

GRIDPP - UK Tier 1 Experiment Requests: 2019

UK Tier 1 Requests - 2019
CPU (HEPSPEC06)

				VO requirements												WLCG 19 pledge	Possible WLCG 2020 pledge	2016 expected	
	Oct-Dec Av Used/month	Jul 18 Alloc		Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Apr 2019			
ALICE	5784	6076		7300	7300	7300	7300	7300	7300	10950	10950	10950	10950	10950	10950	7300	7300	10950	3140
ATLAS	95973	116300		132125	132125	132125	132125	132125	132125	156436	156436	156436	156436	156436	156436	132125	132125	156436	65000
GMS	32291	48000		52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	32000
LHCb	71135	74820		81300	81300	81300	81300	81300	81300	81300	81300	81300	81300	81300	81300	81300	81300	81300	46800
enmr	0	50		50	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	600	600	
MOBRAIN																			
NA62	2859	1000		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	
T2K	114	600		600	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	200	200	
SNO+	0	200		200	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	0	0	
IRIS																			
LSST				1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Other	824	10		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
TOTAL	213738	247556		277385	277385	277385	277385	277385	277385	305346	305346	305346	305346	305346	305346	277385			
LCG Total	205183	245196		272725	272725	272725	272725	272725	272725	300686	300686	300686	300686	300686	300686				
Sum of Non-LHC	8555	2360		4660	4660	4660	4660	4660	4660	4660	4660	4660	4660	4660	4660				
Fabric	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				
CURR CAPACITY	267616	267616		302507	302507	302507	302507	302507	302507	458373	458373	458373	458373	458373	458373	302507			
HEADROOM	53878	20060		25122	25122	25122	25122	25122	25122	153027	153027	153027	153027	153027	153027	25122			

Ongoing requirement to be decided at the resource meeti

LSST placeholder to be monitored.
(Includes LIGO?, SKAtelescope...)

Usually 5% - set to zero for now
Estimated Capacity dependant on

UK Tier 1 Requests - 2019
DISK(TeraBytes)

	Dec 18 deploy	Dec 18 Used	Dec 18 Alloc	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	95% of pledge into disk for each VO. 5% of pledge into tape buffers	WLCG 19 Pledge	Possible WLCG 2020 Pledge
ALICE Echo	100			720	720	720	720	720	720	1320	1320	1320	1320	1320	1320	720	758	1320
ATLAS Echo	5000	7794		10450	10450	10450	10450	10450	10450	13024	13024	13024	13024	13024	13024	10450	11000	13024
CMS Echo	3000	4426		5168	5168	5168	5168	5168	5168	5440	5440	5440	5440	5440	5440	5168	5440	5440
LHCb Echo	2500	1840		7952	7952	7952	7952	7952	7952	8370	8370	8370	8370	8370	8370	7952	8370	8370
LIGO(echo)				100	100	100	100	100	100	100	100	100	100	100	100			
DUNE??																		
NA62??																		
LSST																		
S3 testing for all VO (Echo)				100	100	100	100	100	100	100	100	100	100	100	100			
IRIS				5346	5346	5346	5346	5346	5346	5346	5346	5346	5346	5346	5346			
Castor Tape buffer (Castor)	1281.0	2139.0	1281	1278	1278	1278	1278	1278	1278	1278	1278	1278	1278	1278	1278			
LCG Total	10600	14060	0	24290	24290	24290	24290	24290	24290	28154	28154	28154	28154	28154	28154		25568	28154
Echo TOTAL Allocated				29836	29836	29836	29836	29836	29836	33700	33700	33700	33700	33700	33700			
Echo CURR CAPACITY				31088	31088	31088	31088	31088	31088	38071	38071	38071	38071	38071	38071			
Echo HEADROOM				1252.0	1252.0	1252.0	1252.0	1252.0	1252.0	4371.0	4371.0	4371.0	4371.0	4371.0	4371.0			

Need to check the total allocatable

1407.7

UK Tier 1 Requests - 2019
TAPE(TeraBytes)

	Dec 18 Used	Dec 18 Alloc	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Apr 2019	WLCG 19 Pledge	Possible WLCG 2020 Pledge
ALICE	882.0	818	870	870	870	870	870	870	1131	1131	1131	1131	1131	1131	870	754	1131
ATLAS	16980.0	24375	23000	23000	23000	23000	23000	23000	32708	32708	32708	32708	32708	32708	23000	27625	32708
CMS	11601.0	14936	14960	14960	14960	14960	14960	14960	17600	17600	17600	17600	17600	17600	16000	17600	17600

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

T2K		835.0	1800	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300			Plan to expand to 1.8PB during 2016
Pheno		0.0	0	5	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	100			Planned to increase by 100TB each year
SNO+		111.0	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
DUNE				500	500	500	500	500	500	500	500	500	500	500	500	500	500			DUNE will be covered by IRIS resources
Dteam/Ops		0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
DIRAC		2614.0	5000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	5000			DIRAC will be covered by IRIS resources
DEAP3600				50	50	50	50	50	50	50	50	50	50	50	50	50	50			
Nuclear Physics																				Up to 150TB over time?
LSST				50	50	50	50	50	50	50	50	50	50	50	50	50	50			
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	15.0			
Fabric		0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
TOTAL		45724.8	66500.0	59028	59028	59028	59028	59028	59028	74329	74329	74329	74329	74329	74329	74329	62490			
LCG Total 2018		41033.0	58360.0	51408	51408	51408	51408	51408	51408	66709	66709	66709	66709	66709	66709	66709				
LCG Total 2019																	52870.0			
																		61249		
CURR CAPACITY		58956	58956	58956	58956	58956	58956	58956	58956	85000	85000	85000	85000	85000	85000	85000	58956			
HEADROOM		13231.2	-7544.0	-72.0	-72.0	-72.0	-72.0	-72.0	-72.0	10671.0	10671.0	10671.0	10671.0	10671.0	10671.0	10671.0	-3534			

IRIS Capacity 13000

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. Page 9