



# WLCG - Tier-2 Accounting Summary

June 2008

Efficiency factor for Tier-2 sites - utilisation 60% of pledge as specified in TDR

CPU usage in month (KSI2K-Hrs)

Federation - Accounting Name	2008 CPU Pledge (KSI2K)	pledge inc. efficiency (KSI2K-Hrs)	Site(s)	ALICE	ATLAS	CMS	LHCb	Total	used as % of pledge
Australia, University of Melbourne			Australia-UNIMELB-LCG2						
<b>AU-ATLAS</b>	<b>150</b>	<b>64,800</b>							
Austria, Austrian Tier-2 Federation			HEPHY-UIBK		20,151			20,151	
<b>AT-HEPHY-VIENNA-UIBK</b>	<b>540</b>	<b>233,280</b>			<b>20,151</b>			<b>20,151</b>	<b>9%</b>
Belgium, Belgian Tier-2 Federation			BEgrid-ULB-VUB						
			BelGrid-UCL			9,663		9,663	
<b>BE-TIER2</b>	<b>1,050</b>	<b>453,600</b>				<b>9,663</b>		<b>9,663</b>	<b>2%</b>
Canada-East Federation			TORONTO-LCG2						
<b>CA-EAST-T2</b>	<b>200</b>	<b>86,400</b>							
Canada-West Federation			ALBERTA-LCG2						
			SFU-LCG2						
			VICTORIA-LCG2		5,276			5,276	
<b>CA-WEST-T2</b>	<b>300</b>	<b>129,600</b>			<b>5,276</b>			<b>5,276</b>	<b>4%</b>
China, IHEP, Beijing			BEIJING-LCG2		22,341	10,923		33,264	
<b>CN-IHEP</b>	<b>400</b>	<b>172,800</b>			<b>22,341</b>	<b>10,923</b>		<b>33,264</b>	<b>19%</b>
Czech Rep., FZU AS, Prague			praguelcg2	39,034	8,976			48,010	
			prague_cesnet_lcg2	3	5,434			5,437	
<b>CZ-Prague-T2</b>	<b>164</b>	<b>70,848</b>		<b>39,037</b>	<b>14,410</b>			<b>53,447</b>	<b>75%</b>
Estonia, NICPB, Tallinn			T2_Estonia			53,377		53,377	
<b>EE-NICPB</b>	<b>150</b>	<b>64,800</b>				<b>53,377</b>		<b>53,377</b>	<b>82%</b>
Finland, NDGF/HIP Tier2			CSC						
<b>FI-HIP-T2</b>	<b>564</b>	<b>243,648</b>							
France, CC-IN2P3 AF			IN2P3-CC-T2	116,923	488,843	107,822	4,198	717,786	
<b>FR-IN2P3-CC-T2</b>	<b>1,500</b>	<b>648,000</b>		<b>116,923</b>	<b>488,843</b>	<b>107,822</b>	<b>4,198</b>	<b>717,786</b>	<b>111%</b>
France, GRIF, Paris			GRIF	313,429	500,774	217,849	13,738	1,045,790	
<b>FR-GRIF</b>	<b>1,642</b>	<b>709,344</b>		<b>313,429</b>	<b>500,774</b>	<b>217,849</b>	<b>13,738</b>	<b>1,045,790</b>	<b>147%</b>
France, LAPP, Annecy			IN2P3-LAPP		120,654		7,085	127,739	
<b>FR-IN2P3-LAPP</b>	<b>600</b>	<b>259,200</b>			<b>120,654</b>		<b>7,085</b>	<b>127,739</b>	<b>49%</b>
France, LPC, Clermont-Ferrand			IN2P3-LPC	132,021	183,088		5,378	320,487	
<b>FR-IN2P3-LPC</b>	<b>800</b>	<b>345,600</b>		<b>132,021</b>	<b>183,088</b>		<b>5,378</b>	<b>320,487</b>	<b>93%</b>
France, SUBATECH, Nantes			IN2P3-SUBATECH	199,460				199,460	
<b>FR-IN2P3-SUBATECH</b>	<b>312</b>	<b>134,784</b>		<b>199,460</b>				<b>199,460</b>	<b>148%</b>
Germany, GSI, Darmstadt			GSI-LCG2	48,396				48,396	
<b>DE-GSI</b>	<b>660</b>	<b>285,120</b>		<b>48,396</b>				<b>48,396</b>	<b>17%</b>
Germany, ATLAS Federation FR/W			UNI-FREIBURG		43,780			43,780	
			wuppertalprod		23,275			23,275	
<b>DE-FREIBURGWUPPERTAL</b>	<b>584</b>	<b>252,288</b>			<b>67,055</b>			<b>67,055</b>	<b>27%</b>

Federation - Accounting Name	2008 CPU Pledge (KSI2K)	pledge inc. efficiency (KSI2K-Hrs)	Site(s)	ALICE	ATLAS	CMS	LHCb	Total	used as % of pledge
Germany, ATLAS Federation, Munich			LRZ-LMU		75,018			75,018	
			MPPMU		49,279		1	49,280	
<b>DE-MCAT</b>	<b>622</b>	<b>268,704</b>			<b>124,297</b>		<b>1</b>	<b>124,298</b>	<b>46%</b>
Germany, ATLAS Federation, DESY			DESY-HH		203,374			203,374	
			DESY-ZN		133,224			133,224	
<b>DE-DESY-ATLAS-T2</b>	<b>583</b>	<b>251,856</b>			<b>336,598</b>			<b>336,598</b>	<b>134%</b>
Germany, CMS Federation			DESY-HH			120,362		120,362	
			DESY-ZN						
			RWTH-Aachen			45,195		45,195	
<b>DE-DESY-RWTH-CMS-T2</b>	<b>1,050</b>	<b>453,600</b>				<b>165,557</b>		<b>165,557</b>	<b>36%</b>
Hungary, HGCC Federation			BUDAPEST	420	852	14,844	13	16,129	
			ELTE						
<b>HU-HGCC-T2</b>	<b>270</b>	<b>116,640</b>		<b>420</b>	<b>852</b>	<b>14,844</b>	<b>13</b>	<b>16,129</b>	<b>14%</b>
India, TIFR, Mumbai			INDIACMS-TIFR						
<b>IN-INDIACMS-TIFR</b>	<b>450</b>	<b>194,400</b>							
India, VECC/SINP, Kolkata			IN-DAE-VECC-01						
<b>IN-DAE-KOLKATA-TIER2</b>	<b>450</b>	<b>194,400</b>							
Israel, HEP-IL Tier-2 Federation			WEIZMANN-LCG2						
			TAU-LCG2						
<b>IL-HEPTier-2</b>	<b>280</b>	<b>120,960</b>							
Italy, INFN ALICE Federation			INFN-BARI	21,729				21,729	
			INFN-CATANIA	45,473				45,473	
			INFN-FRASCATI						
			INFN-LNL-2	23,932				23,932	
			INFN-MILANO	3				3	
			INFN-NAPOLI-ATLAS	5				5	
			INFN-PISA	13				13	
			INFN-ROMA1						
			INFN-ROMA1-CMS						
			INFN-TORINO	8,502				8,502	
<b>IT-ALICE-federation</b>	<b>750</b>	<b>324,000</b>		<b>99,657</b>				<b>99,657</b>	<b>31%</b>
Italy, INFN ATLAS Federation			INFN-BARI		2,623			2,623	
			INFN-CATANIA						
			INFN-FRASCATI		13,329			13,329	
			INFN-LNL-2		5,349			5,349	
			INFN-MILANO		32,920			32,920	
			INFN-NAPOLI-ATLAS		84,043			84,043	
			INFN-PISA		19,452			19,452	
			INFN-ROMA1		101,106			101,106	
			INFN-ROMA1-CMS						
			INFN-TORINO						
<b>IT-ATLAS-federation</b>	<b>750</b>	<b>324,000</b>			<b>258,822</b>			<b>258,822</b>	<b>80%</b>

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Italy, INFN CMS Federation			INFN-BARI			61,367		61,367	
			INFN-CATANIA						
			INFN-FRASCATI						
			INFN-LNL-2			114,270		114,270	
			INFN-MILANO						
			INFN-NAPOLI-ATLAS						
			INFN-PISA			183,686		183,686	
			INFN-ROMA1						
			INFN-ROMA1-CMS			8,342		8,342	
			INFN-TORINO						
<b>IT-CMS-federation</b>	<b>850</b>	<b>367,200</b>				<b>367,665</b>		<b>367,665</b>	<b>100%</b>
Italy, INFN LHCb Federation			INFN-BARI				1,641	1,641	
			INFN-CATANIA						
			INFN-FRASCATI						
			INFN-LNL-2				4,085	4,085	
			INFN-MILANO				544	544	
			INFN-NAPOLI-ATLAS				1,250	1,250	
			INFN-PISA				13,550	13,550	
			INFN-ROMA1						
			INFN-ROMA1-CMS						
			INFN-TORINO						
<b>IT-LHCb-federation</b>	<b>350</b>	<b>151,200</b>					<b>21,070</b>	<b>21,070</b>	<b>14%</b>
Japan, ICEPP, Tokyo			TOKYO-LCG2		495,213			495,213	
<b>JP-Tokyo-ATLAS-T2</b>	<b>1,000</b>	<b>432,000</b>			<b>495,213</b>			<b>495,213</b>	<b>115%</b>
Republic of Korea, KISTI, Daejeon			KR-KISTI-GCRT-01	534				534	
<b>KR-KISTI-T2</b>	<b>100</b>	<b>43,200</b>		<b>534</b>				<b>534</b>	<b>1%</b>
Norway, UNINETT SIGMA Tier-2			NO-NORGRID-T2		101,952			101,952	
<b>NO-NORDGRID-T2</b>	<b>110</b>	<b>47,520</b>			<b>101,952</b>			<b>101,952</b>	<b>215%</b>
Pakistan, Pakistan Tier-2 Federation			NCP-LCG2		637	14	4	655	
			PAKGRID-LCG2		342			342	
<b>PK-CMS-T2</b>	<b>795</b>	<b>343,440</b>			<b>979</b>	<b>14</b>	<b>4</b>	<b>997</b>	<b>0%</b>
Poland, Polish Tier-2 Federation			CYFRONET-IA64						
			CYFRONET-LCG2	133,312	88,588			221,900	
			PSNC	239,729	9,432		1	249,162	
			WARSAW-EGEE			36,434	67	36,501	
<b>PL-TIER2-WLCG</b>	<b>1,250</b>	<b>540,000</b>		<b>373,041</b>	<b>98,020</b>	<b>36,434</b>	<b>68</b>	<b>507,563</b>	<b>94%</b>

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Portugal, LIP Tier-2 Federation			LIP-Coimbra		2,362	12,267		14,629	
			LIP-Lisbon		1,644	8,922		10,566	
<b>PT-LIP-LCG-Tier2</b>	<b>750</b>	<b>324,000</b>			<b>4,006</b>	<b>21,189</b>		<b>25,195</b>	<b>8%</b>
Romania, Romanian Tier-2 Federation			NIHAM	159,732				159,732	
			RO-02-NIPNE		101			101	
			RO-07-NIPNE	6	30,923		4	30,933	
			RO-11-NIPNE				16	16	
<b>RO-LCG</b>	<b>1,300</b>	<b>561,600</b>		<b>159,738</b>	<b>31,024</b>		<b>20</b>	<b>190,782</b>	<b>34%</b>
Russian Fed., Russian Data-Intensive GRID			RU-Protvino-IHEP	39,491	30,454	11,601	3,973	85,519	
			ITEP	87,737	15,290	49,430	12,383	164,840	
			JINR-LCG2	181,760	139,750	142,250	15,111	478,871	
			RRC-KI	262,254	5,987	19,048	4,149	291,438	
			ru-Moscow-SINP-LCG2	43,669	17,257	25,095	317	86,338	
			ru-Moscow-FIAN-LCG2						
			ru-Moscow-MEPHI-LCG2		3,033			3,033	
			RU-SPbSU	588	187			775	
			RU-Phys-SPbSU						
			ru-PNPI	108,072	67,417	16,081	7,310	198,880	
			Ru-Troitsk-INR-LCG2	57,468			593	58,061	
<b>RU-RDIG</b>	<b>3,000</b>	<b>1,296,000</b>		<b>781,039</b>	<b>279,375</b>	<b>263,505</b>	<b>43,836</b>	<b>1,367,755</b>	
Slovenia, SiGNET			SiGNET		17,691			17,691	
<b>SI-SiGNET</b>	<b>300</b>	<b>129,600</b>			<b>17,691</b>			<b>17,691</b>	<b>14%</b>
Spain, ATLAS Federation			lfae		5,267			5,267	
			IFIC-LCG2		48,430			48,430	
			UAM-LCG2		142,873			142,873	
<b>ES-ATLAS-T2</b>	<b>875</b>	<b>378,000</b>			<b>196,570</b>			<b>196,570</b>	<b>52%</b>
Spain, CMS Federation			CIEMAT-LCG2			112,873		112,873	
			IFCA-LCG2			54,978		54,978	
<b>ES-CMS-T2</b>	<b>760</b>	<b>328,320</b>			<b>167,851</b>			<b>167,851</b>	<b>51%</b>
Spain, LHCb Federation			UB-LCG2				2,878	2,878	
			USC-LCG2				18,753	18,753	
<b>ES-LHCb-T2</b>	<b>296</b>	<b>127,872</b>					<b>21,631</b>	<b>21,631</b>	<b>17%</b>
Sweden, SNIC Tier-2			SE-SNIC-T2						
<b>SE-SNIC-T2</b>	<b>981</b>	<b>423,792</b>							
Switzerland, CHIPP			CSCS-LCG2		63,179	130,523	922	194,624	
<b>CH-CHIPP-CSCS</b>	<b>680</b>	<b>293,760</b>			<b>63,179</b>	<b>130,523</b>	<b>922</b>	<b>194,624</b>	<b>66%</b>

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Taipei, Taiwan Analysis Facility Federation			TW-FTT		64,001	31,086		95,087	
<b>TW-FTT-T2</b>	<b>400</b>	<b>172,800</b>			<b>64,001</b>	<b>31,086</b>		<b>95,087</b>	<b>55%</b>
Turkey, Turkish Tier-2 Federation			TR-03-METU		4,254	1,348		5,602	
			TR-10-ULAKBIM		4,333	3,857		8,190	
<b>TR-Tier2-federation</b>	<b>850</b>	<b>367,200</b>			<b>8,587</b>	<b>5,205</b>		<b>13,792</b>	<b>4%</b>
UK, London Tier 2			UKI-LT2-Brunel	13	52,765	59,534	10,689	123,001	
			UKI-LT2-IC-HEP	16	67,656	38,425	38	106,135	
			UKI-LT2-IC-LeSC	4	6,983	24,090	2	31,079	
			UKI-LT2-QMUL		13,974	1	60	14,035	
			UKI-LT2-RHUL		260,826	100,957	9,750	371,533	
			UKI-LT2-UCL-CENTRAL						
			UKI-LT2-UCL-HEP		7,864			7,864	
<b>UK-London-Tier2</b>	<b>1,017</b>	<b>439,344</b>		<b>33</b>	<b>410,068</b>	<b>223,007</b>	<b>20,539</b>	<b>653,647</b>	<b>149%</b>
UK, NorthGrid			UKI-NORTHGRID-LANCS-HEP	4	105,092		7,682	112,778	
			UKI-NORTHGRID-LIV-HEP	6	184,081		1,318	185,405	
			UKI-NORTHGRID-MAN-HEP	3	104,329		12,272	116,604	
			UKI-NORTHGRID-SHEF-HEP	3	79,930		7,425	87,358	
<b>UK-NorthGrid</b>	<b>725</b>	<b>313,200</b>		<b>16</b>	<b>473,432</b>		<b>28,697</b>	<b>502,145</b>	<b>160%</b>
UK, ScotGrid			UKI-SCOTGRID-DURHAM		395		602	997	
			ScotGRID-Edinburgh						
			UKI-SCOTGRID-ECDF		262,672		2,398	265,070	
			UKI-SCOTGRID-GLASGOW		224,786		4	224,790	
<b>UK-ScotGrid</b>	<b>925</b>	<b>399,600</b>			<b>487,853</b>		<b>3,004</b>	<b>490,857</b>	<b>123%</b>
UK, SouthGrid			EFDA-JET						
			UKI-SOUTHGRID-BHAM-HEP	15	4,152		4,687	8,854	
			UKI-SOUTHGRID-BRIS-HEP	2	668	15,932	2,216	18,818	
			UKI-SOUTHGRID-CAM-HEP		31,214		4,948	36,162	
			UKI-SOUTHGRID-OX-HEP		59,702		111	59,813	
			UKI-SOUTHGRID-RALPP	5	120,822	51,538	6,725	179,090	
<b>UK-SouthGrid</b>	<b>959</b>	<b>414,288</b>		<b>22</b>	<b>216,558</b>	<b>67,470</b>	<b>18,687</b>	<b>302,737</b>	<b>73%</b>
Ukraine, Ukrainian Tier-2 Federation			Information to become available in 2008						
<b>UA-</b>	<b>1,166</b>	<b>503,712</b>							
USA, Great Lakes ATLAS T2			AGLT2		602,642			602,642	
<b>US-AGLT2</b>	<b>965</b>	<b>416,880</b>			<b>602,642</b>			<b>602,642</b>	<b>145%</b>
USA, Northeast ATLAS T2			BU_ATLAS_Tier2		174,557			174,557	
<b>US-NET2</b>	<b>665</b>	<b>287,280</b>			<b>174,557</b>			<b>174,557</b>	<b>61%</b>

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USA, Midwest ATLAS T2			MWT2_UC		491,357			491,357	
			MWT2_IU		272,625			272,625	
<b>US-MWT2</b>	<b>1,112</b>	<b>480,384</b>			<b>763,982</b>			<b>763,982</b>	<b>159%</b>
USA, Southwest ATLAS T2			OU_OCHEP_SWT2		155,175			155,175	
			SWT2-CPB		86,203			86,203	
			UTA_SWT2		139,685			139,685	
<b>US-SWT2</b>	<b>1,386</b>	<b>598,752</b>			<b>381,063</b>			<b>381,063</b>	<b>64%</b>
USA, SLAC ATLAS T2			PROD_SLAC		113,300			113,300	
<b>US-WT2</b>	<b>820</b>	<b>354,240</b>			<b>113,300</b>			<b>113,300</b>	<b>32%</b>
USA, Caltech CMS T2			CIT_CMS_T2		321	428,182		428,503	
<b>T2_US_Caltech</b>	<b>1,000</b>	<b>432,000</b>			<b>321</b>	<b>428,182</b>		<b>428,503</b>	<b>99%</b>
USA, Florida CMS T2			Uflorida-PG			10,176		10,176	
			Uflorida-IHEPA			5,689		5,689	
			Uflorida-HPC		3	68,539		68,542	
<b>T2_US_Florida</b>	<b>1,000</b>	<b>432,000</b>			<b>3</b>	<b>84,404</b>		<b>84,407</b>	<b>20%</b>
USA, MIT CMS T2			MIT_CMS		5,109	1,408		6,517	
<b>T2_US_MIT</b>	<b>1,000</b>	<b>432,000</b>			<b>5,109</b>	<b>1,408</b>		<b>6,517</b>	<b>2%</b>
USA, Nebraska CMS T2			Nebraska		3	40,496		40,499	
<b>T2_US_Nebraska</b>	<b>1,000</b>	<b>432,000</b>			<b>3</b>	<b>40,496</b>		<b>40,499</b>	<b>9%</b>
USA, Purdue CMS T2			Purdue-Lear						
			Purdue-RCAC		1	72,053		72,054	
			Purdue-Steele			647		647	
<b>T2_US_Purdue</b>	<b>1,000</b>	<b>432,000</b>			<b>1</b>	<b>72,700</b>		<b>72,701</b>	<b>17%</b>
USA, UC San Diego CMS T2			UCSDT2		2,176	16,139		18,315	
<b>T2_US_UCSD</b>	<b>1,000</b>	<b>432,000</b>			<b>2,176</b>	<b>16,139</b>		<b>18,315</b>	<b>4%</b>
USA, U. Wisconsin CMS T2			GLOW			414,470		414,470	
<b>T2_US_Wisconsin</b>	<b>1,000</b>	<b>432,000</b>				<b>414,470</b>		<b>414,470</b>	<b>96%</b>
<b>Grand Total</b>	<b>46,208</b>	<b>19,961,856</b>		<b>2,263,766</b>	<b>7,134,826</b>	<b>2,951,783</b>	<b>188,891</b>	<b>12,539,266</b>	<b>63%</b>