion on +-5% page count penalty, but it will need to be addressed eventually because it uses pages.
- Not proposed at this time, but this approach could be applied to on-line conference material.
- PPC should plan to monitor and report annually to TAB on the performance of this algorithm.
Next Steps

• Continue to validate / scrub data
  – Work with Staff & other groups on the data collection process & integrity

• Absorb feedback from Board Series discussions
  – Continue dialog via e-mail/phone post-meeting

• Refine weighting factors

• Refine proposal details (the if, ands & buts)

• Return to TAB for final approval
  – Provide update with partial 2003 data
Timeline

**February**
- meet with new (2003) Products Committee

*Feb - May*
- PPC refines proposal and create straw dog
- Create actual data for review

**June**
- present straw dog w/ actual data to PSC, PSPB & TAB
- get feedback

*July - Sept*
- PPC reworks proposal based on feedback

*Q3*
- Price Waterhouse usage data audit

*Oct*
- e-mail proposal to TAB in advance of Nov meeting

**November**
- come to PSC / TAB with final proposal for use in preparing 2005 Budgets
Next Steps (2)

• Request a motion stating:
  – “This Body endorses in principal the proposed prototype algorithm for ASPP/IEL On-Line Revenue distribution and requests a fully defined proposal is present to TAB in November for formal approval.”
Back-up Slides
Why Not Count Member Usage?

• Institutional package purchasers relate their costs with their usage. This seems the right way to distribute the revenue
• Membership access varies from S/C – some charge for access, some do not – this will distort the membership usage
• Some S/C have access to their IP outside of Xplore – again distorting the Xplore numbers
Usage, Just a Popularity Contest?

• Shouldn’t we be more concerned about technical strength of article and not how popular there are??
  – We should be concerned about both!!
  – Base, Content and Usage – supports both.

• But ultimately a “great article” not used is a problem and we need to make sure we are “providing” what is needed by our profession.
Why Articles?

• Why not page count?
  – Future content (multi-media or HTML content as examples) does not fit the page count model
  – Page count is no better model of value

• Article approach better fits “single article” sales model already adopted

• Are all articles equal?
  – magazines versus transactions, for example – let usage with a higher importance (weighting) drive this?

• Different article lengths?
  – Unclear how article length is correlated to “value” – let usage with a higher importance drive this?
More Article Issues

• Would this encourage publishing lots of short articles?
  – Impossible to prevent all bad behavior, but the best way to increase revenue is to increase “usage”
  – Increasing number of articles will cause additional work for the publication increasing costs – a counter balancing result

• Does this encourage re-publishing conference articles and getting double credit?
  – This is a potential issue and we need to address this via our publication standards since on Xplore conference material is as easily accessible as periodicals (and to members as apart of MDL)
    • Address as a publications’ practice issue?
  – This is just as much of an issue in the “page count” world
**Article Charts**

*Pages/Article - S/C+Joint Pubs*

*Articles/Issue - S/C+ Joint Pubs*
How good is the usage data?
Plans for perfecting our understanding & use of the usage statistics

• Usage data procedures now being audited to assure that procedures yield consistent and accurate data
  – Audit by Price Waterhouse Coopers to be completed by 3Q 2003 -- in advance of the use of the data in 2004 to compute the distributions for 2005.

• Committee of PSPB is reviewing data and user comments to recommend additional versions of statistics.
  – Additional slices now being planned include article level usage data.
Base Portion Issues

• Why no Base portion for joint publications?
  – Since a joint pub surplus is distributed to S/Cs – just give the base portion directly to S/C
  – Main intent of base was to make sure each S/C had funding for one journal

• Why not a Base portion for each publications?
  – Main intent of base was to make sure each S/C had funding for one journal, did not want to incentive S/Cs to generate more publications just to get a larger distribution
Alternative Factors Considered

- **Page Count** -- traditional factor, poor fit for future media content, may not work for conference material

- **Non-Member (Price, Subscriptions)** — traditional factor, only external measure at publication level, declining market, may not represent larger market, no parallel in conference material, distort due to new packages

- **Citations** — data lag of multiple years, can be distorted at the article level by self citation, measure of research usage vs application usage (or magazines)

- **Surveys of Purchasers** — difficult & costly to administrate

- **Bonus factors** — longer average article lengths, frequency of publication, publication performance factors (on time, time to publish cycle, …) -- Added complexity
Total article Views / 3 year content contribution

possible distortion - looking at 3 year article count but up to 50 year article database

average 152

average 74%
Other Issues

• Why Now?
  – The soonest anything will be affected is 2005 and with multi-year phase it would be 2007 /’08 before fully enacted.

• This creates problems for my S/C? This has completely changing the rules!
  – We are proposing a multi-year transition
  – 3/4ths of the IP distribution is not changing
  – TAB can decide to do additional overriding rules