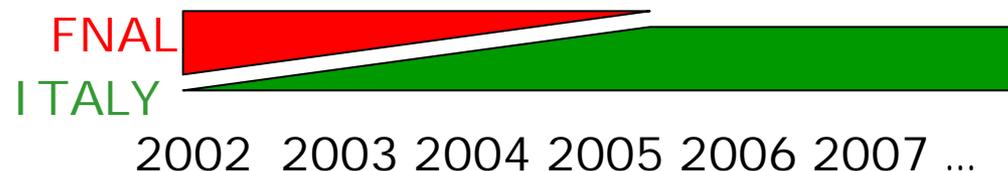


# Italian strategy for analysis

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- So far heavy investment on CAF
  - 60 duals and 15 TB by 2002 (enough for  $1\text{fb}^{-1}$ )
  - more in 2003 (according to Luminosity)
- INFN putting pressure to rather spend money in Italy
- INFN decided to build "GRID Tier1" for LHC
- We now plan a transition on the time scale of 2004



# Tier1 in Italy

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- New structure going to be built at CNAF (Bologna)
  - Sized for LHC, 10x our (CDF-Italy) needs
  - Exact amount of hw will be defined as need grow
  - HW can be dynamically allocate to various groups
- Computing room ready next year
- Project started one year ago. O(100) nodes there already
  - "ready for users" date around 2004
- Purchase, operation, hw-maint, sys.man. : CNAF
- Experiment specific (farm running) : CDF
  - Have not identified people to do it yet
  - Needs depend on SW choices

# CDF at Italian Tier1. 2004-...

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- Copy to Italy all PADS we need and run there
  - By hand or by SAM
- About 10~20% of CAF
  - O(10) TB/year
  - O(10) worker nodes / TB
- Local Mass Storage (tape) possible
  - HW & SW still to be defined
- Gbits/sec from Tier1 to NewYork (shared with all research)
  - Now 600 Mbit/s connection (2.5Gbit/sec on backbone)
  - Bottlenecks: NY-Esnet and Esnet-Fnal

# Software on the Italian CAF

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- European Data Grid toolkit available and supported
- User's authentication:
  - Globus Certificates OK, K5 possible
- CNAF has expertise on: EDG, Condor, PBS
  - Can we exploit it ?
- CDF jobs runs on EDG, but remote access to CAF is easier
- EDG i/f to CDF very uncertain
  - DataTAG helping, now defining where/how
- CAF cloning (Korean way) always a possibility (so far)
- Interested in global broker (many dCAF's)
  - Hope for 2FTE x few months

# Politics

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- INFN buys hardware for what is needed for analysis by us  
INFN physicists after we have used our share of FCC's CAF
  - We indicated a need for ~ 10TB+100duals/year (~350K)
  - Actual budget still to be discussed (yearly)
- Access to that hardware for all collaboration possible
  - Plan to build it from beginning
  - Priority in resource usage for Italians
- Expansion to provide significant contribution to FNAL
  - Possible, both for MC and analysis (dCAF style)
  - Financing to be discussed
  - Quite likely not a gift to the collaboration