

# ICPAC MODELLING HPC UNDER INTRA-ACP CLIMSA PROJECT: COMPONENTS

	ITEM	DESCRIPTION	QUANTITY
1	<b>Dedicated Servers</b>	Servers enabling monitoring, controlling and interaction with compute nodes as well as NFS server for deploying shared storage*.	2
2	<b>KVM Over IP Switch</b>	16 ports. Provides interconnectivity for LCD Display, Mouse / Trackpad, Keyboard etc.	1
3	<b>Adapters cables for KVM switch</b>	Will enable blade servers, enclosures and dedicated servers to be controlled using the KVM keyboard and mouse.	10
4	<b>Keyboard with Trackpad</b>	For interaction with the cluster nodes and servers.	1
5	<b>LCD Display</b>	20" LCD Screen for interacting with the cluster.	1
6	<b>Network Switches</b>	48 port 10-Gig Network Switches with Fibre optic modules. Switches will interconnect cluster components on a high-speed network*.	2
7	<b>Enclosures</b>	Enclosures for the blade servers (16 blade servers each) providing power and interconnection to blade servers*.	2
8	<b>Compute Nodes</b>	Blade servers for processing of tasks. 2 of the 32 will be controlling nodes i.e. Master & Backup*.	32
9	<b>Data Storage</b>	500 Terabytes storage, provisioned using BeeGFS or Lustre *. This will form the shared storage for the 32 compute nodes.	1
10	<b>Cabling</b>	Provides interconnection of cluster components consisting of CAT 6a twisted pair cables for LAN as well as fibre optic cables.	1
11	<b>UPS</b>	High Capacity smart power backup 10 KVA*.	2
12	<b>PDU</b>	Intelligent Power Distribution Units for distributing power to cluster components with metering and switching capabilities.	2
13	<b>Server Rack</b>	At least 48U Enclosed Server Rack with cooling and locking mechanism.	1
14	<b>System integration</b>	Involves assembling and interconnecting components, as well as installing operating system on blade servers.	-
15	<b>Systems Integration Training</b>	This will involve factory training on cluster integration for the sys admin.	-

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\* Detailed specifications attached