

GRIDPP - UK Tier 1 Experiment Requests: 2019

UK Tier 1 Requests - 2018  
CPU (HEPSPEC06)

				VO requirements																
		Oct-Dec Av Used/month	Jul 18 Alloc	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Apr 2019	WLCG 18 Pledge	WLCG 17 Pledge	WLCG 19 pledge	
ALICE		5784	6076	6076	6076	6076	7300	7300	7300	7300	7300	7300	7300	7300	7300	7300	6076	4840	7300	
ATLAS		95973	116300	116300	116300	116300	132125	132125	132125	132125	132125	132125	132125	132125	132125	132125	116300	103175	132125	
GMS		32291	48000	48000	48000	48000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	48000	46400	52000	
LHCb		71135	74820	74820	74820	74820	81300	81300	81300	81300	81300	81300	81300	81300	81300	81300	74820	58020	81300	
enmr		0	50	50	50	50	50	50	50	50	50	50	50	50	50	50				
ILC		3931	300	600	600	600	600	600	600	600	600	600	600	600	600	600				
MOBRAIN																				
NA62		2859	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
T2K		114	600	600	600	600	600	600	600	600	600	600	600	600	600	600				
Pheno		795	200	200	200	200	200	200	200	200	200	200	200	200	200	200				
SNO+		0	200	200	200	200	200	200	200	200	200	200	200	200	200	200				
Dteam/Ops		32	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
UK-T0																				
Other		824	10	10	10	10	10	10	10	10	10	10	10	10	10	10				
<b>TOTAL</b>		<b>213738</b>	<b>247556</b>	<b>247856</b>	<b>247856</b>	<b>247856</b>	<b>275385</b>	<b>275385</b>	<b>275385</b>	<b>275385</b>	<b>275385</b>	<b>275385</b>	<b>275385</b>	<b>275385</b>	<b>275385</b>	<b>275385</b>				
LCG Total		205183	245196	245196	245196	245196	272725	272725	272725	272725	272725	272725	272725	272725	272725	272725				
Sum of Non-LHC		8555	2360	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660	<b>245196</b>	<b>212435</b>	272725	
Fabric		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Reserve		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
<b>CURR CAPACITY</b>		<b>267616</b>	<b>267616</b>	<b>267616</b>	<b>267616</b>	<b>267616</b>	<b>302507</b>	<b>302507</b>	<b>302507</b>	<b>302507</b>	<b>302507</b>	<b>302507</b>	<b>302507</b>	<b>302507</b>	<b>302507</b>	<b>302507</b>				
<b>HEADROOM</b>		<b>53878</b>	<b>20060</b>	<b>19760</b>	<b>19760</b>	<b>19760</b>	<b>27122</b>	<b>27122</b>	<b>27122</b>	<b>27122</b>	<b>27122</b>	<b>27122</b>	<b>27122</b>	<b>27122</b>	<b>27122</b>	<b>27122</b>				

Ongoing requirement to be decided

(Includes LSST, LIGO?, SKAtelesc)

Usually 5% - set to zero for now

Estimated Capacity dependant on

TB - Powers of 10!

**UK Tier 1 Requests - 2018**  
**DISK(TeraBytes)**

	Dec 18 deploy	Dec 18 Used	Dec 18 Alloc	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	95% of pledge into disk for each VO. 5% of pledge into tape buffers	WLCG 18 pledge	WLCG 19 Pledge
ALICE CASTOR	544	385	638	638	638	638	0	0	0	0	0	0	0	0	0		638	758
ALICE Echo	100			0	0	0	720	720	720	720	720	720	720	720	720			
ATLAS CASTOR	534	505	8850	0	0	0	0	0	0	0	0	0	0	0	0		8850	11000
ATLAS Echo	5000	7794		8500	8500	8500	10450	10450	10450	10450	10450	10450	10450	10450	10450	8408		
CMS CASTOR	2079	504	4784	0	0	0	0	0	0	0	0	0	0	0	0		4784	5440
CMS Echo	3000	4426		4600	4600	4600	5168	5168	5168	5168	5168	5168	5168	5168	5168	4545		
LHCb CASTOR	5472	5140	7317	0	0	0	0	0	0	0	0	0	0	0	0		7317	8370
LHCb Echo	2500	1840		7000	7000	7000	7952	7952	7952	7952	7952	7952	7952	7952	7952			
ALICE Total	644	385	638	638	638	638	720	720	720	720	720	720	720	720	720			
ATLAS Total	5534	8299	8850	8500	8500	8500	10450	10450	10450	10450	10450	10450	10450	10450	10450			
CMS Total	5079	4930	4784	4600	4600	4600	5168	5168	5168	5168	5168	5168	5168	5168	5168			
LHCb Total	7972	6980	7317	7000	7000	7000	7952	7952	7952	7952	7952	7952	7952	7952	7952			
Castor Tape buffer (Echo)			0	0	0	0	0	0	0	0	0	0	0	0	0			Shared pool
LIGO(echo)				100	100	100	100	100	100	100	100	100	100	100	100			Propose to support LIGO DISCUSS
DUNE??																		
NA62??																		
S3 testing for all VO (Echo)				100	100	100	100	100	100	100	100	100	100	100	100			
IRIS				2346	2346	2346	5346	5346	5346	5346	5346	5346	5346	5346	5346			
Castor Tape buffer (Castor)	1281.0	2139.0	1281	1281	1281	1281	1278	1278	1278	1278	1278	1278	1278	1278	1278			
CASTOR TOTAL	9910	8673	22870	1919.0	1919.0	1919.0	1278.0	1278.0	1278.0	1278.0	1278.0	1278.0	1278.0	1278.0	1278.0			
LCG Total	16729	18754	21589	20738.0	20738.0	20738.0	24290.0	24290.0	24290.0	24290.0	24290.0	24290.0	24290.0	24290.0	24290.0		21589	25568
CURR CASTOR CAPACITY	21828	21828	21828	4730	4730	4730	4730	4730	4730	4730	4730	4730	4730	4730	4730			Need to check the total allocatable
CASTOR HEADROOM	11918.0	13155.0	-1042.0	2811.0	2811.0	2811.0	3452.0	3452.0	3452.0	3452.0	3452.0	3452.0	3452.0	3452.0	3452.0			
Echo TOTAL Allocated				22646	22646	22646	29836	29836	29836	29836	29836	29836	29836	29836	29836			
Echo CURR CAPACITY				31088	31088	31088	31088	31088	31088	31088	31088	31088	31088	31088	31088			Need to check the total allocatable
Echo HEADROOM				8442.0	8442.0	8442.0	1252.0	1252.0	1252.0	1252.0	1252.0	1252.0	1252.0	1252.0	1252.0			
Grand Total Capacity				35818.0	35818.0	35818.0	35818.0	35818.0	35818.0	35818.0	35818.0	35818.0	35818.0	35818.0	35818.0			
Total Headroom				11253.0	11253.0	11253.0	4704.0	4704.0	4704.0	4704.0	4704.0	4704.0	4704.0	4704.0	4704.0			

720.1

10450

5168

7951.5

1278.4

Usually 5% - set to zero for now

Need to check the total allocatable

Need to check the total allocatable

TB - Powers of 10!

UK Tier 1 Requests - 2018 TAPE(TeraBytes)		Dec 18 Used	Dec 18 Alloc	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Apr 2019	WLCG 18 Pledge	WLCG 19 Pledge
ALICE		882.0	818	870	870	870	870	870	870	870	870	870	870	870	870	870	818	754
ATLAS		16980.0	24375	17000	17000	17000	23000	23000	23000	23000	23000	23000	23000	23000	23000	23000	24375	27625
CMS		11601.0	14936	12720	12720	12720	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	14936	17600
LHCb		11570.0	18231	12870	12870	12870	13000	13000	13000	13000	13000	13000	13000	13000	13000	13000	18231	15270
ILC		214.0	400	400	400	400	400	400	400	400	400	400	400	400	400	400		400
MICE		83.0	75	100	100	100	100	100	100	100	100	100	100	100	100	100		
NA62		831.0	800	800	800	800	800	800	800	800	800	800	800	800	800	800		
T2K		835.0	1800	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300		
Pheno		0.0	0	5	5	5	5	5	5	5	5	5	5	5	5	5		
SOLID				100	100	100	100	100	100	100	100	100	100	100	100	100		
SNO+		111.0	50	100	100	100	100	100	100	100	100	100	100	100	100	100		
DUNE				200	200	500	500	500	500	500	500	500	500	500	500	500		
Dteam/Ops		0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
DiRAC		2614.0	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000		
DEAP3600				50	50	50	50	50	50	50	50	50	50	50	50	50		
Nuclear Physics																		
Other		3.8	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0		
Fabric		0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>TOTAL</b>		<b>45724.8</b>	<b>66500.0</b>	<b>51530</b>	<b>51530</b>	<b>51830</b>	<b>61240</b>	<b>61240</b>	<b>61240</b>	<b>61240</b>	<b>61240</b>	<b>61240</b>	<b>61240</b>	<b>61240</b>	<b>61240</b>	<b>61240</b>		
LCG Total 2018		41033.0	58360.0	43460	43460	43460	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870		
LCG Total 2019																52870.0		
CURR CAPACITY		55374	55374	55374	55374	55374	55374	55374	55374	55374	55374	55374	55374	55374	55374	55374		
HEADROOM		9649.2	-11126.0	3844.0	3844.0	3544.0	-5866.0	-5866.0	-5866.0	-5866.0	-5866.0	-5866.0	-5866.0	-5866.0	-5866.0	-5866.0		60495

Note increased allocation (over the pledge value agreed by the PMB Nov 2015)

Increased request from 200 to 1PB in Mar 18 , decided or Plan to expand to 1.8PB during 2016

Planned to increase by 100TB each year

Up to 150TB over time?

Notes:

1. WLCG pledges to be taken from REBUS database at <http://gstat-wlcg.cern.ch/apps/pledges/resources/> when available after October C-RRB

2. GridPP4 2015 numbers from: [http://www.gridpp.ac.uk/docs/gridpp4/GridPP4\\_Proposal\\_Final.pdf](http://www.gridpp.ac.uk/docs/gridpp4/GridPP4_Proposal_Final.pdf). Page 9