Essential Consolidation Items for LIU-PSB

Collection from LIU-PSB WP holders

Group	Consolidation Items	Related Budget	Comments
EN-CV	Cooling plant replacement	2M	Cooling towers need to be replaced; also higher risk of legionella spread; chilled water system size incorrect (+no spare); RF equipment still cooled with drinking water in open circuit; currently no surface/tunnel circuit separation (RP request)
	Chilled water plant replacement	2M	
	Renovation of ventilation system	3.5M (large uncertainty due to asbestos)	Fire risk, unreliable controls, not working instrumentation, issues with condensate…
TE-VSC	12 pumping groups to be exchanged; essential are 4 pumping groups (BI and BT line)	500k	4 pumping groups with difficult access highest priority; risk of failure and spare situation increasing if not replaced

Group	Consolidation Items	Related Budget	Comments
TE-EPC	20+2 MidiDiscap PC for LT and LTB lines, 24+2 MaxiDiscap PC for LT, LTB and BI lines; related WIC machine protection, communication gateways, electrical feeders, metallic structure for racks	710k	Many obsolete parts of actual PC; obsolete MIL-1553 controls; DC instead of pulsed operation; risk of accidents without metallic support structure
	Renovation of all PC controls for the full LHC injector chain based on G64 and MIL-1553 (~300 PC)	3M (for all LHC injectors)	Obsolete electronics, 60% of CPU software unknown; high communication error rate

Group	Consolidation Items	Related Budget	Comments
TE-MSC	BT.BHZ10	210k	urgent and approved cons item
	Other magnets please complete	xxx	
EN-STI	BTP.STP10	300k	confirm if cons item!!!
BE-BI	DCCT head amplifier	10k	study done?
	Other items???		
interlocks	WIC		confirm!!
EN-EL	Please confirm	xxx	

No need for CONS (or included in LIU)

- HL-RF (cons. already part of LIU)
- POPS-B budget transferred to LIU
- Main dump was CONS, already completed
- Transport: 100% consolidation, already completed
- Survey
- Extraction kickers/septa (cons. already part of LIU)
- Management, commissioning, HST
- Cables not part of this overview