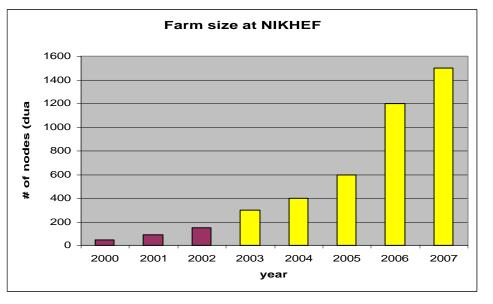


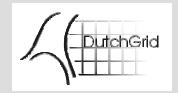
## **Dutch Tier Hardware**

## • Farm size

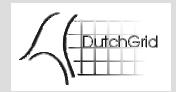
- now: 150 dual nodes+ scavenging 200 nodes
- buildup to ~1500
  up-to-date nodes in 2007
- Network
  - now: 2 Gbit/s internatl.
    - (+2.5 Gbit/s experimental)
  - build-up to >>10 Gbit/s soon (2003?)
- Mass store
  - Now 120 TByte total, 20 TByte allocated to HEP
  - will grow such that it's never\* full

\*part of national HCP infrastructure with sufficient funds





- Take many of the tools from DataGrid/DataTAG
  - farm management by EDG WP4 (NIKHEF involved!)
  - completely optical networking (DataTAG, SURFnet)
- Security
  - Long-since established operational DutchGrid CA
  - Currently supports many VOs (also for national Grids)
  - IETF/IRTF AAA Arch. chair from UvA/NIKHEF
  - security towards industrial-grade Grids
- Support staff
  - 10 fte development staff at NIKHEF,SARA,UvA
  - dedicated support staff from national E-science project
  - local grid experts in Alice and LHCb



## Embedding of Grids in NL

- Active national projects
  - Virtual Laboratory for E-Science (VL-E) (information management, interactive collaborations,...)
  - Grids for applied sciences and industry (VL-N)
  - CS-driven "Distributed cluster computer" (DAS-2)
  - strong national HCP infrastructure (NCF)
  - lambda networking with NREN (SURFnet)
  - various grass-roots efforts in universities
- Collaborating in
  - EU DataGrid
  - DataTAG
  - CrossGrid
  - new proposals for industrial-grade security on Grids

