# Proposal for the establishment of EGI Technical Group to study the integration of Computational Accelerators into the EGI Grid Infrastructure.

## Background:

Over the summer of 2012, the EGI GPGPU Virtual Team developed and distributed two surveys - a Grid User oriented survey and a Resource Centre (RC) oriented survey - on the current and future use of General Purpose Graphics Processing Units (GPGPU) on the European Grid Infrastructure (EGI). The key results of the surveys, which were presented at the EGI Technical Forum 2013, showed that (i) many Resource Centres had already deployed GPGPUs or had planned to do so; and (ii) Users would be interested in using these resources.

However, currently there is no coherent or standardised means for discovering or accessing GPGPU resources on the EGI or similarly related grid infrastructures. Integration of such resources is a non-trivial task. Many of the issues that hinder integration were discussed during a dedicated GPGPU workshop at the EGI CF 2013 in Manchester. These include: (a) Batch System integration best practices; (b) the evaluation and adoption of an appropriate GlueSchema; (c) GPGPU resource usage accounting; and (d) GPGPU resource availability and reliability testing.

## Technical Group Objectives:

This proposal seeks to establish an EGI Technical Group/Working Group to initially study only (i) Batch System integration best practices and (ii) the proposal and evaluation of an appropriate GlueSchema suitable for describing generalised “Computational Accelerators”.

## Duration:

6 Months. Starting July 2013.

## Technical Group Membership:

Membership of the Group is open to Resource Centre representatives who can contribute directly to either of these objectives. User Community representation and expertise from GlueSchema developers is required to aid with the development and evaluation of the GlueSchema definition.

The TG should have a chairperson and one or more co-chairs.

## Reporting:

The interim results should be ready for presentation at the EGITF 2013 (Madrid).