Looking Forward for Tier-0 cloud

- Keep growing within Tier-0 budget & staff envelope
  - Collaborate with the OpenStack community
  - Upstream changes for sustainability and sharing with other labs
- Expand on-premise services and automation
  - Multiple complementary instance types
    - VMs and Containers like Kubernetes, Docker Swarm and Mesos
    - Integrated with CERN infrastructures
  - Resource lifecycle management and workflows

Private and/or Public?

- Ongoing studies for the Tier-0 extension for LHC additional capacity
    - Extend Tier-0 HTCondor batch system to internal and external clouds
- Investigations have raised a number of questions
    - Procurement process
    - Architecture, especially storage/networking/flavors
    - Cost comparison and control
    - Skills evolution
    - High value services are not standardised