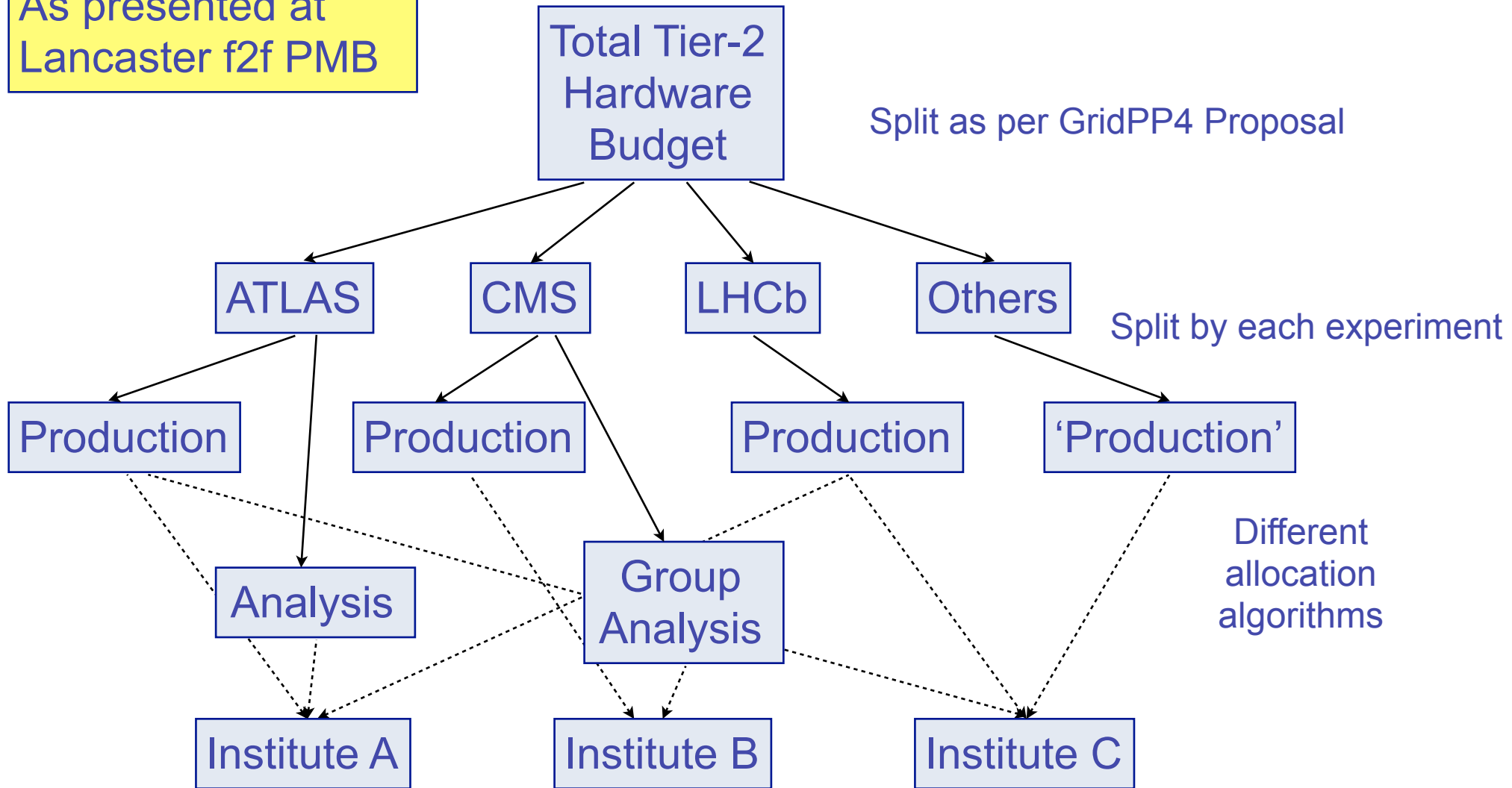


As presented at
Lancaster f2f PMB



Final allocations reviewed by PMB

Operationally probably
won't be quite like this

For ATLAS Analysis e.g.

As presented at
Lancaster f2f PMB

Figure of Merit = TB Days

x [Availability * W_1 + (1 - W_1)]	'Availability'
x [(Average Response Time/Response Time) * W_2 + (1 - W_2)]	'Responsiveness'
x [Min(Ave(TB)/Pledge(TB), 1) * W_3 + (1 - W_3)]	'Meeting pledge'
x [(TB/Total(TB)*Total(£)/£) * W_4 + (1 - W_4)]	'Value for money'
x ...	

$W_{1,2,3,4}$ are weights 0 to 1 (if necessary). Total() is sum over all sites.

Since then input from CMS (Dave Colling) and ATLAS (Graeme Stewart)

A number of metrics each worth a total number of 'points'
Resources allocated on total points

Dave Colling

Average data on disk as seen by PhEDEx (in TB)
Source: PhEDEx web pages
Total points: 70

CPU used on analysis (in normalised CPU days)
Source: Dashboard
Total Points: 100

CPU used on MC Production (in normalised CPU days)
Source: Dashboard
Total Points: 30

Site Readiness (percentage ready)
Source: Not easily available and will work on this
Total Points: 100

Analysis Groups supported
Source: CRB minutes
Total Points: 50

Points system seems useful
- transparent, bounded and
probably relatively stable

Graeme Stewart

TB/days provided by the site - sum of ATLAS space tokens
Source: ATLAS DQ2 Accounting



HS06/days x ATLAS share
Source: WLCG accounting



Site availability from ATLAS SRMv2 SAM tests
Source: ATLAS Dashboard



Analysis - Total jobs, success rates. All test jobs will be excluded
Source: ATLAS Dashboard



Production - Job totals and success rates
Source: ATLAS Dashboard



Reliability - Time to respond to GGUS tickets
Source: GGUS(?)

Have managed to
measure most of these



<http://pprc.qmul.ac.uk/~lloyd/gridpp/metrics.html>

UK Grid Metrics at 24 Mar 2011 17:59:17

To be determined

Final Answer

ATLAS

Site	★ ★ Disk						★ ★ CPU					★ Analysis Jobs					★ Production Jobs					Points	
	Total	Used	Ave	Avail	Frac	Points	Total	Ave	Avail	Frac	Points	Total	Success	Perc	Frac	Points	Total	Success	Perc	Frac	Points	Total	Frac
UKI-LT2-BRUNEL	4	2	4						100.0%								10786	8337	77%	1%			
UKI-LT2-IC-HEP	17	1	17				384.0	384	100.0%	0%							21608	17593	81%	3%			
UKI-LT2-QMUL	411	253	411	63.1%	6%	6.5	20429.0	20429	100.0%	18%	9.1	22328	18227	82%	14%	6.9	80145	71022	89%	12%	3.3	25.8	11.5%
UKI-LT2-RHUL	266	139	266	95.0%	6%	6.3	31.0	31	100.0%	0%	0.0	9371	6904	74%	5%	2.6	27591	24193	88%	4%	1.1	10.1	4.5%
UKI-LT2-UCL-HEP	20	3	20	96.2%	0%	0.5	485.0	485	100.0%	0%	0.2	2756	1449	53%	1%	0.6	8089	7599	94%	1%	0.4	1.6	0.7%
UKI-NORTHGRID-LANCS-HEP	616	161	603	96.1%	14%	14.5	26051.0	26051	100.0%	23%	11.6	33784	16582	49%	13%	6.3	74872	61818	83%	10%	2.9	35.3	15.7%
UKI-NORTHGRID-LIV-HEP	249	140	249	95.8%	6%	5.9	5286.0	5286	100.0%	5%	2.4	12516	11382	91%	9%	4.3	42778	39602	93%	7%	1.8	14.5	6.4%
UKI-NORTHGRID-MAN-HEP	516	176	516	95.8%	12%	12.3	13358.0	13358	100.0%	12%	6.0	23990	20494	85%	16%	7.8	86629	77067	89%	13%	3.6	29.7	13.2%
UKI-NORTHGRID-SHEFF-HEP	225	97	225	92%	5%	5.5	4164.0	4164	100.0%	4%	2.0	1255	874	69%	1%	3.3	1737	2565	83%	5%	1.4	12.1	5.4%
UKI-SCOTGRID-DURHAM	10	2	10	61.1%	0%		1995.0	1995	100.0%	2%							44913	40583	90%	7%			
UKI-SCOTGRID-GLASGOW	1175	322	1175	98.9%	29%	29.0	14909.0	14909	100.0%	13%	6.7	22165	18978	86%	14%	7.2	118560	109434	92%	18%	5.1	47.9	21.3%
UKI-SCOTGRID-ECDF	146	20	176	97.8%	4%	4.3	17881.0	17881	100.0%	16%	8.0	1718	658	38%	1%	0.3	53358	50447	95%	8%	2.3	14.9	6.6%
UKI-SOUTHGRID-BHAM-HEP	189	73	189	90.8%	4%	4.3	1010.0	1010	100.0%	1%	0.5	7255	5987	83%	5%	2.3	12061	11469	95%	2%	0.5	7.5	3.3%
UKI-SOUTHGRID-CAM-HEP	143	46	143	93.8%	3%	3.3	1527.0	1527	100.0%	1%	0.7	3781	1182	31%	1%	0.4	8271	7645	92%	1%	0.4	4.8	2.1%
UKI-SOUTHGRID-OX-HEP	123	90	130	95.4%	3%	3.1	3839.0	3839	100.0%	3%	1.7	31783	18913	60%	14%	7.2	20824	17788	85%	3%	0.8	12.8	5.7%
UKI-SOUTHGRID-RALPP	201	93	201	91.6%	5%	4.6	2768.0	2768	100.0%	2%	1.2	2434	2003	82%	2%	0.8	33930	31238	92%	5%	1.4	8.0	3.6%
Total	4311	1618	4336	90.6%	100%	100.0	114417.0	114417	100.0%	100%	50.0	188146	131505	70%	100%	50.0	676127	605460	90%	100%	25.0	225.0	100.0%
Points						100					50					50						25	225

Only based on a couple of days data

Relative points to be adjusted

LHCb

HS06/days x LHCb share
Source: WLCG accounting

Production - Job totals and success rates
Source: ??

Other Experiments

HS06/days
Source: WLCG accounting ?

Jobs run
Source: ??

Something similar for
other experiments?

Believe we have a baseline solution for ATLAS and CMS

Probably something similar for LHCb and others

Maybe need to add:
Value for money?
Pledge adherence?

(How) do we reward ATLAS use of CMS resources and vice versa?

When do we start?

Use 'Others' allocation?

1st May for 6 months?