



CCIN2P3 Network

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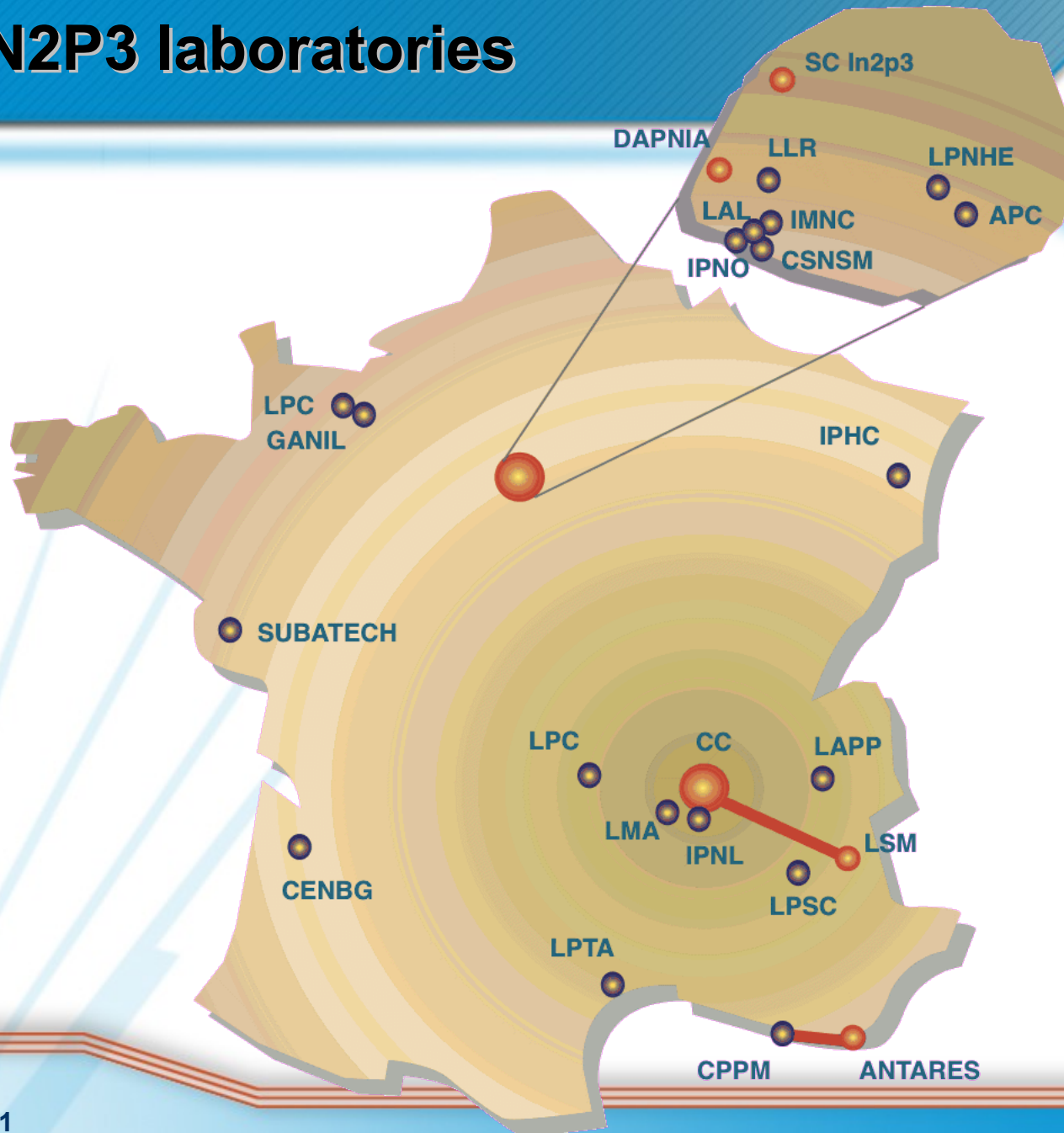
November 2007

dapnia

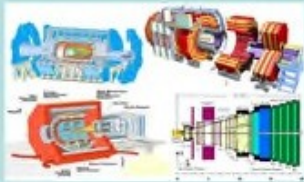
cea

saclay

IN2P3 laboratories



LHC Large Hadron Collider



Trigger and
Data
Acquisition
System

Tier-0

10 Gbps links
Optical Private Network

Tier-1

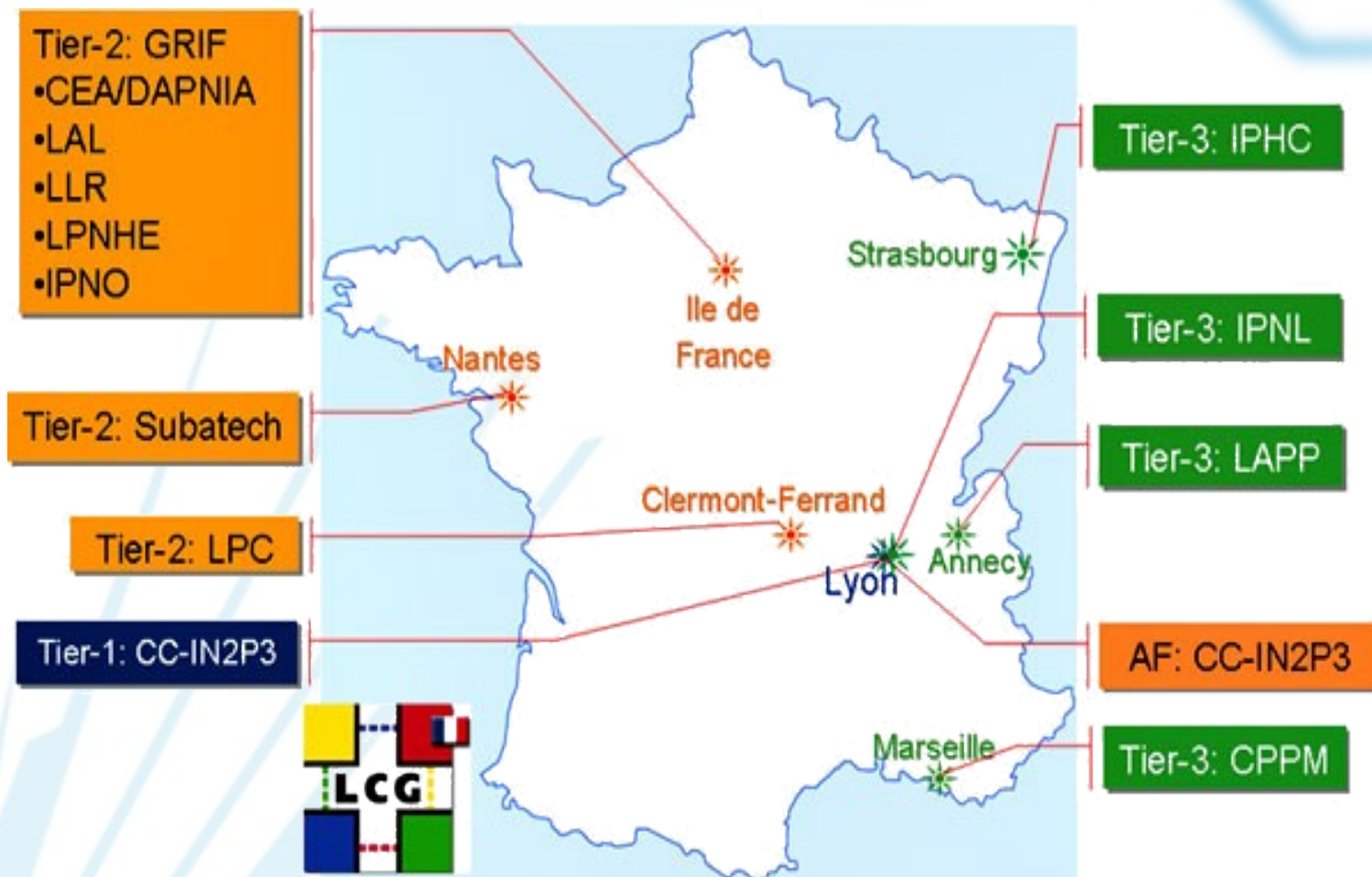


General
Purpose/Academic/
Research Network

Tier-2



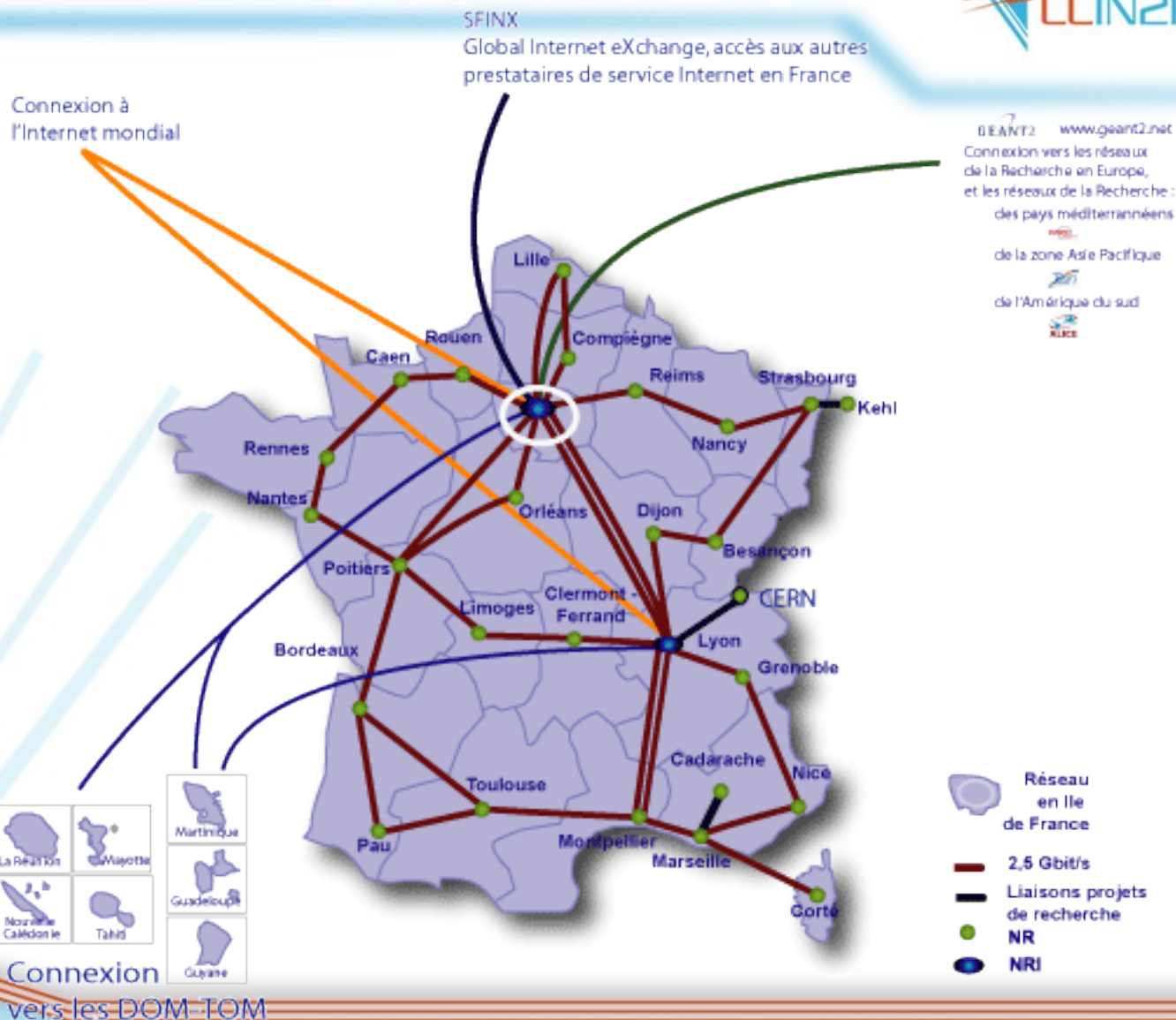
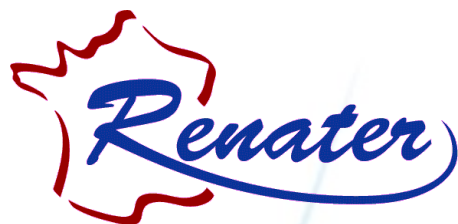
LCG LHC Computing Grid



+ Foreign Tiers2 : Belgium, Romania, Japan, China

CMS Tiers2 : GRIF, Belgium, China

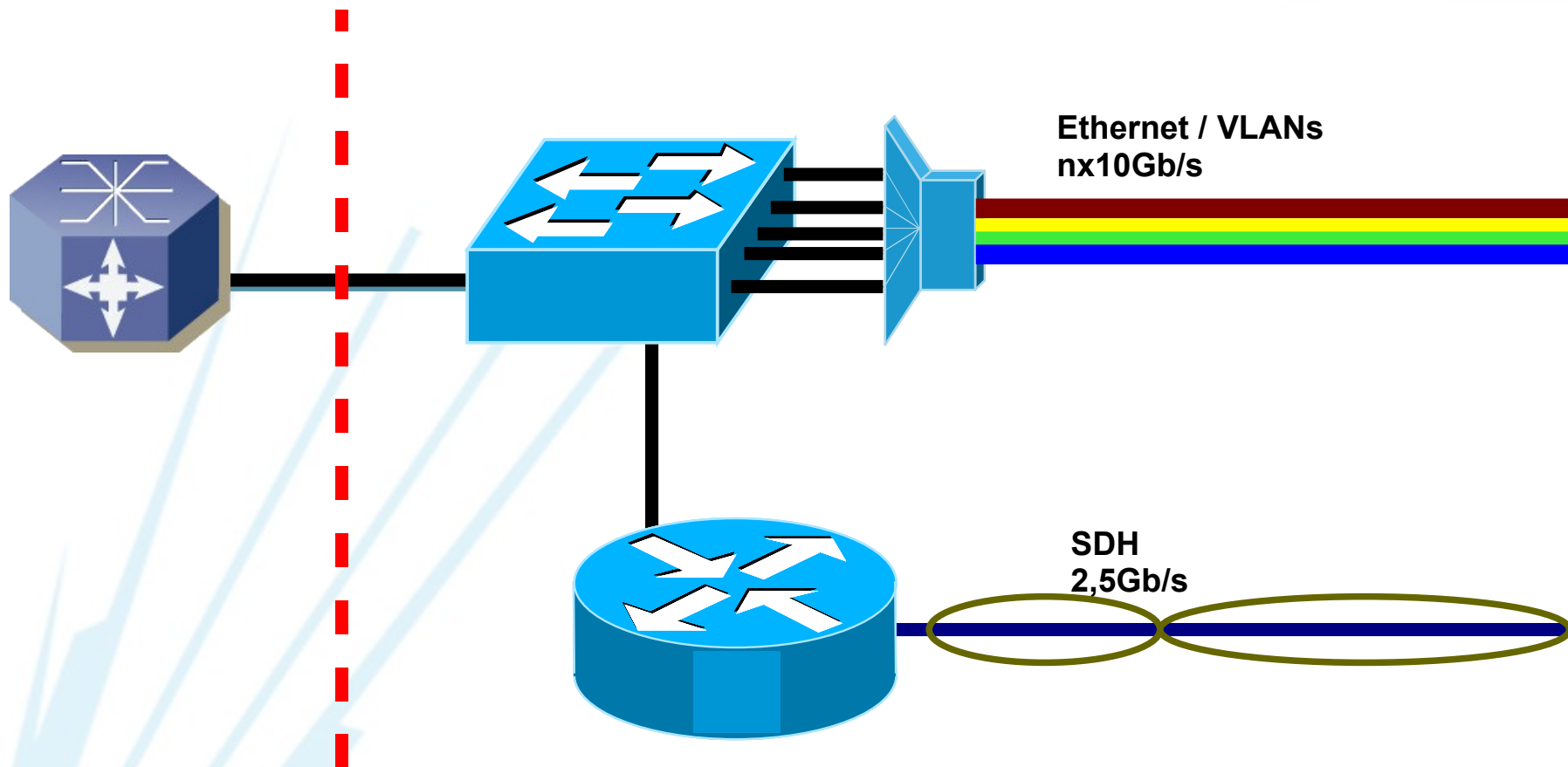
RENATER4



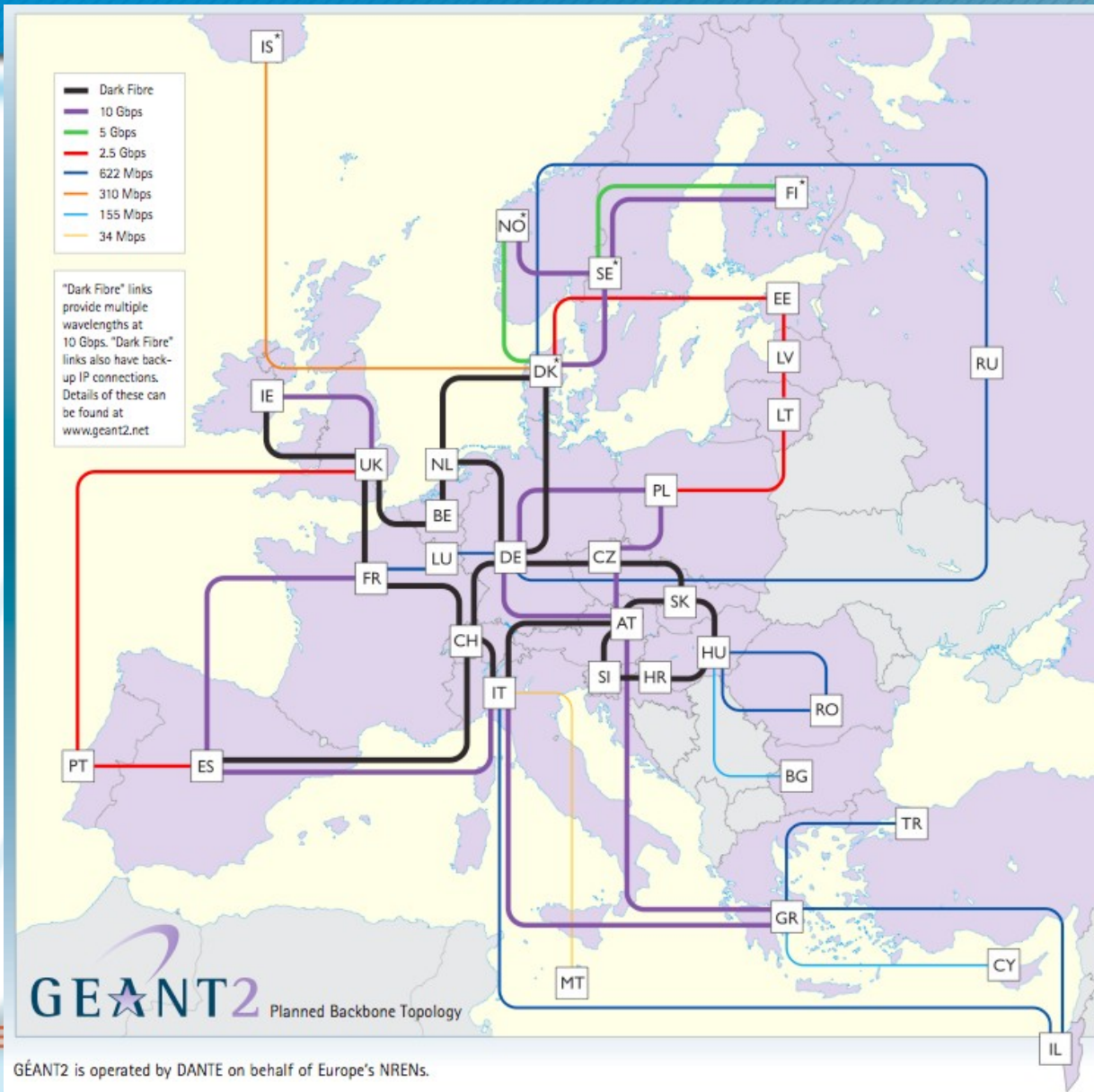
RENATER4 Dark Fibers



NR RENATER

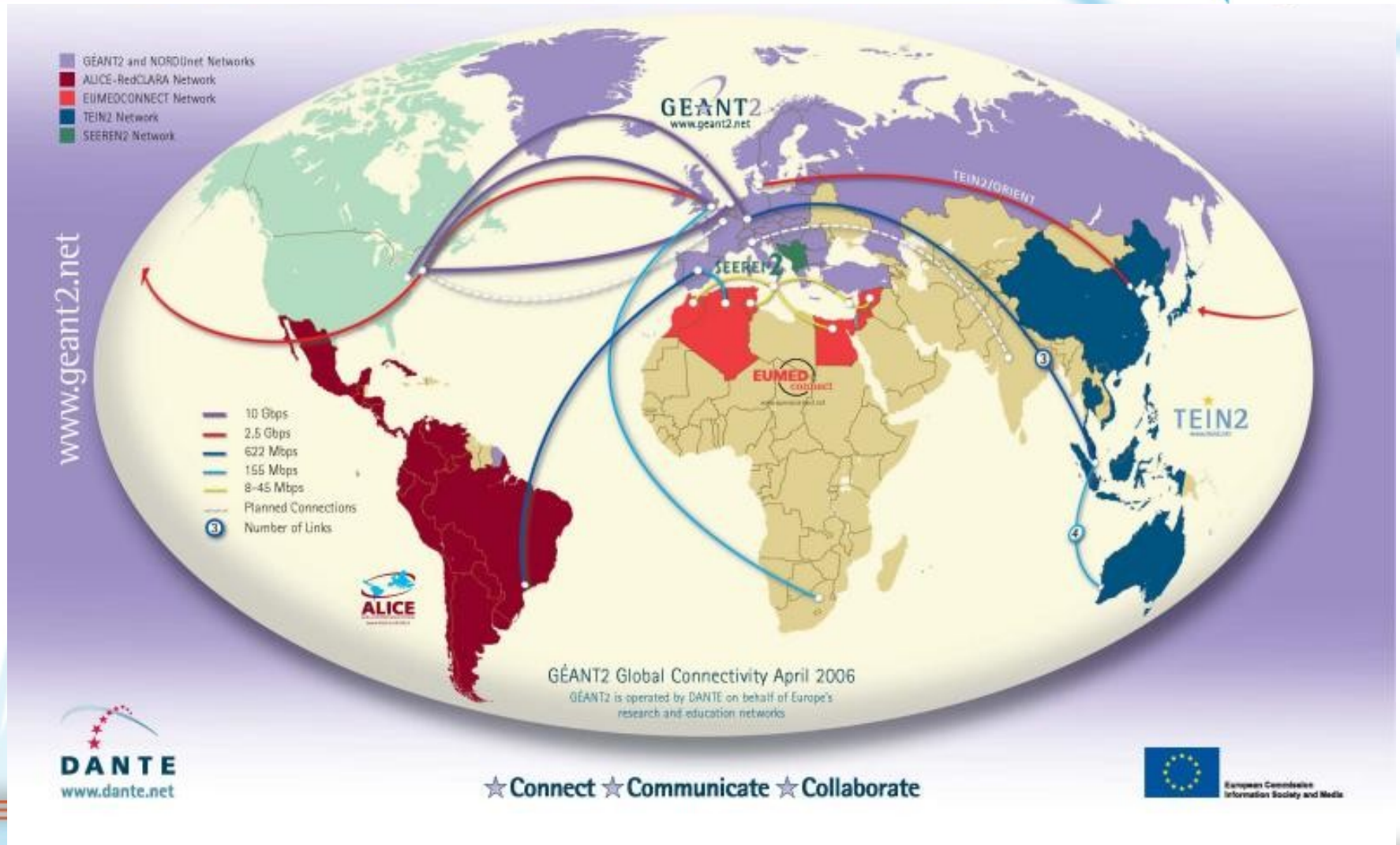


GEANT2



GEANT2 is operated by DANTE on behalf of Europe's NRENs.

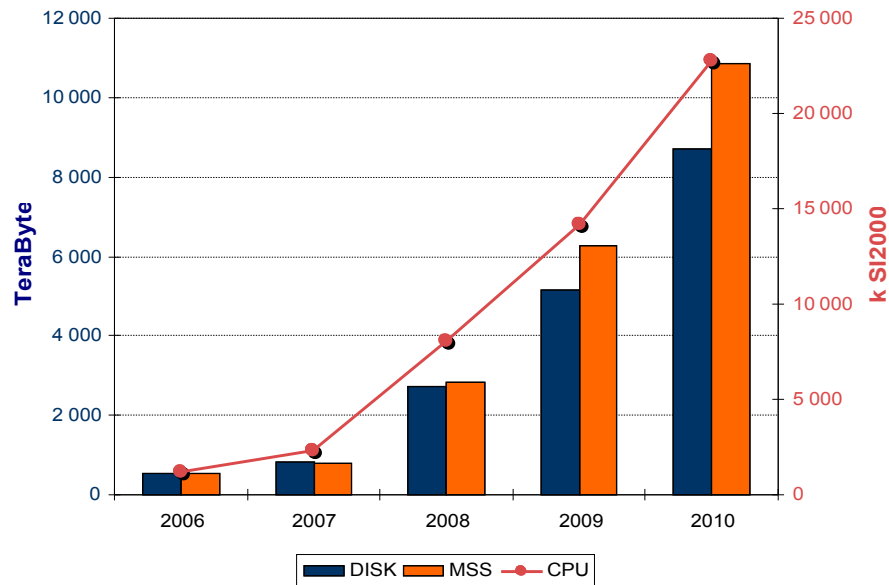
GEANT2



Tier1 CCIN2P3



Tier-1 & Analysis Facility Resource Deployment



The CCIN2P3 Tier1 must double each year its computing power and disk capacity between 2006 and 2010 !

For 2007 we will install

- . 700 computing servers**
- bi-processor quad-core**
- . 2 Peta bytes of disk space**
- and the hundred of disk servers associated**



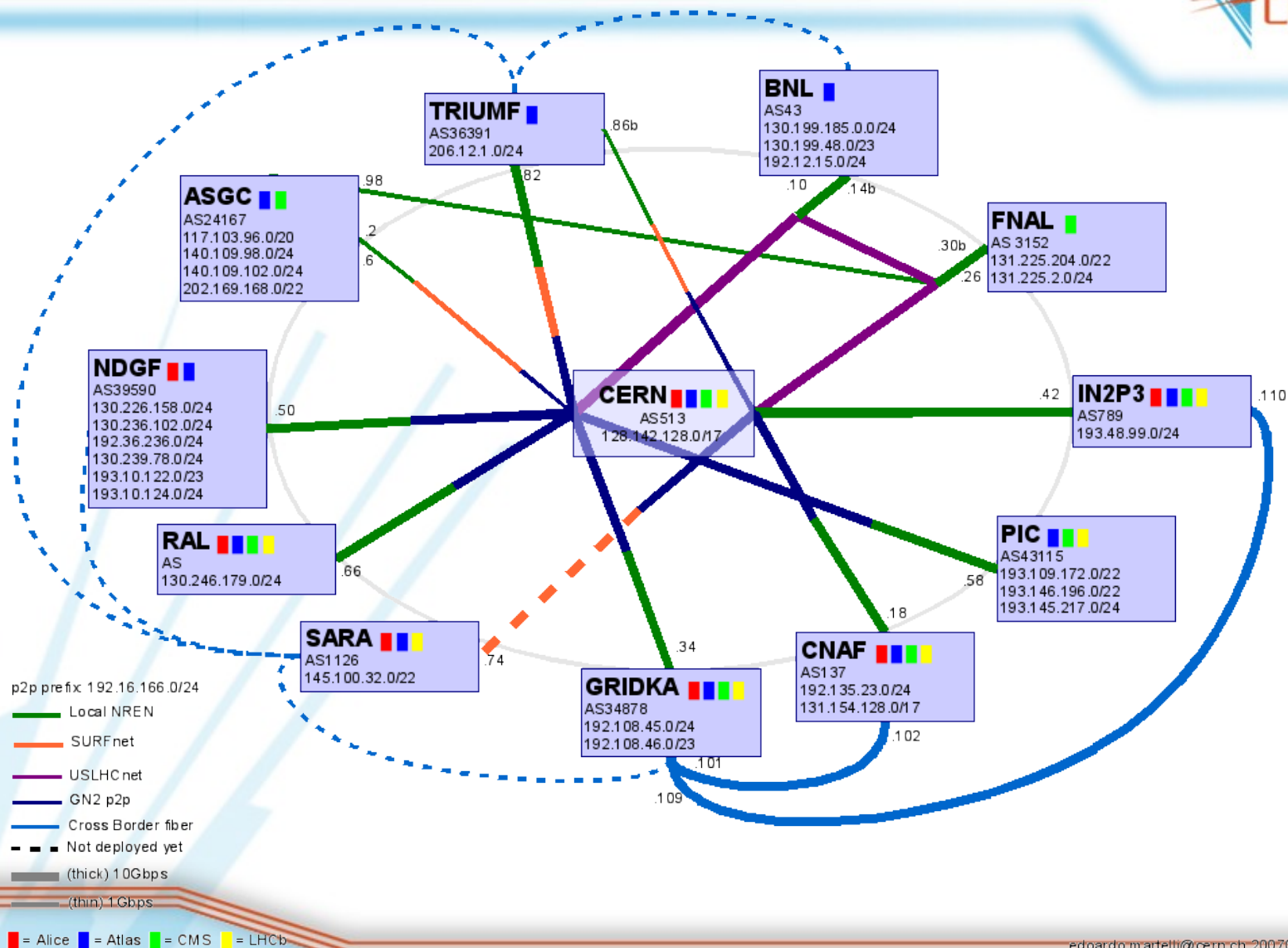
CCIN2P3 network needs



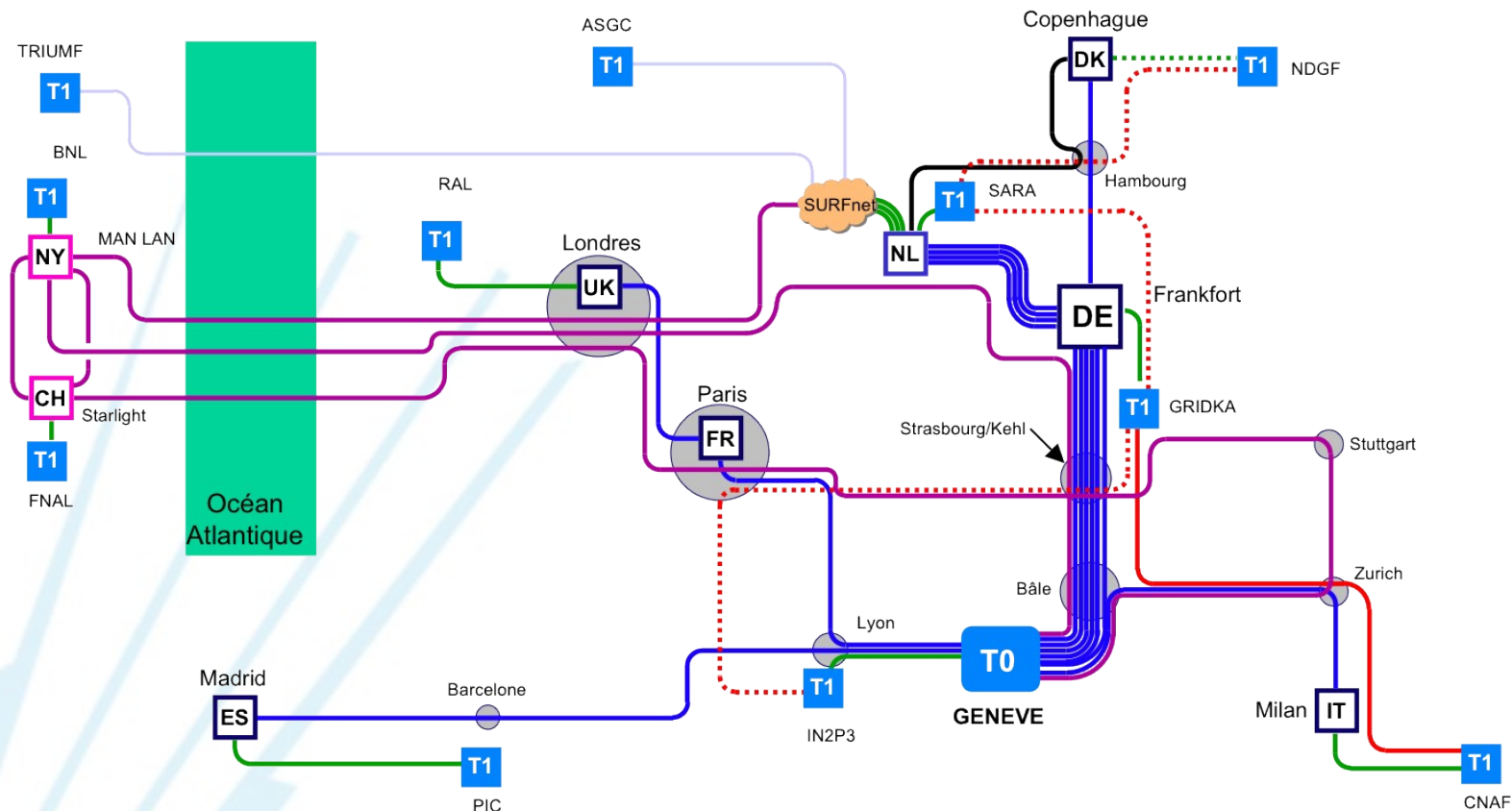
network infrastructure needs for LHC	CCIN2P3
CERN	4 Gb/s
Tier1s	5 Gb/s
French Tier2s	1 Gb/s
Foreign Tier2s	3 Gb/s

from experiments requirements for 2008

LHCOPN LHC Optical Private Network

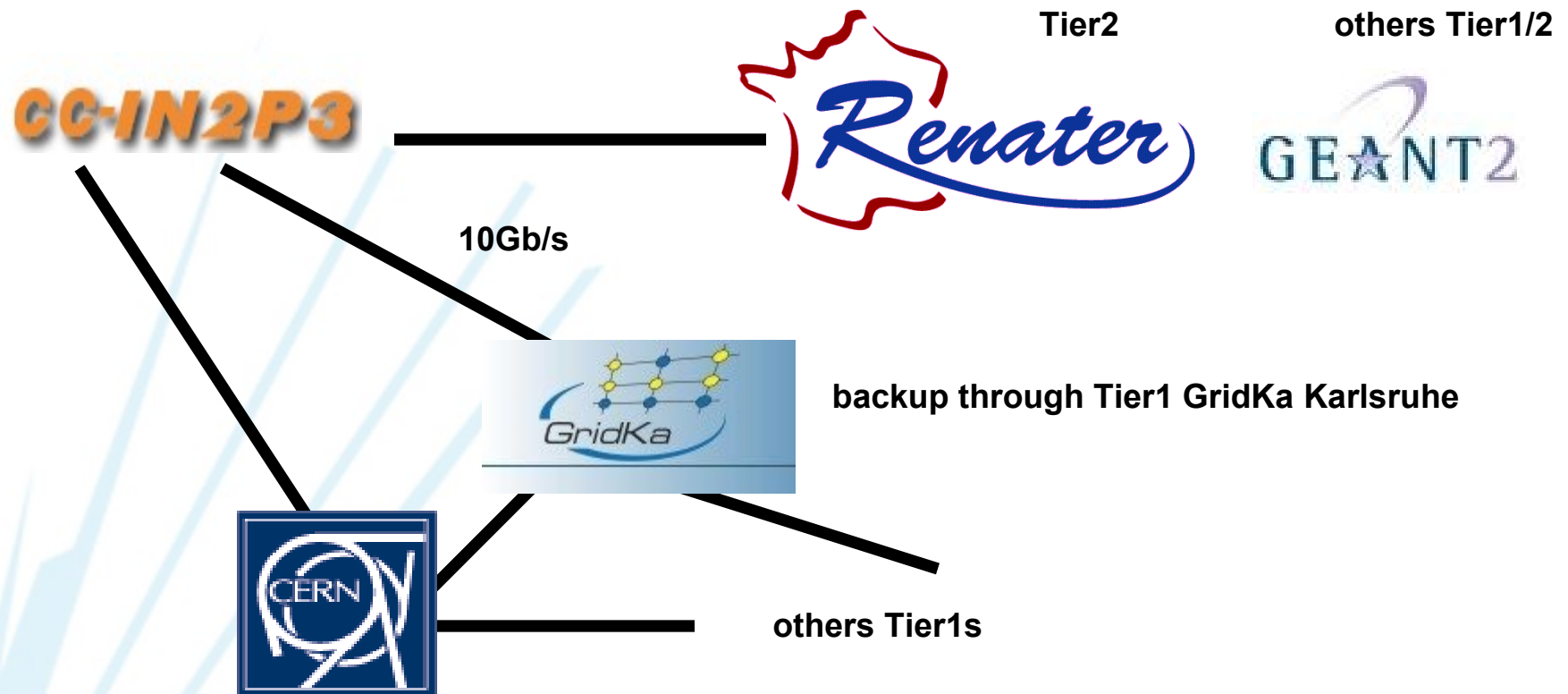


Fiber paths

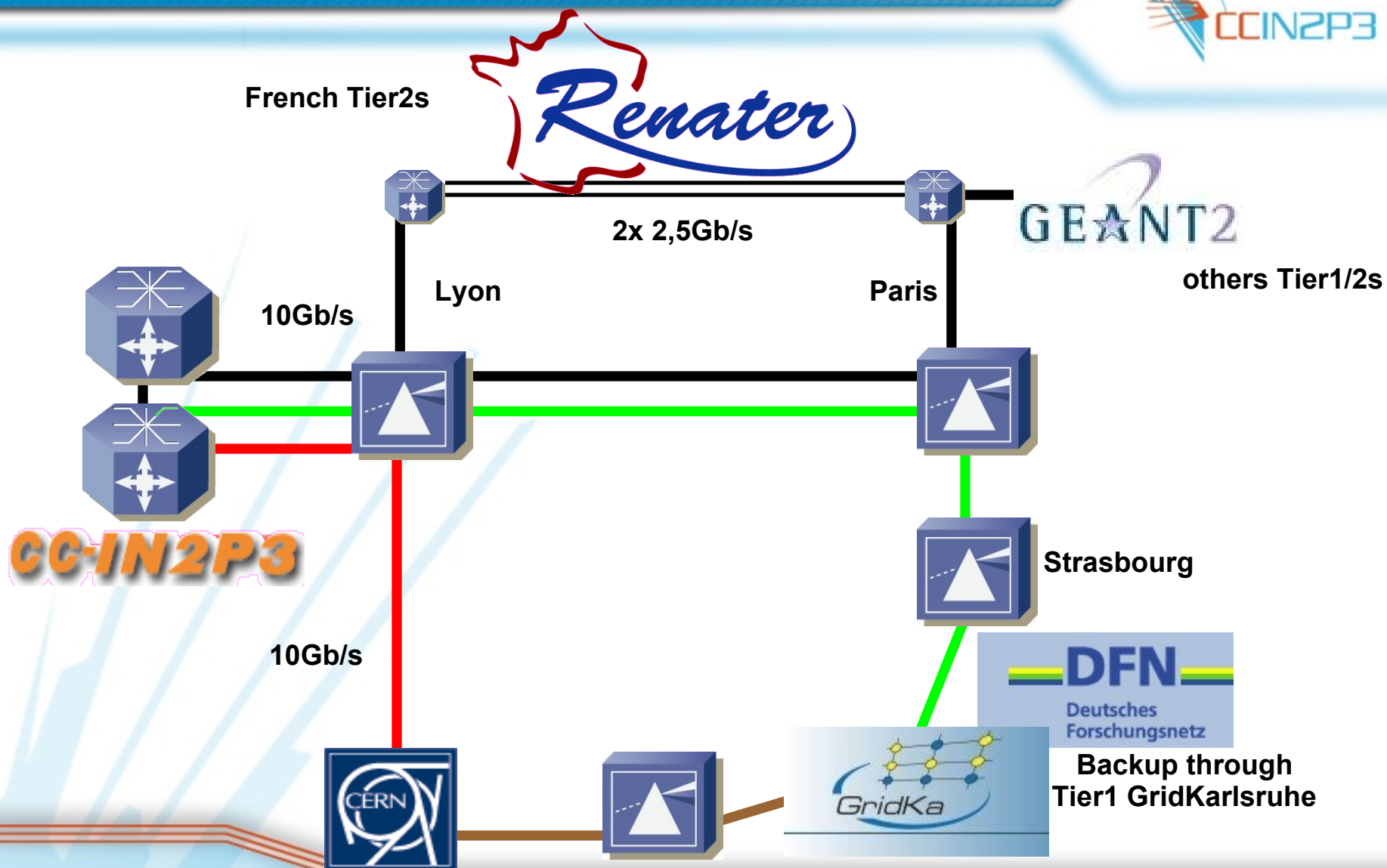


Michael Enrico - DANTE - 2007-07-27

CCIN2P3 logical infrastructure

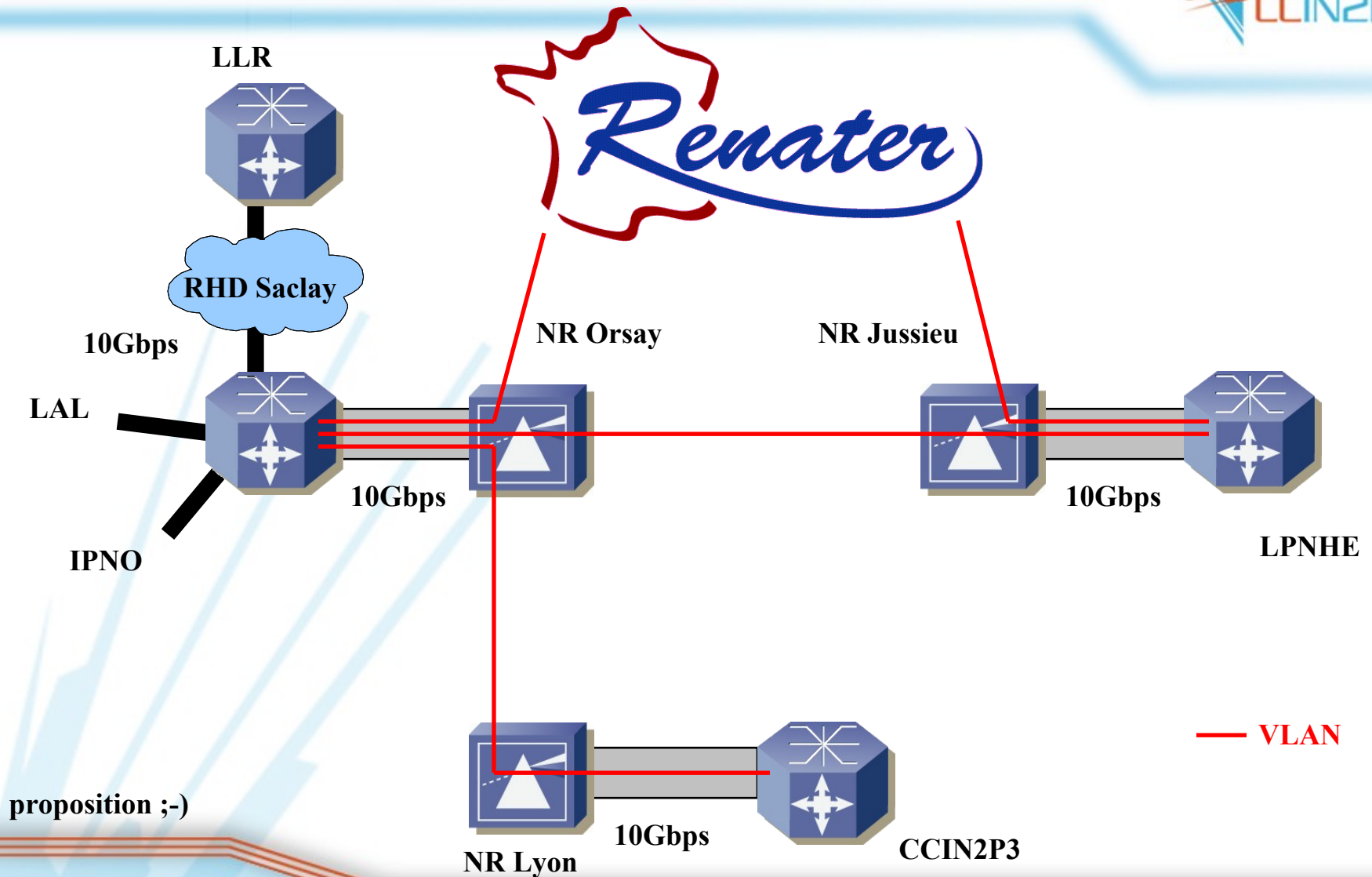


CCIN2P3 physical infrastructure



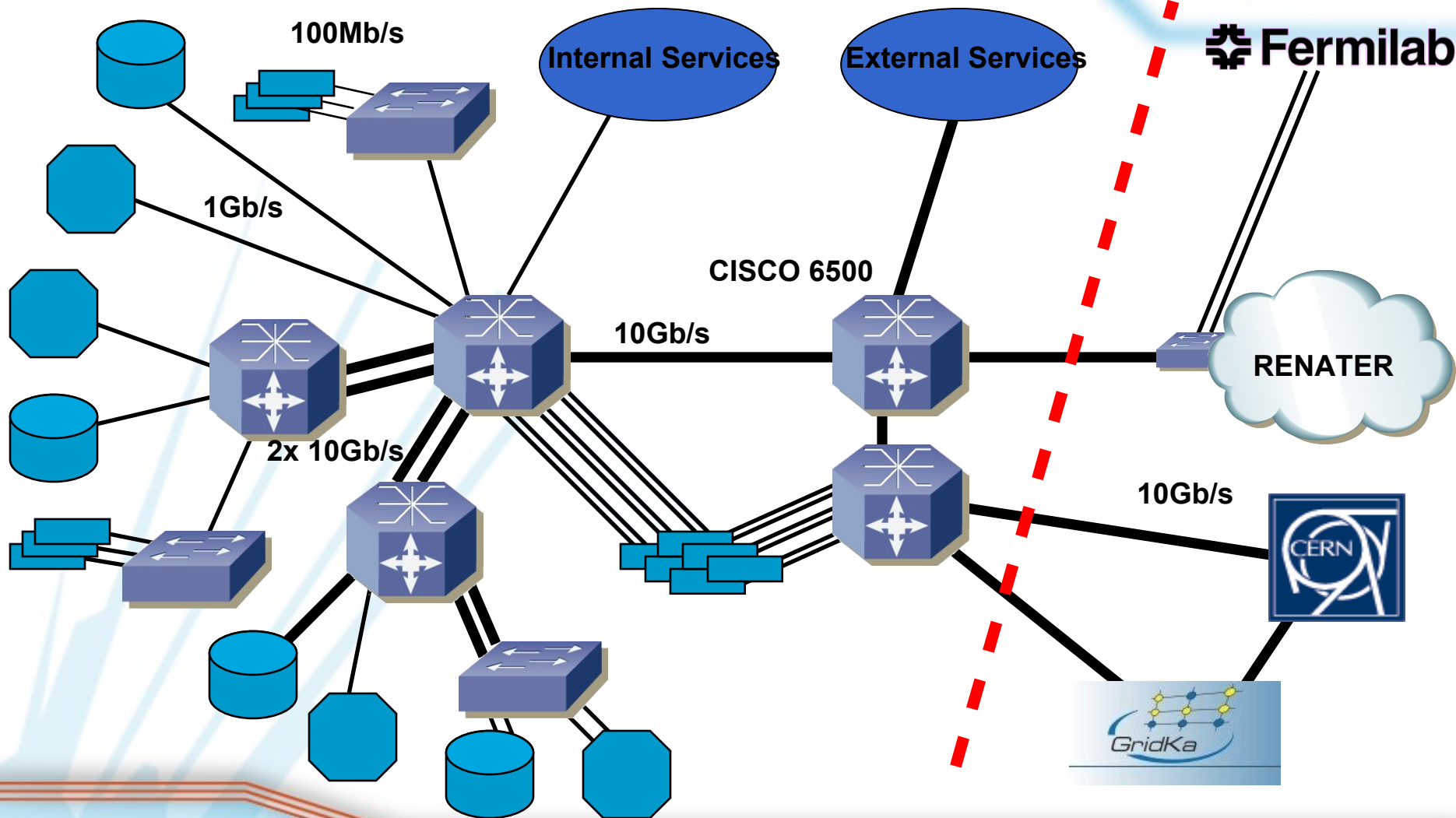
Tier2 GRIF

Grille de Recherche Ile de France



LAN CCIN2P3

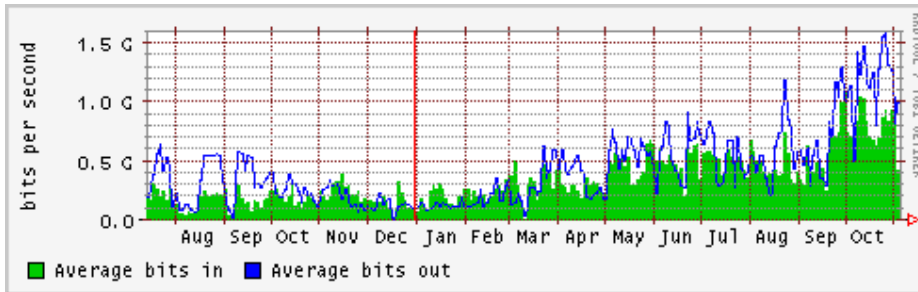
- > 1500 computing servers
- > 2 PB disks
- > 6 PB tapes



Last update on Fri Nov 16 12:15:11 2007 UTC

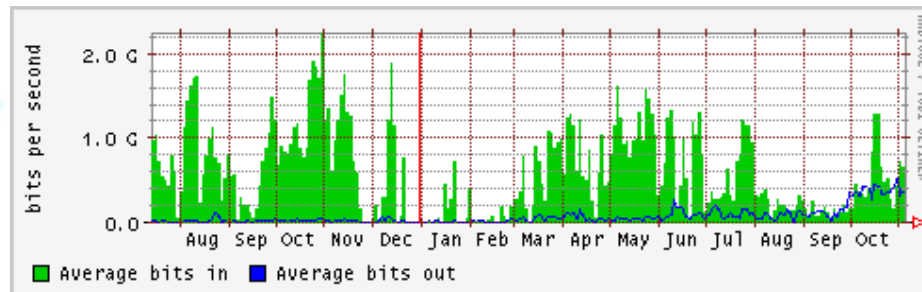


<http://netstat.in2p3.fr>



CCIN2P3-RENATER

CCIN2P3-CERN



CCIN2P3-GRIDKA

