

Targets and Milestones for 2007

1 Data Rates for 2007

Based on the data rates for 2008 in the Megatable ([link](#))

Targets to be achieved by June 07

1.1 CMS

- 65% Tier-0 → Tier-1 peak rate for a week
- Tier-1 → each Tier-2 sustain 10 MB/s for 12 hours
- Each Tier-2 → Tier-1 sustain 5 MB/s for 12 hours

Aggregate for the Tier-1, SIMULTANEOUSLY:

- Tier-0 → Tier-1 – 50% of average rate for 12 hours
- Tier-1 → Tier-2s – 50% of sum of average rate for 12 hours
- Tier-2s → Tier-1 – 50% of sum of average rate for 12 hours

ASGC		CMS							
Tier-0 → Tier-1		Belgium		China		Finland		FR/GRIF	
65% peak rate		to from		to from		to from		to from	
65% of 26.3 = 17.1 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s	
		D/CMSF		I/TIFR		INFN		Pakistan	
		in out		to from		to from		to from	
		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s	
		Poland		Portugal		RUIRDIG		SP/CMS	
		to from		to from		to from		to from	
		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s	
Simultaneously		CH/CSCS		Taipei		UK		Ukraine	
		to from		to from		to from		to from	
		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s	
Tier-0 → Tier-1		US/Caltech		US/Florida		US/MIT		US/Nebraska	
50% average rate		to from		to from		to from		to from	
50% of 13.2 = 6.6 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s	
Tier-1 → all Tier-2s		US/Purdue		US/S.Diego		to from		to from	
60% average rate		to from		to from		to from		to from	
50% of 76.0 = 38 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s	
all Tier-2s → Tier-1		to from		to from		to from		to from	
50% average rate		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s		10 MB/s 5 MB/s	
50% of 9.0 = 4.5 MB/s									

1.2 ATLAS

- 65% Tier-0 → Tier-1 peak rate for a week
- Tier-1 → each Tier-2 sustain 65% peak rate for 12 hours
- Each Tier-2 → Tier-1 sustain 65% peak rate for 12 hours

Aggregate for the Tier-1 SIMULTANEOUSLY:

LHC Computing Grid Project

- Tier-0 → Tier-1 – 50% of average rate for 12 hours
- Tier-1 → Tier-2s – 50% of sum of average rate for 12 hours
- Tier-2s → Tier-1 – 50% of sum of average rate for 12 hours

2 Site Reliability – Tier-0, Tier-1

2007 SAM targets monthly average

Target for each site

- 91% - by Jun 07
- 93% - by Dec 07

Taking 8 best sites

- 93% - by Jun 07
- 95% - by Dec 07

Tier-2s – Begin reporting the monthly averages, but do not set targets yet

3 Other Site Milestones in 2007

3.1 24x7 milestones

- Definition of the levels of support and rules to follow, depending on the issue/alarm - **February**
- Support and operation scenarios tested - **April**

3.2 VOBoxes

- Service level, backup and restore defined- **March**
- VOBoxes service implemented at the site - **April**

3.3 Job Priorities

- Mapping of the Job priorities on the batch software of the site - **April**
- Configuration and maintenance of the jobs priorities as defined by the VOs - **June**

3.4 3D Service milestones

- Oracle Service in production, and certified by the experiment(s) - streams interventions CERN working-hours only - **March**
- Conditions DB in operations (ATLAS, CMS, and LHCb) - **April**

3.5 Procurement

At the beginning of each quarter the capacity required by the experiments (as defined in Harry's table) installed and in production

3.6 SRM 2.2 Storage Systems

Once the Storage Systems have SRM 2.2 certified then we will agree dates for each site to provide:

SRM 2.2 endpoint with storage classes as specified in the Megatable

LHC Computing Grid Project

Site Milestones	CERN	ASGC	CC-IN2P3	FZK	INFN	NDGF	PIC	RAL	SARA NIKHEF	TRIUMF	US-ATLAS	US-CMS
Feb07 24x7 defined		15 01 2007	10 01 2007	15 02 2007								
Feb07 VO Box Services defined												
Apr07 Job implemented Priorities		ATLAS	ATLAS CMS		LHCb ALICE		CMS					
Apr 07 24x7 in operations and tested												
Jun07 Site Reliability 91%												
Jun07 Job Priorities Tested/used experiments by												
[...etc...]												

4 Experiment Milestones

4.1 Job Submission Rates

CMS (from CSA07)

- Apr 07 50K jobs/day
- May 07 75K jobs/day
- Jun 07 100K jobs/day

•ATLAS

To be defined - similar values?

5 Issues to follow during all 2007

3D in Service, tested by ATLAS and LHCb

3D in production, used for the condition DB

SRM 2.2 implementations , check through the tests

SRM 2.2 tested by the experiments

LHC Computing Grid Project

SLC4

gLite CE

new RB

FTV v2

VOMS scheduling priorities

24x7 definition and

24x7 test scenario

VO Boxes SLA

VO boxes implementation