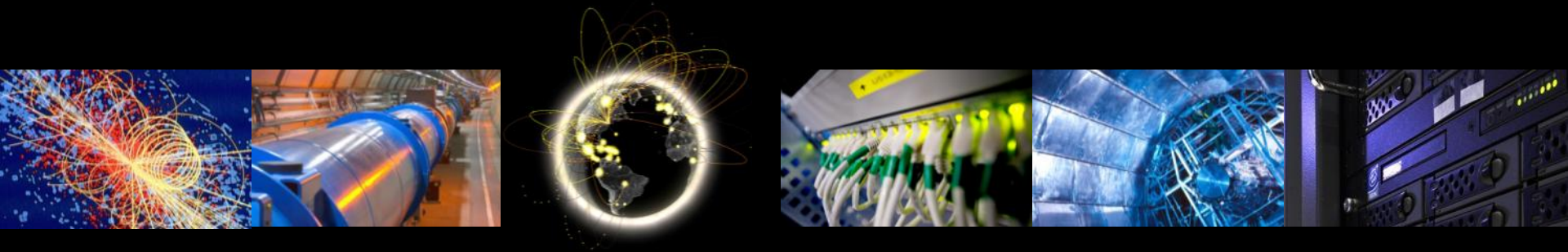


# Procedure to follow for proposed new Tier 1 sites

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# Background

- In 2011 the first suggestions of potential new Tier 1 sites have been made
- The procedure was initially discussed in the WLCG Collaboration Board in July 2011
- The process is now documented (WLCG-OB-2012-001)
  - And the OB approved this process on 9<sup>th</sup> March 2012

# Process

- Pre-requisite is that any such proposal must be supported by the experiment(s)
- Balance between encouragement of new sites/resources and reaching high standards of existing Tier 1 services
- Process:
  - Prepare with MB a detailed plan that shows how the site will demonstrate required functionality, performance, reliability; timeline and milestones
  - Present plan to OB: OB recommends acceptance (or not)
  - Site can sign MoU as an *Associate* Tier 1
  - MB monitors progress on ramp up, reports to OB
  - When milestones achieved as agreed by MB, final report to OB to recommend full Tier 1 status
    - This should normally take ~1 year

# Requirements

- Most elements are described in the MoU addenda
- Candidate site must achieve MoU requirements in terms of:
  - Level and performance of resources – see next
  - Quality and reliability of services:
    - Set of services agreed with the experiments
    - Provide agreed levels of support – as in MoU. Typically on-call support year round
    - Availability and reliability: install agreed sensors, publish to WLCG monthly (as all other sites)
    - Interface to WLCG accounting, provide accounting data to be published monthly
    - Support for Tier 2s – in agreement with experiments. Data source and technical support for Tier 2s

# Resources - 1

- Networking:
  - Eventually 10 Gb/s (+ alternate) as part of OPN for T0-T1 or T1-T1
  - Proposal should describe how connectivity provided during prototyping, and the plan to achieve connecting to the OPN
  - Tier 2 connectivity via academic networks. Tier 1 normally expected to have good connectivity. Practical needs to be agreed with experiment(s) – as part of the usage model. Plan should describe this.

# Resources - 2

- Must provide tape archive service:
  - Capacity needed for share of raw + other data
  - Must guarantee archive for life of the experiment
  - Specified in MoU
- Must show capability of accepting agreed share of raw data and writing it to tape at agreed rate
  - Plan should detail what this is
- Disk & CPU of significant fraction of experiment requirement
  - Typically ~10% (minimum 5%) of requirements expressed to RRB
  - Must be balanced with adequate internal networking to support expected workloads

# New Tier 1s

- At the March OB; KISTI (S. Korea) presented an initial proposal as a Tier 1 for ALICE; the OB accepted KISTI as the first “Associate Tier1”
  - A full plan is now being prepared
- Also anticipated:
  - Russia has proposed providing Tier 1 for all 4 experiments
  - Discussions with Mexico for ALICE; and India for ALICE and CMS
  - All t.b.c.