**Statement of Work EXTENCI** 

## **Specific Deliverables**

The specific deliverables/tasks and high level ExTENCI milestones are:

Item	Description	Start Date	End Date	Owner	Institution Role <sup>1</sup>
L1.0	Interface SAGA with Condor & Cactus and verify with application use	11/1/10	7/31/11	Ole Weidner	Lead
L1.1	Design and document integrated architecture of SAGA for interface to Condor and Cactus	11/1/10	12/31/10	Shantenu Jha	Lead
L1.2	Develop and test SAGA adaptor to use Condor-g	12/1/10	4/30/11	Ole Weidner Jaime Frey (UW)	Lead Support
L1.3	Verify operation and document performance of a science application using the Condor-g adaptor	4/1/11	4/30/11	Ole Weidner	Lead
L1.4	Develop and test SAGA adaptor to use Condor Glide-in	3/1/11	6/30/11	Ole Weidner Dan Bradley (UW)	Lead Support
L1.5	Move SAGA to use the Metronome (NMI build system)	3/1/11	7/31/11	Ole Weidner Todd Miller (UW)	Lead Support
L1.6	Validate TG and OSG usage with SAGA- BigJob for Cactus application(s) via command-line	5/1/11	6/30/11	Ole Weidner Cactus Dev.	Lead Support
L1.7	Verify and document performance of execution of O(10^3) concurrent Cactus tasks on OSG+TG, repeatedly O(10^2)	6/15/11	7/31/11	Ole Weidner Steve Brandt	Lead Support
L2.0	Extend capability to Cactus Gateway and EnKF and Coastal modeling science applications and verify performance improvement				Lead
L2.1	Integrate with Cactus Gateway and document capabilities provided to the Gateway	8/1/11	12/31/11	Ole Weidner Steve Brandt	Lead Support
L2.2	Support Cactus-based EnKF and Coastal Modeling applications with parameter sweep and other usage modes. Document performance	11/1/11	1/31/12	Ole Weidner Steve Brandt Jian Tao	Lead Support Support
	improvement and throughput of these applications.				
L2.3	Add SAGA support for multi-level scheduling for HTPC using Pilot Jobs (Optional)	2/1/12	6/30/12	Ole Weidner Greg Thain (UW)	Lead Support
L2.4	Document new capabilities and publish performance and throughput analysis of EnKF and Coastal Modeling applications	6/1/11	7/31/12 ongoing	Ole Weidner	Lead

<sup>&</sup>lt;sup>1</sup> Either Lead or Support.