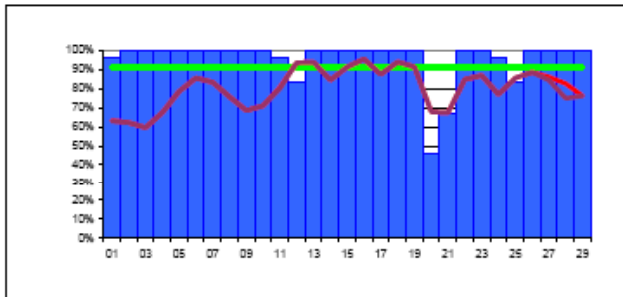




# Reliability Reports – June 2007

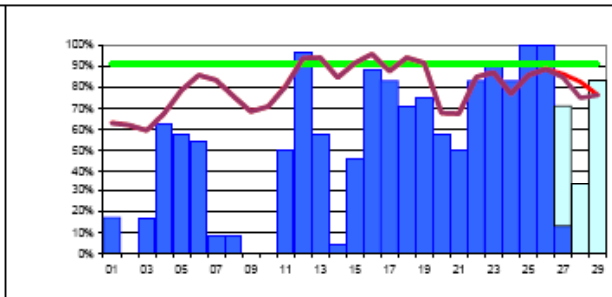
[http://lcg.web.cern.ch/LCG/MB/availability/site\\_reliability.pdf](http://lcg.web.cern.ch/LCG/MB/availability/site_reliability.pdf)

	CERN-PROD	FZK-LCG2	IN2P3-CC	INFN-T1	RAL-LCG2	SARA-MATRIX	TRIUMF-LCG2	Taiwan-LCG2	USCMS-FNAL-WC1	PIC	BNL-LCG2
1	96%	17%	92%	83%	58%	33%	63%	71%	50%	42%	92%
2	100%	0%	100%	100%	100%	0%	100%	0%	100%	0%	83%
3	100%	17%	75%	100%	100%	0%	100%	0%	96%	0%	67%
4	100%	63%	100%	54%	100%	8%	100%	17%	100%	0%	100%
5	100%	58%	100%	71%	100%	0%	100%	88%	100%	54%	92%
6	100%	54%	100%	92%	96%	29%	100%	100%	96%	79%	96%
7	100%	8%	100%	75%	92%	79%	100%	100%	96%	96%	71%
8	100%	8%	100%	0%	83%	100%	100%	100%	54%	88%	100%
9	100%	0%	100%	0%	79%	100%	96%	100%	0%	79%	100%
10	100%	0%	100%	21%	88%	100%	88%	100%	0%	83%	100%
11	96%	50%	54%	92%	96%	73%	100%	96%	42%	88%	100%
12	83%	96%	96%	92%	100%	83%	100%	100%	83%	96%	100%
13	100%	58%	100%	83%	100%	100%	100%	100%	100%	96%	96%
14	100%	4%	100%	63%	96%	100%	100%	100%	92%	75%	100%
15	100%	46%	100%	92%	92%	100%	100%	100%	88%	88%	100%
16	100%	88%	100%	92%	100%	92%	100%	100%	96%	83%	100%
17	100%	83%	100%	67%	100%	21%	100%	100%	96%	96%	100%
18	100%	71%	100%	100%	100%	67%	100%	100%	96%	100%	100%
19	100%	75%	38%	96%	100%	100%	100%	100%	100%	100%	96%
20	46%	58%	0%	46%	33%	100%	100%	100%	67%	96%	100%
21	67%	50%	29%	54%	0%	100%	100%	96%	54%	100%	92%
22	100%	83%	67%	54%	42%	100%	100%	100%	88%	100%	100%
23	100%	92%	100%	13%	75%	100%	96%	100%	96%	100%	83%
24	96%	83%	96%	0%	92%	92%	83%	88%	46%	92%	79%
25	83%	100%	100%	63%	100%	100%	92%	100%	33%	100%	71%
26	100%	100%	100%	38%	100%	100%	54%	100%	83%	100%	100%
27	100%	31%	100%	58%	100%	100%	88%	100%	79%	100%	92%
28	100%	0%	100%	100%	100%	100%	100%	54%		75%	96%
29	100%	0%	100%	100%	100%	88%	100%	0%	100%	50%	100%
30	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%
ility	96%	46%	88%	67%	87%	75%	95%	80%	77%	79%	94%



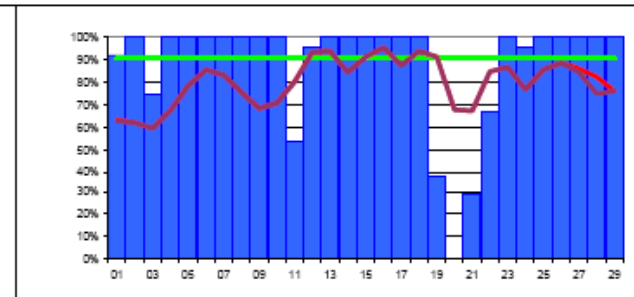
**CERN**

**96%**



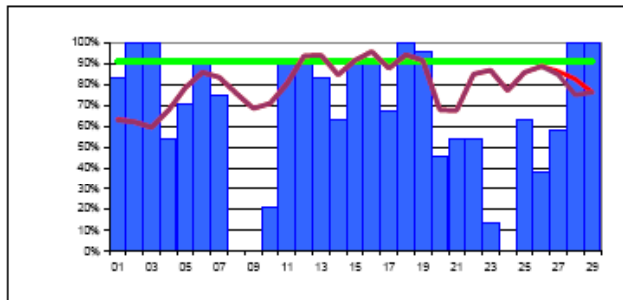
**GridKa/FZK**

**46%**



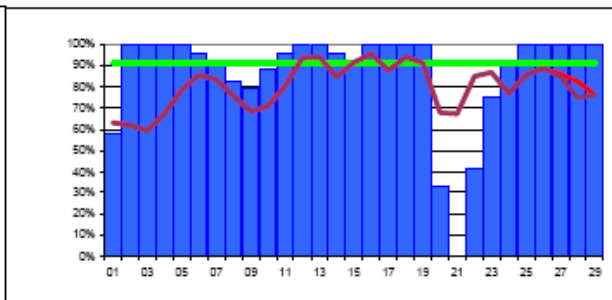
**IN2P3**

**88%**



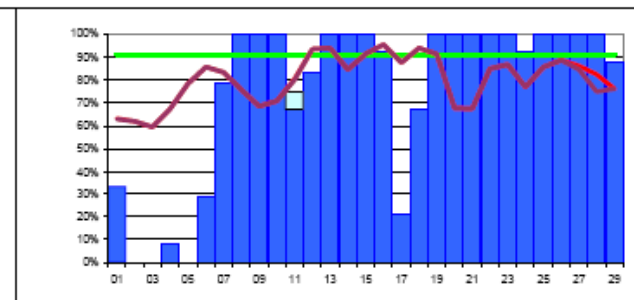
**INFN/CNAF**

**67%**



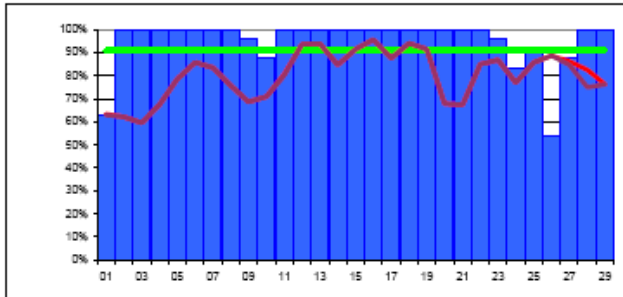
**RAL**

**87%**



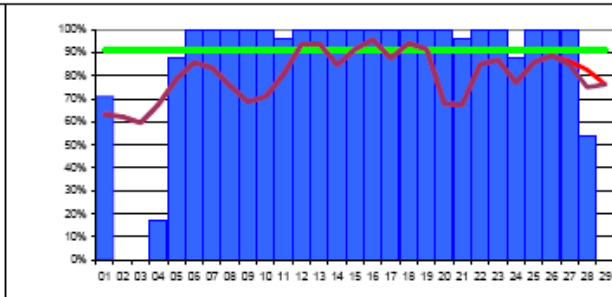
**SARA-NIKHEF**

**75%**



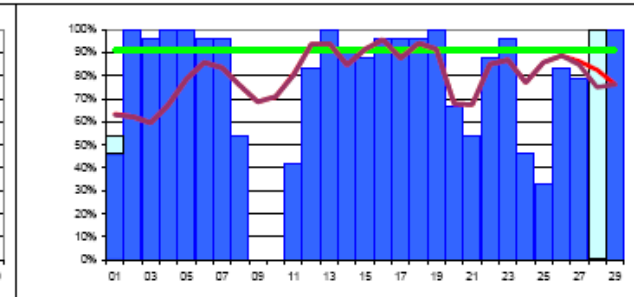
**TRIUMF**

**95%**



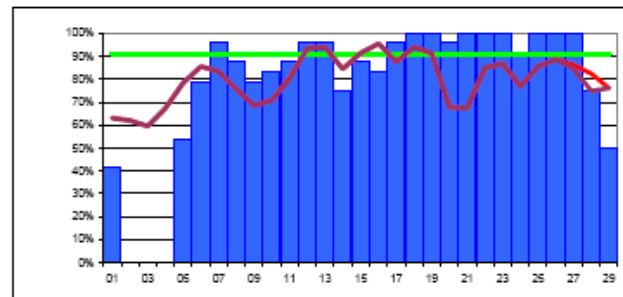
**ASGC**

**80%**



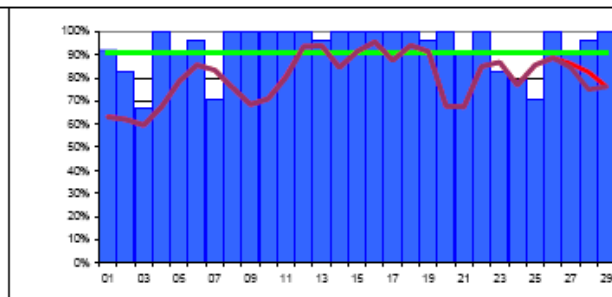
**FNAL**

**77%**



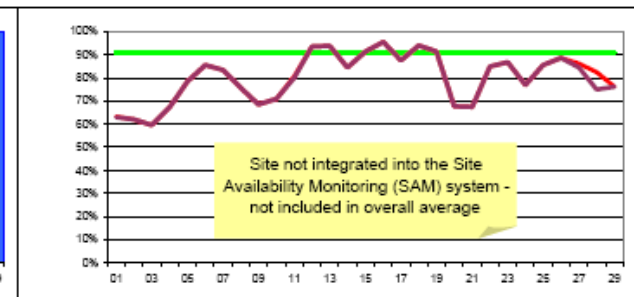
**PIC**

**79%**



**BNL**

**94%**



**NDGF**

**n/a**



# January 07 to June 07

Site	Jan 07	Feb 07	Mar 07	Apr 07	May 07	Jun 07
CERN	99	91	97	96	90	96
GridKa/FZK	85	90	75	79	79	48
IN2P3	96	74	58	95	94	88
INFN/CNAF	75	93	76	93	87	67
RAL	80	82	80	87	87	87
SARA-NIKHEF	93	83	47	92	99	75
TRIUMF	79	88	70	73	95	95
ASGC	96	97	95	92	98	80
FNAL	84	67	90	85	77	77
PIC	86	86	96	95	77	79
BNL	90	57*	6*	89	98	94
NDGF	n/a	n/a	n/a	n/a	n/a	n/a
Reliability Target	88	88	88	88	88	91
Target + 90% target	5 + 5	6 + 3	4 + 1	7 + 3	6 + 3	3 + 2

The target of 91% for the best 8 sites not reached

3 Sites > 91% (target)

3+2 Sites > 82% (90% of target)

(in April 7, May 6)

(in April 7+3, May 6+3)

\* BNL: LCG/gLite CE probed by SAM but not installed with the SL4 upgrade



# Summary of Issues and Solutions Reported

Description	SITE: Problem → Solution
SRM/MSS/ DB	CERN: CASTOR information provider (wrong record published) → Rolled back to previous version INFN: Very many days of CASTOR stager overload → Restarted CASTOR PIC: dCache overload caused several problems → Upgrade to dCache 1.7 BNL: Users tried SRMCP from outside to the internal write pools → firewall conduits configured
BDII	ASGC: Top-level BDII timeouts → Upgraded to BDII 3.8.8-1
Operational Issues	CERN: Configuration errors in the SRM → Fixed the configuration INFN: Power cut for several days, affecting all services FNAL: Cooling outages FNAL: Failure of DNS at CERN FZK: About 25 days well under targets, but no reports at the Operations meeting. IN2P3: Certificate expired, SAM failing for 2 days. PIC: Wrong manual CE configuration → Fixed the configuration RAL: OPN link to CERN was down for 4 days SARA: Wrong configuration of SGM mappings, failing tests for 6 days SARA: /root file system filled on the dCache pools SARA: NAT to Internet for WN not functioning. TRIUMF: Certificate expired
Tools (SAM, GOCDDB)	CERN: Scheduled down-time CASTOR stager but other SAM tests failed CERN: SAM test stopped in the afternoon → Restarted next morning ASGC, PIC: replica-management test fails because of wrong ACL permissions (same as last month) ASGC: Inconsistent information in GOCDDB after the migration, DPM node unreachable FNAL: Several SAM failures while site working correctly for CMS IN2P3: replica-management tests failed no explanation IN2P3: Scheduled downtimes not taken into account by SAM



## Summary – June 2007

- > 91% (target) 3 sites May 6 Apr 7
- > 82% (90% of target) 5 sites May 8 Apr 10
  
- Average 8 best sites: 87% May 94% Apr 92%
- Average all sites: 80% May 89% Apr 89%
  
- **Main Issues**
  - Infrastructure and Operational Issues are increasing
  - SAM tests reliability is questioned in some reports
  
  - SE and BDII issues seem better now
  
- **The issues should be followed (actually anticipate)**
  - File systems full, certificate expired, network configuration problems, DNS changes
  - The Monitoring working group will look into probes that should detect these issues