GSC Report 2006

David Sinclair, Chair, GSC-19

Committee Members

Name	Organization F	inal Year
Georges Azuelos Cliff Burgess Marielle Chartier Stéphane Coutu Roy Holt	Université de Montréal McMaster U. / Perimeter Institu University of Liverpool Pennsylvania State University Argonne national Laboratory	(2008) ute (2007) (2008) (2007) (2008)
Byron Jennings Karol Lang John Martin (Co-Chair) Allena Opper Kumar Sharma David Sinclair (Chair)	TRIUMF University of Texas at Austin University of Toronto George Washington University University of Manitoba Carleton University/TRIUMF	(2008) (2008) (2007) (2007) (2007) (2006)

Sam Boughaba (NSERC Team Leader)

Sandra Zohar (Michele Beaudry) NSERC Programme Officer

Pekka Sinervo (Physics Group Chair)

Site Visits

- University of Alberta
- University of Saskatoon
 - Joined by University of Regina
- University of Winnipeg
 - Joined by University of Manitoba
 - University of Brandon
- Site visits considered very useful by both Committee and Community

Review Process

- Form 180's received
 - First reviewer assigned
 - Potential referees identified, typically 3 from applicants list, 2 others
 - Please read instructions!
- Chairs' Meeting
 - Review all applications to ensure that correct GSC is assigned, internal and external reviewers list complete
 - Applications are assigned to GSC with expertise best matched to field of application

Project Reviews

- Review committees met for
 - TIGRES
 - T2K
 - SNO
- ATLAS review by correspondance

Large Projects Day

- Opportunity for the GSC to be updated on largest projects
 - >\$400K/a, Major change in direction
 - Presentations by IPP, TRIUMF, SNOLAB
 - Presentation of LRP recommendations
 - Priority for EMMA, T2K capital funding
 - Hold operating to maintain equipment budget

Budget Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Base Budget	20.665	20.665	20.665	20.665	20.665	20.665
Cumulative Permanent Add	ditions					
New Applicants	1.250	1.505	1.505	1.505	1.505	1.505
Reallocations	0.287	0.373	0.459	0.459	0.459	0.459
Transfers	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Transfers						
Atlas Cost to Complete	0.750	0.075	0.075	-0.300	-0.300	-0.300
SRO Contribution	-0.137	-0.137	0.000	0.000	0.000	0.000
Total Fiscal Year	22.815	22.481	22.704	22.329	22.329	22.329
Actual Spend	19.517					
Carry Forward	0.416					
Commitments	-2.882	-13.855	-6.400	-2.100	-0.550	
KOPIO Cancellation		0.740	0.500			
RTI Budget Adjustment		0.118				
Available for competion		9.900				

GSC Imposed Constraints

- Maintain total operations to be same as last year but with re-allocation and new applicants monies added
- Assume SNOLAB operations problem solved outside of the envelope but do not assume a windfall

Results of the Competition

- Able to support T2K and EMMA
- Comes at a steep price loss of KOPIO
- Competition for operating funds extremely hard
 - First round over budget by \$3M
 - Second round over by \$1M
 - Third round required to get to budget
- Funds for new projects, new applicants, theory put extreme pressure on fixed pot

FISCAL YEAR	2006	2007 2008		2009	2010
EQ - NEW ¹	907,076	1,354,541	1,053,844	500,000	500,000
EQ - COMMITMENTS	2,490,000	2,384,000	1,429,000	300,000	300,000
EQ - TOTAL	3,397,076	3,738,541	2,482,844	800,000	800,000
THEORY - NEW	862,000	862,000	862,000	535,000	535,000
THEORY COMMITMENTS	2,288,784	1,186,500	973,000	553,000	0
THEORY-TOTAL	3,150,784	2,048,500	1,835,000	1,088,000	535,000
EXP OPS - NEW	7,338,350	5,482,900	2,683,750	0	0
EXP OPS - COMMITMENTS	8,302,985	2,433,100	0	0	0
EXP OPS - TOTAL	15,641,335	7,916,000	2,683,750	0	0
TOTAL EXPENDITURE	22,189,195	13,703,041	7,001,594	1,888,000	1,335,000

¹ New Equipment for 2006 does not include \$117.4K awarded in this competition but paid in FY2005 EQ: Equipment; EXP OPS: Experimental Operations

THEORY 14% EXP OPS 70% CAPITAL 15%

EXP OPS: Experimental Operations

FISCAL YEAR	2006	2007	2007 2008		2010
EMMA	85,000	500,000	500,000	500,000	500,000
T2K	629,207	854,541	553,844	0	0
Other ¹	192,869	0	0	0	0
ATLAS CTC	375,000	375,000	300,000	300,000	300,000
COMMITTED	2,115,000	2,009,000	1,129,000	0	0
TOTAL CAPITAL	3,397,076	3,738,541	2,482,844	800,000	800,000

CTC: Cost to Completion

¹New Equipment for 2006 does not include \$117.4K awarded in this competition but paid in FY2005

Post-Competition Subatomic Physics Envelope Budget

(millions of dollars)

Budget Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Base Budget	20.665	20.665	20.665	20.665	20.665	20.665
	20.000	20.000	20.000	20.000	20.000	20.000
Cumulative Permanent Additions:						
New Applicants*	1.250	1.505	1.505	1.505	1.505	1.505
Reallocations	0.287	0.373	0.459	0.459	0.459	0.459
Transfers	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Transfers:						
ATLAS Cost-to-Completion	0.750	0.075	0.075	-0.300	-0.300	-0.300
SRO Contribution	-0.137	-0.137	0.000	0.000	0.000	0.000
From other GSCs	0.000	0.000	0.000	0.000	0.000	0.000
Total Fiscal Year	22.933	22.481	22.704	22.329	22.329	22.329
Commitments**	-	-22.189	-13.703	-6.702	-1.588	-1.035
Actual Spending	22.517	-				
Carry-forward to next year	0.416	0.708				

^{*} The allocation for new applicants past FY2006 is not known at this time

^{**} Takes into account the return of the \$500K of the cancelled KOPIO instalment

General Budget Situation

- There is a carry forward of \$708K to next year
- However, this is all required for the capital commitments made
- Total new capital money for the coming year is very small assuming operating costs are again similarly constrained.
- Major new project could start in 2008

Policy Issues

- Community must work to increase the support of SAP as good research could not be funded
- GSC would prefer to manage all SAP activities within NSERC to ensure consistency with LRP. However, SRO programme will continue outside of the GSC

Policy Issues

- Applicants need to exercise care in filling out applications to ensure consistent commitment estimates. In several cases there were factors of 2 between total effort on the application and on the PDFs
- LRP should review use of MFA's and computing resources