	CPU	Disk	Tape	WAN to (E	Disk(MB/s)	Tape (MB/s)	
15-Sep-05		120	229	2*1Gb/s	100	100	
15-Oct-05 Closed Tender for New Tape Robot							
15-Nov-05 Commenced Tender for January 2006/April 2006							
	15-Nov-05 Commence Service Hardening Project						
	5 Delivery of 3D Production Hardware						
	05 Delivery of Resiliant Hardware for Critical Services 05 New Tape Robot Delivered						
		stem in Plac					
	15-Jan-06 Airconditioning Capacity Upgrade 15-Jan-06 Tier-1 Connected to Site Edge Router at 10Gb/s						
			te Edge Ro				
15-Jan-06		120		4*1Gb/s	150	100	
15-Feb-06 3D Service Moves to Production Hardware 15-Feb-06 1st Disk and CPU delivery							
15-Mar-06 Completion of Phase I Service Hardening 15-Mar-06 Test Castor Service Commences - provides back end service to dCache							
15-1//2r-116							
				- provides ba	ck end ser	rice to dCache St	RM
15-Apr-06	2nd Delive	ry of Disk, C	PU	-		rice to dCache Si	RM
15-Apr-06 15-Apr-06	2nd Delive Delivery of	ry of Disk, C (6?) Tape S	PU Storage Brid	- provides ba cks and Media		vice to dCache Si	RM
15-Apr-06 15-Apr-06 15-May-06	2nd Delive Delivery of 1st CPU U	ry of Disk, C (6?) Tape S pgrade In Pi	CPU Storage Brid roduction	cks and Media	a		RM
15-Apr-06 15-Apr-06 15-May-06 15-May-06	2nd Delive Delivery of 1st CPU U 493 (+)448	ry of Disk, C (6?) Tape S pgrade In Pi 3 120	PU Storage Brid roduction <b>229</b>	-		100	RM
15-Apr-06 15-Apr-06 15-May-06 15-May-06	2nd Delive Delivery of 1st CPU U 493 (+)448	ry of Disk, C (6?) Tape S pgrade In Pi 3 120 ograde In Pr	PU Storage Brid roduction 229 roduction	cks and Media	a 150	100	RM
15-Apr-06 15-Apr-06 15-May-06 15-May-06 15-Jul-06	2nd Delive Delivery of 1st CPU U 493 (+)444 1st Disk Up	ry of Disk, C (6?) Tape S pgrade In Pi 3 120 ograde In Pr 120 (+)10	Storage Brid roduction 229 roduction 3 229	cks and Media  4*1Gb/s  4*1Gb/s	150 150		RM
15-Apr-06 15-Apr-06 15-May-06 15-May-06 15-Jul-06	2nd Delive Delivery of 1st CPU U 493 (+)444 1st Disk Up Production	ry of Disk, C (6?) Tape S pgrade In Pi 3 120 ograde In Pr 120 (+)10 Service Co	EPU Storage Brid roduction 229 roduction 3 229 mmences of	4*1Gb/s 4*1Gb/s n New Tape	150 150 Robot	100	RM
15-Apr-06 15-Apr-06 15-May-06 15-May-06 15-Jul-06 15-Jul-06	2nd Delive Delivery of 1st CPU U 493 (+)444 1st Disk Up Production Production	ry of Disk, C (6?) Tape S pgrade In Pr 3 120 ograde In Pr 120 (+)10 Service Cor Castor 2 Se	SPU Storage Brid roduction 229 roduction 3 229 mmences dervice (best	cks and Media  4*1Gb/s  4*1Gb/s	150 150 Robot	100	RM
15-Apr-06 15-Apr-06 15-May-06 15-May-06 15-Jul-06 15-Jul-06	2nd Delive Delivery of 1st CPU U 493 (+)444 1st Disk Up Production Production	ry of Disk, C (6?) Tape S pgrade In Pi 3 120 ograde In Pr 120 (+)10 Service Co	SPU Storage Brid roduction 229 roduction 3 229 mmences dervice (best	4*1Gb/s 4*1Gb/s n New Tape	150 150 Robot	100	RM
15-Apr-06 15-Apr-06 15-May-06 15-May-06 15-Jul-06 15-Jul-06 15-Jul-06	2nd Delive Delivery of 1st CPU U 493 (+)444 1st Disk Up " Production Production 2nd CPU U	ry of Disk, C (6?) Tape S pgrade In Pr 3 120 ograde In Pr 120 (+)10 Service Cor Castor 2 Se	SPU Storage Brid roduction 229 roduction 3 229 mmences of cervice (best	4*1Gb/s 4*1Gb/s 4*1Gb/s on New Tape	150 150 Robot nate)	100	RM
15-Apr-06 15-Apr-06 15-May-06 15-May-06 15-Jul-06 15-Jul-06	2nd Delive Delivery of 1st CPU U 493 (+)444 1st Disk Up " Production Production 2nd CPU U	ry of Disk, C (6?) Tape S pgrade In Pr 3 120 ograde In Pr 120 (+)10 Service Cor Castor 2 Se	SPU Storage Brid roduction 229 roduction 3 229 mmences dervice (best	4*1Gb/s 4*1Gb/s n New Tape	150 150 Robot	100	RM
15-Apr-06 15-Apr-06 15-May-06 15-May-06 15-Jul-06 15-Jul-06 15-Jul-06 15-Jul-06	2nd Delive Delivery of 1st CPU U 493 (+)444 1st Disk Up " Production Production 2nd CPU U 980	ry of Disk, C (6?) Tape S pgrade In Pr 3 120 ograde In Pr 120 (+)10 Service Cor Castor 2 Se	SPU Storage Bridge Production 229 roduction 3 229 mmences of cervice (besite Production 664	4*1Gb/s 4*1Gb/s 4*1Gb/s on New Tape	150 150 Robot nate)	100	RM

## Notes

- 1) Bandwidth to disk is not limited by hardware capability. Rate depends on capability of software stack
- 2) Tape capacity is an upper limit. Capacity mayl be purchased on-demand as required to meet commitments
- 3) Exact date for 10Gb/s network depends on UKERNAs SJ5 procurement
- 4) tender due for launch in November will deliver 448KSI2K of CPU and 103TB disk available in May and July respectivly. Allocation between LHC and other experiments has yet to be made by the GRIDPP User Board but typically 50-70% of additional capacity prefixed by (+) would be made available. By July we will reach MoU commitments on CPU and by August for disk