



CONS and HL-LHC day Analysis of needs from XX-YYY

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CONS and HL-CONS approved requests

(for HL-CONS except spares)

| Item n. | Description | Approved Budget | Funding (CONS/HL-CONS) % | Budget to be allocated in the years |
|---------|---|-----------------|--------------------------|-------------------------------------|
| 1 | LHC WorldFIP Repeater Consolidation | 200 | CONS | 2017 |
| 2 | WorldFIP Master boards | 600 | CONS | 2017-2018 |
| 3 | GMT distribution renovation (Repeaters + cabling) | 600 | CONS | 2017-2019 |
| 4 | OASIS | 627 | CONS | 2016-2019 |
| 5 | Video Distribution System | 205 | CONS | 2016-2017 |
| 6 | Accelerator Database Servers and Storage | 380 | CONS | 2016-2018 |

New requests in view of HL-LHC installation

(to meet HL-LHC goals)

New requests for conversion of LHC into HL-LHC

| Item n. | Description | Budget request | Budget to be allocated in years (from-to) | Priority (1-3) 1 top 3 low |
|---------|---|----------------|---|----------------------------------|
| 1 | Renovation of Technical Network Routers | 2.3MCHF | 2019-2020 | 1 |
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ITEM: TN Router renovation

Rational of the request

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|-------------------------|---------------------------|---|--|
| Total Budget request | 2.3 MCHF + 1 FSU (80kCHF) | Budget to be allocated in years 2019-2020, Procurement starts in 2019 and installation before the end of LS2 in 2020. | |
| Material budget request | | No personnel request. | |

Consequences of suppression of request on HL performance: Risk of network downtime.

Consequences of delay of request to LS4 or later. Critical equipment not under warranty.
Would depend on old "retired" equipment for spares.

ITEM: TN Router renovation descriptive slide

- This comes from the network experts in the IT Department.
- They point out that the Technical Network (TN) Routers have already reached their "end of sale" in 2015 and by 2020 they will reach "End of support".
- In addition, the current setup is not tolerant to a router failure (no redundancy).
- So the proposal by IT is to replace the existing routers by state of the art network devices and modify the TN architecture (extra fibres) to support router redundancy. While doubling the current bandwidth available to TN services.

The cost of this consolidation is estimated at 2.3MCH for routers and fibres plus 1 FTE for the installation work.

Summary

| Priority (1-3) in decreasing order of importance | Item n. | Description | Approval Status: <ul style="list-style-type: none">• <i>Approved by CONS</i>• <i>Approved by HL-CONS</i>• <i>Not Approved by CONS</i>• <i>Not Approved by HL-CONS</i><ul style="list-style-type: none">• <i>New</i> |
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