

## BUDGET COMMITTEE REPORT

7-8 March, 1994, Washington, D.C.

### PREAMBLE

The Budget Committee of EXCOM annually reviews the ODP requests and makes its recommendations through this report and at the spring EXCOM meeting. This review process has become progressively more difficult over the last few years. The source of the difficulty is an ever increasing gap between available funds and scientific needs and expectations, particularly in regard to innovation. The fundamental problem is lack of funds and flat budgets, not a bloating of science needs.

The majority of EXCOM members feel very strongly that innovation is an essential driving force behind the drilling program, and mandated that a minimum of 4% of the total subcontractor budgets be allocated for "Special Operating Expenses" (SOE). BCOM fully endorses this position, as does PCOM in a general sense. SOE have been specified to be the mechanism to incorporate new ideas into the Project. These ideas are viewed as an investment in the future that provide important added value to the science and help to maintain a certain programmatic "freshness".

Historically, SOE have referred mainly to non-recurring technological advancements. Although they may be multi-year investments, SOE were not intended to add significantly to the base budgets of the subcontractors. In practice, this has been difficult to design and achieve. The identification of SOE has originated with the subcontractors, PCOM, and the various thematic panels. Prioritization has been mainly a PCOM responsibility. Although cost has played a role in this prioritization, it has not been paramount in PCOM's deliberations.

BCOM has adopted a somewhat broader definition of SOE and categorizes innovation as anything that significantly advances scientific capabilities. For example, we include in this definition new mechanisms for the addition of revenue through further internationalization. At the same time, BCOM reiterates the restriction of SOE to

innovation that does not add to the base budgets. Without this restriction, old SOE will consume new SOE via base budget increases. BCOM also asks PCOM to explicitly consider and factor in costs in prioritizing future SOE.

With the above constraints in mind, BCOM faced a formidable challenge during this year's deliberations. The difficulty was compounded by the following:

- A total budget request that was \$183,797 in excess of available revenues.*
- An unbudgeted request of approximately \$200,000 to support the JOI Office to seek new international partners, without presentation of a detailed plan to achieve this goal.*
- A JOI Office budget request that was \$144,252 above a level budget.*
- An LDEO base budget that lacked any SOE, which placed their request \$193,613 below the 4% mandate but contained an unbudgeted request of \$520,000 for "Supplemental Operating Initiatives" (essentially SOE).*
- A TAMU budget that was \$442,569 below the 4% SOE mandate.*
- A \$900,000 request from TAMU for SOE computer upgrades whose scope, design, and final costs are yet to be determined.*
- A PCOM recommendation for a \$500,000 hazard survey for shallow-water drilling that was not contained in any budget.*

Taken together the "excess" requests totaled \$1,403,795 over available revenues. The 4% SOE mandate had not been adhered to by the subcontractors. Finally, neither the TAMU computer upgrade request or the JOI Office internationalization task were finalized in detail.

It was apparent from the start that BCOM could not make final budget recommendations at its meeting. Accordingly, we have prepared a conditional budget that will be subject to reconsideration when additional details have been made available, as specified herein.

The BCOM approach has been to recommend funding of certain specific SOE at the expense of the base budgets. We recognize the risk inherent in this approach and fully appreciate that TAMU and LDEO have probably reached the limits of how much they can be further squeezed without serious reductions in services. Indeed, in some instances the base budget reductions will already impact future services. Because of the potential consequences of our recommendations, the subcontractors have been invited to submit responses to this conditional report. These will be appended to the final BCOM report in order to allow EXCOM to evaluate all ramifications of base budget cuts.

We end this preamble with a precautionary note: This budgeting approach *cannot* be continued in subsequent years without undermining the underpinnings of ODP. We cannot expect the sub-contractors to continue to squeeze out more with less. There already is a sense that we are beginning to limp along due to budgetary constraints imposed during the last two years. New innovation is, of course, pointless if the basic operational and service support crumbles. It is also noted that the long-range budget predictions are now so out of kilter with reality to be almost meaningless. A new budget model is needed. Without new revenues, the time has come to consider a more surgical and possibly radical approach to matching science needs with budgeting, based upon what is in the best, *affordable* interests of the science. We implore EXCOM and PCOM to give these matters their utmost attention and devise some strategic budgeting guidelines prior to the 1995 BCOM meeting. We also recommend that PCOM develop a strong position paper stating why the Project needs more money, to be used by JOI in its efforts to attract new partners.

## BACKGROUND

The Budget Committee met at JOI Inc., Washington, D.C., on March 7 and 8, 1994. Committee members present included Bruce Rosendahl (Chair), Yves Lancelot, Arthur Maxwell, Rob Kidd, and Brian Lewis (PCOM Chair). James Austin and Ellen Kappel, both of JOI, attended parts of the meeting, as did Phil Rabinowitz, Tim Francis, and Rick McPherson of TAMU and David Goldberg and Katherine Rodway of LDEO

The early morning session of the first day was spent reviewing the problems BCOM would face during its deliberations. The rest of the day was spent receiving presentations from the subcontractors and JOI, culminating in a short executive session

to discuss the issue of SOE and innovation in general. The morning of the second day was spent in executive session addressing the major issues, culminating in a frank summary of BCOM's recommendations made to the subcontractors and JOI.

## SUMMARY OF FY 1995 SCIENCE PLAN

The FY95 Science Plan for ODP will consist of six legs and address topics within the four thematic foci: Lithosphere, Ocean History, Sedimentary and Geochemical Processes, and Tectonics.

### Leg 158 TAG

The objective of this leg is to drill into the TAG hydrothermal mound on the mid-Atlantic ridge and characterize the fluid flow, geochemical fluxes, and associated alteration and mineralization of an active hydrothermal system on a slow spreading ridge. Leg 158 offers an opportunity to drill through a volcanogenic-hosted, hydrothermal deposit and into its underlying stockwork .

### Leg 159 Return to Site 735

The purpose of this leg is to return to ODP site 735, on the Southwest Indian Ridge, and deepen hole 735B to a nominal depth of 2 km mbsf. The principle objective of this proposed leg is to understand the nature of the processes involved in the generation of the lower crust, and place some constraints on the lower crustal stratigraphy at the slowest end of the spreading spectrum.

### Leg 160 Eastern Equatorial Atlantic Transform

The key issues to be addressed by drilling include an evaluation of the tectonic and sedimentary processes involved in the creation of the main morpho-structural features generated at the Cote d'Ivoire-Ghana Transform Margin. Results should provide data on the timing, rate, and degree of vertical motion (subsidence and uplift) of the Cote d'Ivoire-Ghana Transform Margin.

Leg 161/162 Mediterranean I & II

The proposed two legs of drilling in the Mediterranean will address three main objectives: the Alboran Basin (Western Mediterranean), drilling on the Mediterranean Accretionary Complex (Eastern Mediterranean), and an E-W transect across the Mediterranean Sea to sample and study organic-rich layers called Sapropels.

Leg 163 N. Atlantic Arctic Gateways

This is the second of two North Atlantic-Arctic Gateways (NAAG) legs. The first leg, ODP Leg 151, was drilled in August - September of 1993. The scheduled second leg of NAAG drilling will focus on the same goals as NAAG I, but also will collect cores to try to resolve millennial scale climate variability and provide links to ice core data.

**BUDGET PROPOSALS MADE TO BCOM (Dollars)**

	ACTUAL FY 94	PROPOSED FY 95	Innovation Not Included in FY 95 <sup>a</sup>	TOTAL FY 95	CHANGE 94-95
TAMU	38,440,000	38,439,215 <sup>b</sup>	0	38,439,215	-785
LDEO	4,800,002	4,840,330 <sup>c</sup>	520,000	5,360,330	560,322
JOI/JOIDES	1,660,000	1,804,252 <sup>c</sup>	200,000	2,004,252	344,252
<b>TOTAL</b>	<b>44,900,002</b>	<b>45,083,797</b>	<b>720,000</b>	<b>45,803,797</b>	<b>903,795</b>
AMOUNT AVAILABLE PER NSF PLAN		44,900,000		44,900,000	
DEFICIT		183,797	720,000 <sup>d</sup>	903,797 <sup>d</sup>	

<sup>a</sup> Innovation includes SOE and Supplemental Operating Initiatives.

<sup>b</sup> Includes \$1,095,000 in SOE, or 2.85% of TAMU total.

<sup>c</sup> Includes no SOE in base budget.

<sup>d</sup> Does not include \$500,000 requested by PCOM for hazard survey.

## TAMU

The total TAMU budget has remained essentially flat in comparison to the FY 94 level. However, TAMU was provided with \$2,020,000 in SOE in FY 94, compared to \$1,095,000 requested for FY 95. Hence, the TAMU base budget request has grown by \$924,215, or a very modest 2.54%. Much of this increase is contained in programmed day rate increases and some in fuel costs.

TAMU also was asked to "absorb" a pro-rated portion of the total ODP budget shortfall of \$163,797 (\$183,797 minus \$20,000 saved from the requested JOI budget; see JOI section), through internal reprogramming of its base budget. The pro-ration is with respect to the total TAMU and LDEO budgets. The TAMU portion is \$143,009. In addition, TAMU was asked to reduce its base budget by an additional \$180,000 to accommodate internationalization (see JOI section). Hence, the total TAMU base reduction is \$323,009, which changes the base budget to a level that is only \$601,206 above the FY 94 level. Half of this is used up in fixed or programmed cost increases related to ship operations (e.g., day-rate increases). Because these recommendations provide TAMU with an exceedingly tight budget, BCOM has asked TAMU to provide a description of where and how these decreases are to be instituted before we submit our final budget recommendations. BCOM also asked TAMU for a more detailed budget that describes how it plans for contingencies such as lost drill-pipe and other potentially unrecoverable hardware, prior to finalization of this report. This is mainly for the edification of BCOM, not an attempt to micro-manage TAMU.

A summary of the Science Operator FY 95 SOE requests is provided below (in dollars):

	Base	SOE
ENGINEERING DEVELOPMENT	1,279,020	105,000
INFORMATION SERVICES	1,084,584	900,000
SHIP OPERATIONS	21,721,739	90,000
	TOTAL SOE	1,095,000

The vast bulk of TAMU's SOE request is for computer upgrades that PCOM listed as its highest "innovation" priority. Although BCOM concurs with the importance of the upgrades, our unease derives from the arbitrariness of this figure (it was initially \$1,500,000 in TAMU's first budget submission), the incompleteness of the RFP process at the time of our meeting, uncertainties regarding the time frame for completion of the upgrades, and uncertainties as to what the Project gets for the level of expenditure in FY 95. The issue of avoidance of pre-completion obsolescence was discussed on several occasions. The specter of the ongoing DCS problems, and the lesson learned here about the risks of incremental funding, added to our concerns. It is notable that NSF also is concerned with computer upgrades and has withheld payment of the \$600,000 that was allocated in last year's budget pending a more detailed plan from TAMU. TAMU was asked by BCOM to obtain "best and final" offers from the contending bidders within 30 days and to work closely with the ad hoc computer upgrade evaluation committee to finalize and formalize a plan. This should occur sufficiently prior to the EXCOM meeting in June so that BCOM has an opportunity to review the fiscal implications of the plan.

The Engineering Development SOE refers to the DCS land test, which was deferred from last fiscal year due to delays in delivery of functional third-party software. These delays will cause TAMU to miss the contracted land-test drilling window even though the requisite drill-hole was paid for and completed. In effect, the hole must now be abandoned because the drilling contractor is not required and does not intend to pursue its arrangement with TAMU. TAMU is now searching for another contractor to drill a new hole at a new site and it plans to conduct the land test in July. TAMU has approximately \$420,000 remaining from last year's allocation and together with the current request, the total was said to be sufficient to carry out the work. BCOM expressed concern about the wasted money for the first hole and wondered why TAMU had entered into an agreement that led to the above described situation. BCOM generally agrees that if the land test is not demonstrably successful, we will recommend discontinuance of DCS development. This does not mean that alternative technologies to achieve DCS-type objectives would necessarily be abandoned.

The Ship Operations SOE refers to a scheduled dry dock to meet necessary ABS certification and upgrade shipboard laboratories.

BCOM tentatively recommends the TAMU SOE at the requested level. A final recommendation must await the results of the RFP process. Although the TAMU SOE percentage falls below the 4% mandate, we note that TAMU's percentage last year was over 5% of their base budget. Given that TAMU has left-over guide-bases from the FY 94 program, funded through last year's SOE, BCOM believes that TAMU is keeping with the spirit of EXCOM's wishes regarding innovation.

## LDEO

The LDEO budget request is \$40,327 above the FY 94 level. Neither the FY 94 nor 95 budgets contain any SOE requests per se, although last year's BCOM members considered the CNRS and Leicester subcontracts to satisfy the spirit of innovation. These costs total \$586,525 in FY 95, or about 12% of the total LDEO budget. Given that these will be recurring costs and add to the base budget, BCOM no longer views the subcontracts in keeping with the EXCOM mandate for innovation. The Supplemental Operating Initiatives requested by LDEO (but not budgeted in the request) are summarized below (in dollars):

Wireline Heave Compensator (WHC) Upgrade	75,000
Borehole Televiewer (BHTV) Operations	100,000
Continuation of Core-Log Integration Platform (CLIP)	100,000
Logging While Drilling (LWD)	200,000
Test and Training Facility (TTF)	45,000
<b>TOTAL</b>	<b>520,000</b>

The WHC and CLIP initiatives were judged particularly worthwhile and meritorious and together represent SOE that total 3.6% of the total LDEO budget. BCOM recommends that LDEO undertake these two initiatives and fund them from the proposed FY 95 base budget. Line item base-budget cuts were not specified, but it was noted that the internationalization of the Borehole Research Group has added almost \$200,000 to the total Borehole budget, without a concomitant decrease in the LDEO proportion. Questions concerning "value-added" were raised, but it was felt that it was too soon to address these issues meaningfully. They will be a topic at next year's BCOM meeting. BCOM made a request to LDEO that it preserve science services in deciding where and

how to reallocate its budget, meaning that the CNRS and Leicester subcontracts remain as whole as possible. Regrettably, this course of action was the only option available to BCOM in achieving the innovation required by EXCOM. For the record, LDEO representatives were understandably chagrined with this approach, but accepted its necessity.

The FY 95 LDEO budget calls for a 6% raise pool, whereas the TAMU pool is 3% in the budget with an additional 1% to be found from unspecified sources. The JOI raise pool is 4%. BCOM felt uncomfortable limiting institutional decisions regarding raises, but it was strongly suggested that LDEO should consider a reduction not to exceed 4% to keep in line with TAMU and JOI. Large disparities in raise pools were cited as potentially divisive. The cost savings of this reduction would cover almost 10% of LDEO's reallocation problem.

LDEO also was asked to "absorb" a pro-rated portion of the total ODP budget shortfall of \$163,797 through internal reprogramming of its choosing. The pro-ration is with respect to the total TAMU and LDEO budgets. The LDEO portion is \$20,787. Before finalizing these recommendations, BCOM asks LDEO to describe how it will achieve its base budget cuts.

## JOI

The JOI budget request is \$144,252 above the FY 94 level, representing about an 8.7% increase. The increases are mainly in salaries & benefits, the ODP Data Bank, the requirement for a fourth Performance Evaluation Committee, and the JOI G&A (overhead). In addition, JOI requested an unbudgeted SOE of \$200,000-\$250,000 for internationalization, which derives from an EXCOM motion to that effect. These funds would be used to hire a Vice-President of JOI (or equivalent) charged with the task of finding new partners and to provide a working budget.

BCOM generally supported the notion of internationalization and tentatively recommended an allocation of \$180,000. These funds would be derived from an equivalent reduction in the TAMU base budget. It should be noted that BCOM did not unanimously endorse the JOI approach toward internationalization, and the non-U.S. members of BCOM expressed some unease about the use of co-mingled funds for this purpose. It is recommended that JOI be cautious in the expenditure of these funds. They are meant for the betterment of ODP, not just JOI and JOIDES. All BCOM members felt

uncomfortable reprogramming science operation monies for what is essentially administration. However, the need for additional revenues is so pressing that the trade-offs were deemed worth the risk.

The JOI budget request asked for \$20,000 to update the ODP brochure. BCOM recommended that this activity be postponed. BCOM also will ask NSF if the PEC activity could be postponed for another year. The justification is based upon the high costs of this activity and the fact that both engineering and computer upgrade reviews are underway. If acceptable to NSF, this will save another \$40,000 or so. We have not budgeted these savings in the following budget summary. Should they appear, BCOM recommends that JOI hold these funds in reserve for subcontractor science needs and for the production costs of an updated long-range plan. If NSF rejects this proposal, we recommend that JOI should obtain these production costs from internal reprogramming of the JOI budget.

BCOM appreciates the PCOM request for a shallow water hazard survey (\$500,000). However, no funds could be identified for such work. It was suggested that more traditional funding routes be sought, although the likelihood for success was deemed uncertain at best.

Finally, BCOM requests that JOI should more closely monitor and supervise subcontractor expenditures, particularly in regard to the large and complex TAMU budget. In an environment of very tight and limited funds, there was a sense that JOI and EXCOM, working through BCOM, should have more control over where unused funds are expended. Priorities should be determined by the subcontractor, JOI, and BCOM working in consort. However, BCOM members unanimously agree that the subcontractors need some degree of flexibility.

## SUMMARY OF BUDGET RECOMMENDATIONS FOR FY 95 (DOLLARS)

	BASE FY 95	CHANGE 94-95	INNOVAT- ION FY95	CHANGE 94-95	TOTAL FY 95	CHANGE 94-95
TAMU	37,021,206	601,206	1,095,000	-925,000	38,116,206	-323,797
LDEO	4,644,543	-55,459 <sup>a</sup> 431,066 <sup>b</sup>	175,000	175,000 256,066	4,819,543	19,541
JOI	1,784,252	124,252	180,000	180,000	1,964,252 <sup>c</sup>	304,252
TOTAL	43,450,001		1,450,000		44,900,001	

<sup>a</sup> Assumes Leicester and CNRS subcontracts as part of 94 base

<sup>b</sup> Assumes a 94 base that excludes Leicester and CNRS subcontracts

<sup>c</sup> Excludes \$40,000 in savings if PEC activities are postponed

## CONCLUDING COMMENTS

It is fair to state that neither the subcontractors nor BCOM are happy or comfortable with these budget recommendations. The subcontractors were understandably distressed at base budget cuts and TAMU commented that this is a risky proposition because it inevitably will result in a lessening of their work force and inventory. TAMU also noted that there are ways to juggle base costs and innovation, but "it's playing a game with smoke and mirrors". BCOM is worried that this is exactly what might happen and we stress the importance of maintaining a clear distinction between base budget and innovation expenses.

BCOM stresses that this type of budgeting and budget control should not continue. This probably means an end to "business as usual". Whether this leads to a restructuring of ODP for more cost efficiency and/or a restructuring of the types and goals of the science are matters for EXCOM, PCOM, and JOI to resolve. We ask these groups to discuss and derive better ways of doing the ODP "business". If this does not happen, we believe the long-term health of the program will be placed in serious jeopardy.