

Summary of Cost Estimates for the CERN LHC Computing Facility LCG Phase 2 - 2006-08

This model uses as a base the requirements of the experiments as documented in the LCG TDR

2007 assumption: 50 days of data in second half of the year

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Version dated 02sep05 - reduced model protecting Tier-0 but maintaining small Tier-1 and CAF

All costs - MCHF

	year	2006	2007	2008	total	% of total cost	24aug05 2006 estimate	plan-est.cost
Basic Infrastructure		8.5	8.6	3.4	20.5	27%	7.6	0.9
Computer Centre UPS and Cooling		2.0	2.0	0.0	4.0		2.0	0.0
Systems administration services		0.5	0.5	0.5	1.5		0.3	0.2
Physics Database Services		0.5	0.5	0.5	1.5		1.0	-0.5
Grid certification, test and servers		0.8	0.3	0.3	1.4		0.6	0.2
Wide Area Network - line costs, intergration with LAN		2.0	2.0	2.0	6.0		1.0	1.0
LAN infrastructure		2.7	3.3	0.1	6.1		2.7	0.0
Tier-0 Operation		9.6	9.7	12.7	31.9	41%	9.5	0.1
Processors		1.5	1.7	4.1	7.3		1.7	-0.2
Disk systems		0.3	0.6	1.5	2.3		0.5	-0.2
Tape storage infrastructure (including robots, maintenance)		1.5	2.0	3.0	6.5		1.2	0.3
Tape drives		5.5	2.2	0.0	7.7		5.6	-0.1
Tape media		0.8	3.2	4.1	8.1	10%	0.5	0.3
Tier-1 Operation		4.3	3.6	7.5	15.4	20%	2.7	1.6
Processors		1.6	1.1	1.8	4.5		0.9	0.7
Disk systems		1.6	1.3	3.2	6.1		0.9	0.7
Tape storage infrastructure (including robots)		0.5	0.0	1.0	1.5		0.4	0.1
Tape media		0.0	0.6	1.2	1.8		0.0	0.0
LAN - low level connectivity		0.6	0.6	0.3	1.5		0.5	0.1
CERN Analysis Facility		2.1	1.8	5.4	9.4	12%	1.0	1.1
Processors		1.0	0.7	1.7	3.4		0.4	0.6
Disk systems		0.7	0.7	3.2	4.7		0.4	0.3
LAN - low level connectivity		0.4	0.4	0.5	1.3		0.2	0.2
Total cost of CERN Facility		24.5	23.7	29.0	77.2		20.8	3.7
Planning Budget		21.9	22.0	21.9	65.8	85%		
Planned funding 02sep05 - Re-scheduled MTP + IT contribution in 2006		20.8	11.5	18.8	51.1	66%	20.8	