

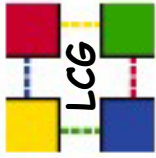
LHC Computing Grid Project

Resource Data for C-RRB

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13 April 2003

www.cern.ch/lcg



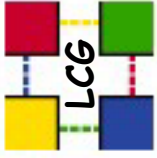


Externally funded LCG Personnel at CERN

Source of Funding	Personnel in FTE				SUM FTE	Cost kCHF	C-RRB4 SUM FTE
	2002	2003	2004	2005			
LCG Assoc. ¹	2.2	3.0	2.2	3.0	10.4	1320	10.5
France	2.8	6.1	6.5	6.5	22.0	2420	20.0
Germany ²	0.3	3.2	4.2	3.7	11.4	1363	9.6
Hungary	0.4	1.6	1.0	0.5	3.5	295	3.3
Israel	2.0	2.2	2.2	2.2	8.6	595	8.3
Italy-INFN ²	1.4	6.8	10.6	10.0	28.7	2696	29.3
Portugal	0.0	2.1	1.3	1.1	4.5	448	5.3
Russia	0.0	1.9	2.4	3.0	7.3	880	6.2
Spain	1.6	2.5	2.2	1.5	7.8	782	4.9
Sweden	0.6	1.1	1.2	1.2	4.1	265	4.1
Switzerland	0.5	1.8	1.6	1.2	5.1	612	5.1
Taipei	0.3	2.6	2.3	0.0	5.2	620	4.2
UK-EP SRC	0.8	1.0	0.2	0.0	2.0	226	2.0
UK-PPARC	10.8	23.8	21.9	13.1	69.7	9790	69.0
UK-Expts	1.7	1.7	1.7	1.7	6.8	816	6.8
USA	6.0	6.1	6.1	5.4	23.7	2839	24.4
SUM	31.4	67.5	67.7	54.1	220.7	25966	213

India ³	0.6	8.0	10.0	10.0	28.6
Russia ⁴		3.0	6.0	6.0	15.0

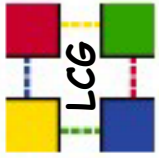




External Materials Funding

Source of Funding	Materials in kCHF						SUM of Materials	Type of Funding ¹	C-RRB4 SUM Materials
	2002	2003	2004 comm.	2004 poss.	2005 comm.	2005 poss.			
Belgium		200	100		100		400	cash	400
Finland		50	50				100	cash	100
France				1000			1000	cash	1000
Germany	3742						3742	computing	3742
Greece		0	0				0	cash	300
Italy-INFN		643	510	60	320	60	1593	cash	1650
Japan		190	100		100		390	in kind comp.	390
Spain		450	0		150		600	cash	600
Sweden		109					109	cash	54
Taipei		30					30	in kind comp.	30
UK-PPARC		1620	1280				2900	computing	2900
US-LHC			400	130		530	1060	in kind comp.	1060
Enterasys ²		85					85	in kind comp.	85
Intel + HP ³						180	180	in kind comp.	180
SUM comm.	3742	3377	2440	1190	670	770	10229		
SUM poss.							1960		
SUM total							12189		12491





Prototype Cost and Budget

	2001	2002	2003	2004	2005	TOTAL
PROTOTYPE						
PREPARING CC for PHASE 2	2454	3434	1074	2440	2740	12142
TOTAL PROTOTYPE OPERATION	150	1665	2083	3342	1500	8740
	2604	5099	3157	5782	4240	20882

	2001	2002	2003	2004	2005	Totals
Estimated Costs						
Sum Physics Comp.	8.5	9.9	10.1	11.0	9.7	49.2
Base Physics	5.8	4.8	6.9	5.3	5.5	28.3
LCG Phase 1 at CERN	2.6	5.1	3.2	5.8	4.2	20.9
Funding						
Income per Year						
Base Physics	8.5	9.9	11.0	8.6	8.7	46.7
Addn. CERN Funding	5.8	4.8	6.9	5.3	5.5	28.3
External Income	2.6	1.4	0.7	0.9	2.5	8.1
	0.0	3.7	3.4	2.4	0.7	10.2
Annual Balance	0.0	0.0	0.9	-2.4	-1.0	
Cumulative Balance	0.0	0.0	0.9	-1.5	-2.5	-2.2
Totals						
C-RRB4						50.2
						29.3
						20.9

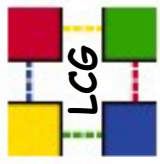




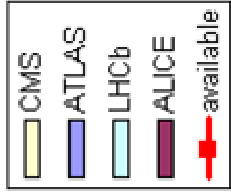
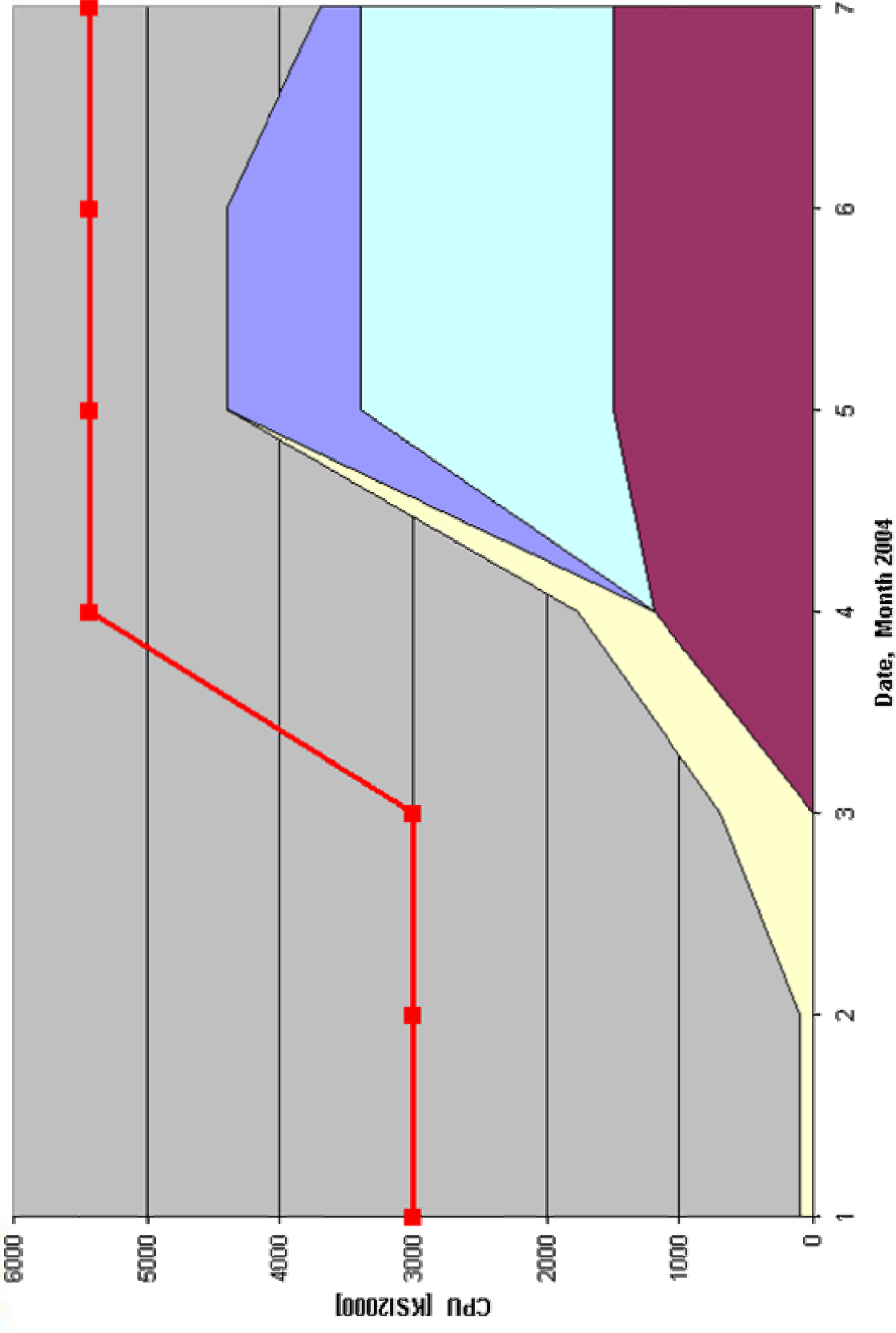
Regional Centre Capacity 2Q2004

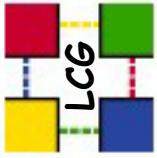
Country	CPU Capacity kSI2k	Disk Capacity TB	Online Tapes TB	Diff. to CPU Capacity announced C-RRB4
Austria	7	1	0	7
Canada	373	25	30	373
CERN	700	50	1000	0
Czech Repu	17	6	5	-13
France	140	27	180	-10
Germany	325	45	77	20
Italy	945	114	200	50
Japan	127	34	0	2
Netherlands	210	10	100	180
Poland	120	5	5	72
Portugal	2	1	0	2
Russia	140	29	21	38
Spain	137	8	46	137
Switzerland	18	5	20	0
UK	2006	219	100	1520
US ¹	863	148	140	783
Sum	6130	727	1924	3161





Data Challenge CPU resources

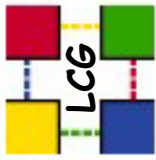




Summary of Phase 2 Costs and Funding

	C-RRB4	C-RRB5
Phase 2 Costs		
Tier 0+1 Installation & Operation	70.0	70.0
Base Physics	13.1	13.1
Additional Personnel	16.7	20.0
Shortfall in Phase 1 Personnel		0.5
Total Estimated Cost of Phase 2	99.8	103.6
Phase 2 Funding		
Physics Base Budget	19.3	19.3
Special Phase 2 Funding	59.4	59.4
Total Funding	78.7	78.7
Shortfall	21.1	24.9
Additional Personnel Committed/Probable		
LCG Phase 1 Overflow	0.9	1.4
EGEE Phase 1		0.9
EGEE Phase 2		2.4
Sum	0.9	4.7
Still to be Found	20.2	20.2





LCG Manpower at CERN

