

LCG-France cost model

Cost Evolution for CC-IN2P3 (forecast for 2012-2016)

		2010	2011	2012	2013	2014	2015	2016	Dépréciation
LCGFR T1 model	CPU [€/HEP-SPEC06]	21,96 €	20,18 €	20,18 €	17,15 €	14,58 €	12,39 €	10,53 €	1,18
	Disk DAS [€/TB]	425,00 €	300,00 €	300 €	279 €	237 €	202 €	171 €	1,08
	MSS [€/TB]	90,00 €	45,00 €	40,8 €	40,8 €	40,8 €	40,8 €	40,8 €	
	Dérouleurs T10 KC			15 000 €	13 500 €	13 500 €	13 500 €	13 500 €	

Cost Evolution for LCG-France T2-T3 (forecast for 2012-2016)

		2010	2011	2012	2013	2014	2015	2016	Dépréciation
LCGFR T2 T3 model	CPU [€/HEP-SPEC06]			20,18 €	17,15 €	14,58 €	12,39 €	10,53 €	1,18
	Disk DAS [€/TB]			300 €	300 €	300 €	300 €	300 €	

Cost evolution- CERN estimates (May 2012, Bernd Panzer-Steindel)

		2010	2011	2012	2013	2014	2015	2016	Dépréciation
CERN T0 & CAF estimates	CPU [€/HEP-SPEC06]	21,53 €	17,39 €	12,83 €	11,18 €	8,61 €	7,12 €	5,96 €	1,3 / 1,15
	Disk DAS [€/TB]	414,01 €	380,89 €	331,21 €	298,09 €	248,41 €	207,01 €	173,88 €	1,15
		1,277 CHF/€ (Tx moyen 2 ans)							
			1,24	1,35	1,15	1,30	1,21	1,19	

Hardware Obsolescence Time

	T1 & AF	T2-T3
	Years	Years
CPU	5	4
Disk DAS	5	5
MSS	4	

Coûts informatiques utilisés dans le cadre de la revue et du plan de financement 2013-2016

Assumptions made for cost estimates HT

Disk Storage	[€/TB]	usable space after subtracting RAID and FS overhead (espace quantifié en puissance de 10)
CPU Capacity	[€/HEP-SPEC06]	WLCG normalisation (since April 2009)

Acquisition costs mean costs for purchasing and putting hardware in operation the first time, including :

all components that make the resource available (PDU, rack, network interfaces and switches, disk servers...)
warranty (4 years) if it is subscribed with the hardware purchase

not included : components related to infrastructure (such as cooling....) or extras costs which depend on site set-up and choice,
grid services hardware (CE and SE machines), costs to maintain hardware in operation