



- Aim: to ensure that both sides are aware of issues, obligations, plans, costs, service levels
- Questionnaire sent to sites
- Members of Project Management Board and deployment team formed group to visit each site March-May 2007 (Tier-1 review 21st Nov)

The Questionnaire was divided into sections covering:

- Management and Context
- Hardware and Network
- Middleware and Operating Systems
- Service Levels and Staff
- Finance and Funding
- Users



- Operationally sites are in reasonable shape and WLCG requirements are understood. Tier-2 communities are improving
- UK site availability is improving - average now >85%. Many sites >95%.
- Staff time a limiting factor for some sites - time could be saved by improvements in software and deployment mechanisms. Improvements in monitoring are needed - Nagios being looked at by many sites
- 72hrs resolution possible; 2hr response difficult
- Middleware stability (and evolution) still a concern - several problematic updates/changes
- Still missing some needed functionality in some components
- Emphasis is moving to disk procurement at sites (large ramp up) - generally UK sites have sufficient machine room space and power. Building work has delayed some kit deployment. Deployed disk still under used.
- Hardware at sites is very mixed (age and specs). Biggest problem was Tier-1 disk.
- There has been insufficient sustained running at anywhere near full utilisation
- Most site networking is/will be sufficient. Some likely bottlenecks identified - 100Mb/s WN connections and 1Gb/s switches
- Better feedback from experiments/users (e.g. when site blacklisted in FCR) is needed
- Concern about too many information sources - where do you go to find answers. Broadcasts not always accurate enough. Some official documentation out-of-date.
- (As expected) more problems/constraints are seen at shared resource centres