

# WLCG Tier1 - Tier2 Association

Some Thoughts - Jamie Shiers

# Introduction

- All 4 experiments now have a draft table of T1-T2 associations
- In many cases, there is an “obvious” association
  - E.g. within a country / project, such as GridPP, INFN, US-ATLAS/CMS etc.
- LHCb: exception is Brazil, where PIC plan (do?) offer T1 services
- ATLAS: 3 T2 (federations) without “a T1” (at least for SC4)
  - UIBK Innsbruck (FZK?), Brazilian T2 federation (PIC?)
  - HEP-IL federation (European T1?)
- CMS: more sites not yet “assigned”
  - <http://cmsdoc.cern.ch/cms/cpt/Computing/Integration/documents/T12survey.xls>
- 💣 ALICE: 8 sites / federations assigned to CERN

# Considerations

- **Include:**
  - Network connectivity (bandwidth for data transfers)
  - RTT (remote services, such as FTS, LFC (ATLAS T1s), VO Box services etc)
- **Resource availability at candidate T1:**
  - Custodial storage of MC products;
  - Delivery of Analysis / Calibration / Other data;
- **Associations for other VOs**
- **There are real costs (resources, manpower) involved**
- **Given CERN's existing under-funding, adding additional services to its 'portfolio' implies DROPPING OTHERS (which?)**

# Summary

1. The real issue is *not* building associations in a table/spreadsheet
2. We need now to be setting up and running production services
3. The proof of the pudding is in the eating...
4. An open discussion of all foreseen associations between experiments and Tier1s will likely resolve many of the open questions
5. The few that may remain are clearly less pressing issue than **2.** above...