

## **GridPP Project Management Board**

## Policy for resource support for new activities within GridPP

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## **Policy**

GridPP5 is primarily funded to provide computing resources for the LHC experiments (ATLAS, CMS and LHCb), and at a lesser level, other Particle Physics experiments. In order to meet commitments set out within the Memorandum of Understanding between CERN and STFC, GridPP necessarily must prioritise service delivery to the LHC experiments through its "best efforts". GridPP also makes "reasonable efforts" to support other communities and generally, where the same LHC infrastructure is used, the quality of service delivered is similar to that achieved for the LHC.

Historically GridPP has made available ~ 10% of resources for non-LHC activities. In the GridPP5 proposal we included the explicit requirements identified by some of the non-LHC Particle Physics experiments and requested additional resources to cover the unspecified usage at the level of 5% for CPU and Disk and 10% for Tape. However, GridPP5 resources were formally awarded at only 93% of the request, but with the aid of careful resource management and leveraged resources (i.e. not funded via GridPP) the situation should remain manageable. Therefore GridPP continues to strive to provide ~5-10% of its hardware resources for non-LHC activities. New groups also benefit from help provided by GridPP staff, but it should be noted that this is limited by the constraints of the GridPP5 award.

The following policy has been developed to make the situation clear to new activities:

- GridPP welcomes all PPAN activities that can benefit from access to GridPP resources whether funded by STFC or not (e.g. funded by an Institute or an EU grant), that contribute to meet STFC strategic goals and hence benefit the overall program.
- 2. GridPP is also open on the same basis to other non-PPAN activities that are deemed to contribute to the wider impact remit of GridPP or STFC.
- 3. For such activities, GridPP is able to provide free access to its resources through its normal allocation process provided: (i) the total capacity requirements are "small" with respect to the ~10% available for non-LHC activities and (ii) that a "reasonable effort" service is sufficient to meet the need of the expected activity.
- 4. We anticipate that this is sufficient to meet the needs of small exploitation-phase projects and will allow large projects to prototype work-flows and store some data in a pre-exploitation phase. This will be discussed on a case-by-case basis.
- 5. GridPP manages its resource allocations through a quarterly meeting where resource requests are tensioned against available capacity. New experiments requesting capacity on GridPP are expected to engage with this process and should provide estimates of resource requirements as required. While formal allocations for CPU are expected to be on average small, there is no restriction upon exceeding this allocation through the opportunistic use of CPU and at quiet times significant CPU resources may be exploited. GridPP recognises that activities need long term predictability in terms of storage capacity and allocations are made accordingly.
- 6. If the requirements of an activity increase substantially such that the resources

made available and the "reasonable efforts" service is no longer appropriate, then the user community is expected to seek funding for their hardware requirements and a possible modest contribution towards support staff. Such reasons may include:

- a. a requirement for substantial long term capacity with respect to the ~5-10% aggregate limit
- b. a requirement to make binding long term commitment to a wider collaboration for production services.
- 7. As a guide, for 2016 non-LHC groups should consider requesting explicit funding through their programme manager if the hardware resources they need guaranteed exceeds a threshold of approximately 200TB of disk storage; 500TB of Tape Storage; or the constant use of more than 150 cores (corresponding to 2KHS06). For subsequent years, these limits rise with "Moore's Law" at approximately 20% per annum for CPU, 25% per annum for disk and 35% per annum for tape storage. In order to allow GridPP to accommodate a range of new groups, these limits have been set at about 10% of the total resources that we estimate GridPP could make available to non-LHC groups.
- 8. A possible contribution towards support staff should be discussed with the GridPP PMB and will depend upon the scope and long-term requirements of the activity. It may be advantageous to create a joint post, with part funding from GridPP and part funding from the activity (this has operated successfully with several new activities so far).
- 9. GridPP appreciates that funding may not always be possible in a timely manner and would continue to support groups as far as possible. However, in such cases, the resources made available would have to be capped if it became apparent that contention for resources was arising within the resources that GridPP makes available to the non-LHC VOs