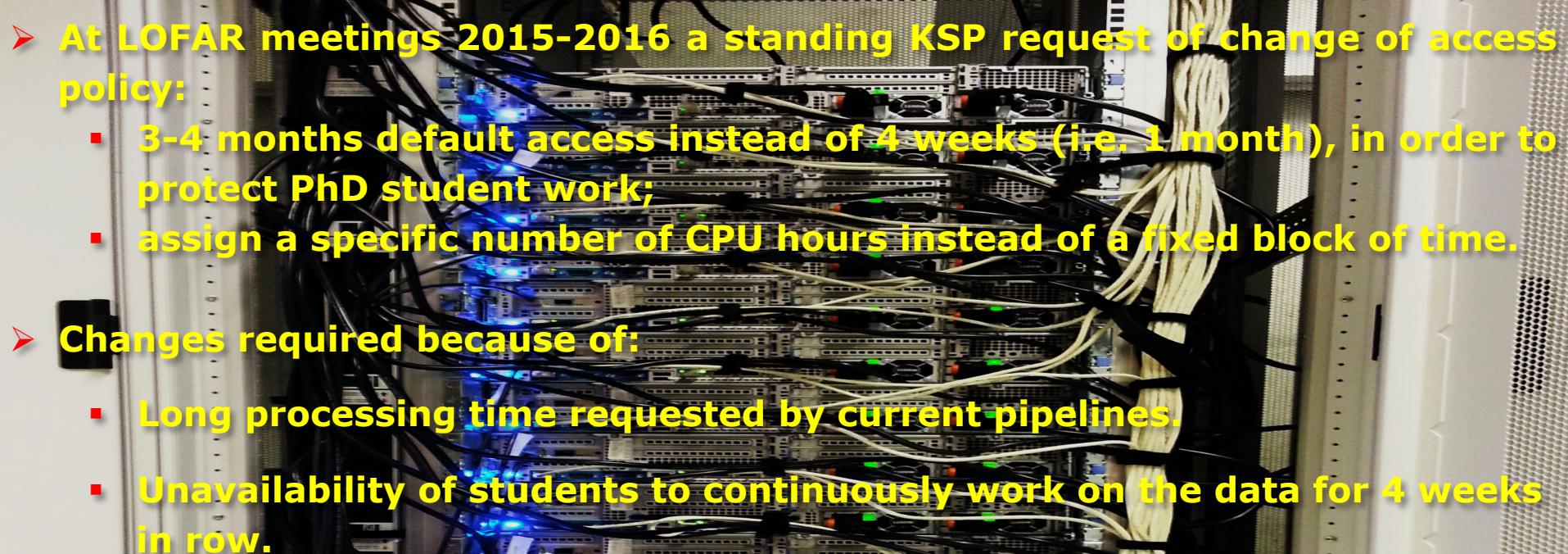


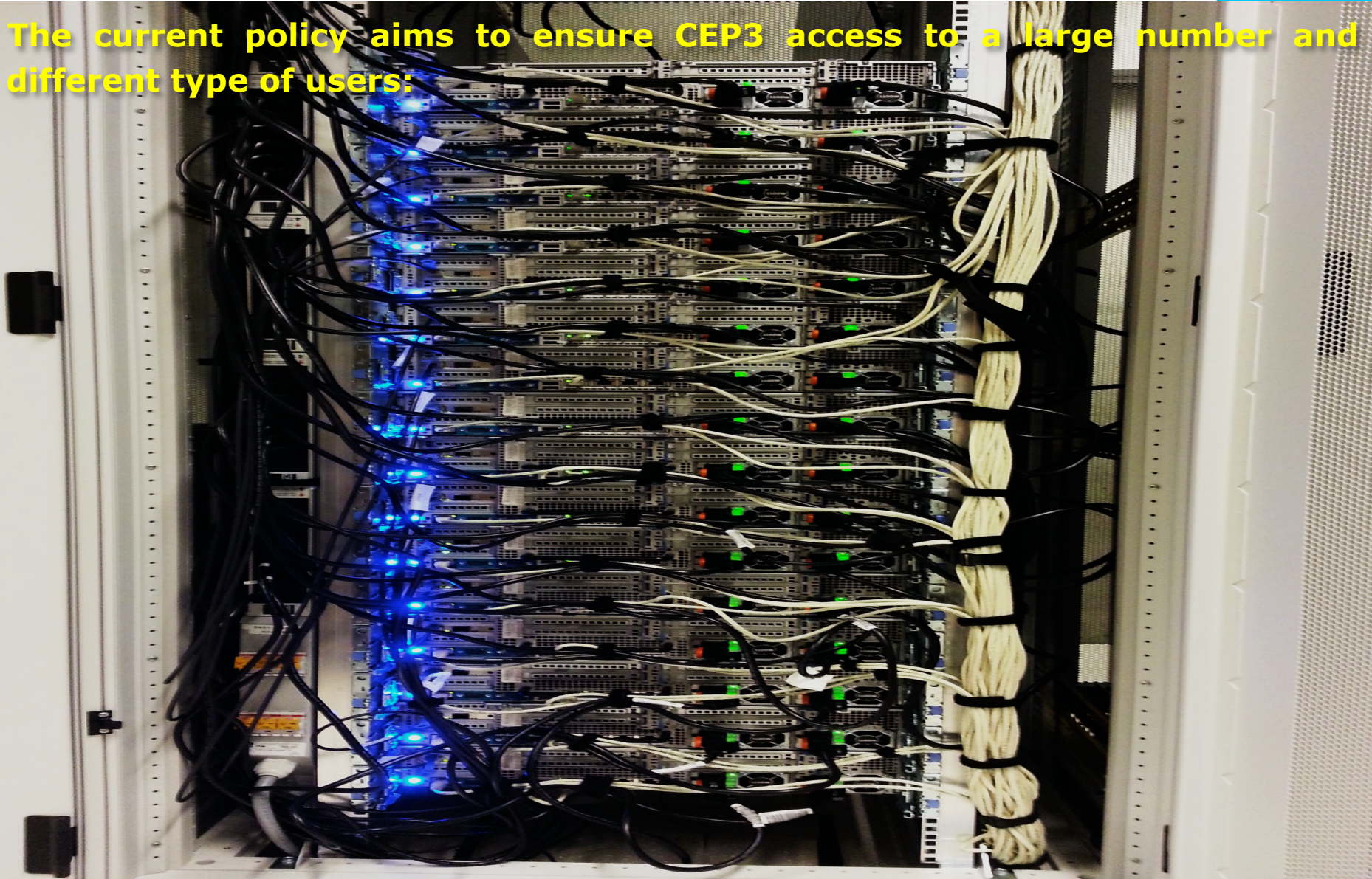
## **CEP3 access policy: usage overview & policy assessment**

Marco Iacobelli  
LSM 11/03/2016

- 
- At LOFAR meetings 2015-2016 a standing KSP request of change of access policy:
    - 3-4 months default access instead of 4 weeks (i.e. 1 month), in order to protect PhD student work;
    - assign a specific number of CPU hours instead of a fixed block of time.
  - Changes required because of:
    - Long processing time requested by current pipelines.
    - Unavailability of students to continuously work on the data for 4 weeks in row.

# CURRENT POLICY & CURRENT USAGE

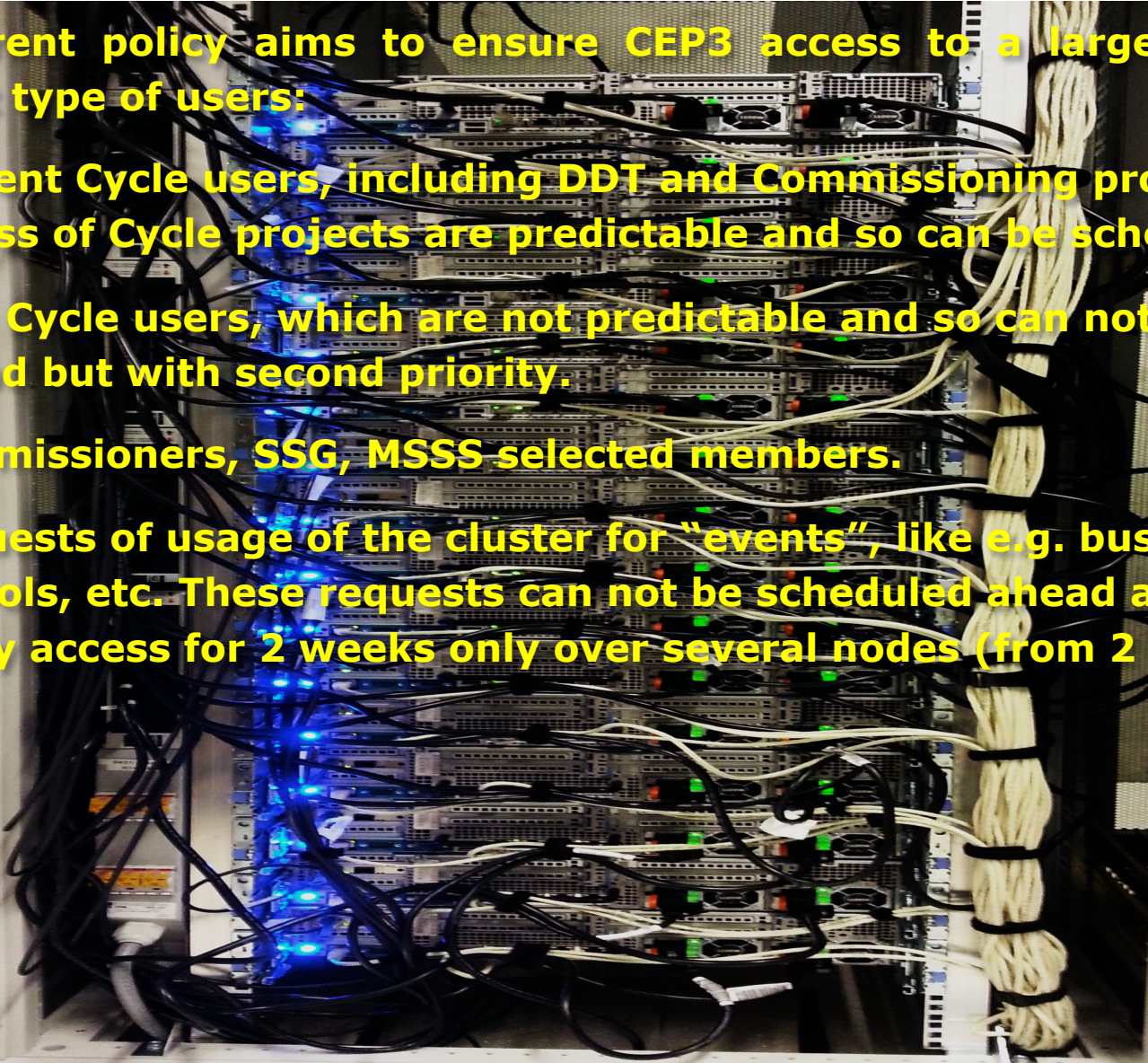
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- Current Cycle users, including DDT and Commissioning projects; only access of Cycle projects are predictable and so can be scheduled ahead.
- Past Cycle users, which are not predictable and so can not be scheduled ahead but with second priority.
- Commissioners, SSG, MSSS selected members.
- Requests of usage of the cluster for "events", like e.g. busy weeks, schools, etc. These requests can not be scheduled ahead and usually imply access for 2 weeks only over several nodes (from 2 up to 6).



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Out of 22 working nodes, only 16 available for flexible/periodic time slots.

4-weeks  
default  
access

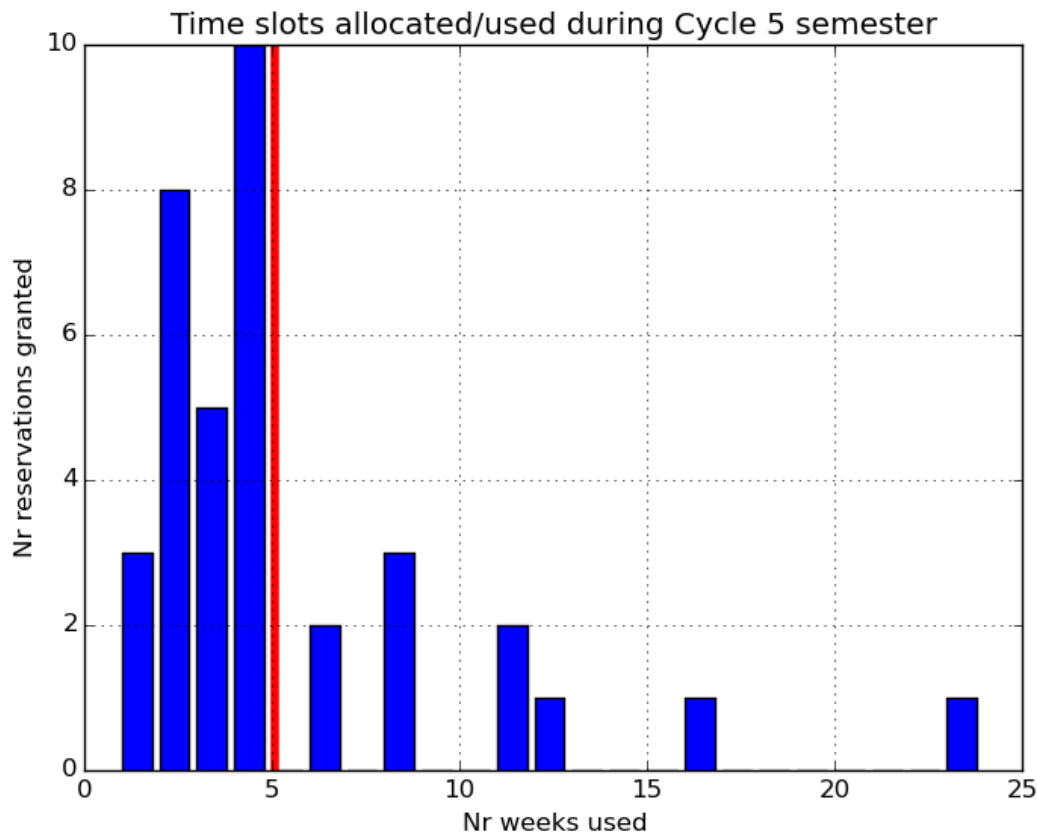


80-time  
slots per  
semester

# CURRENT POLICY & CURRENT USAGE

## Current semester usage indicates ...

- Number of assigned slots is 51 (i.e. 64% of allowed slots).
- Weighted average of the amounts of weeks granted per slot is about 5 but increases to about 8 if neglecting "events".

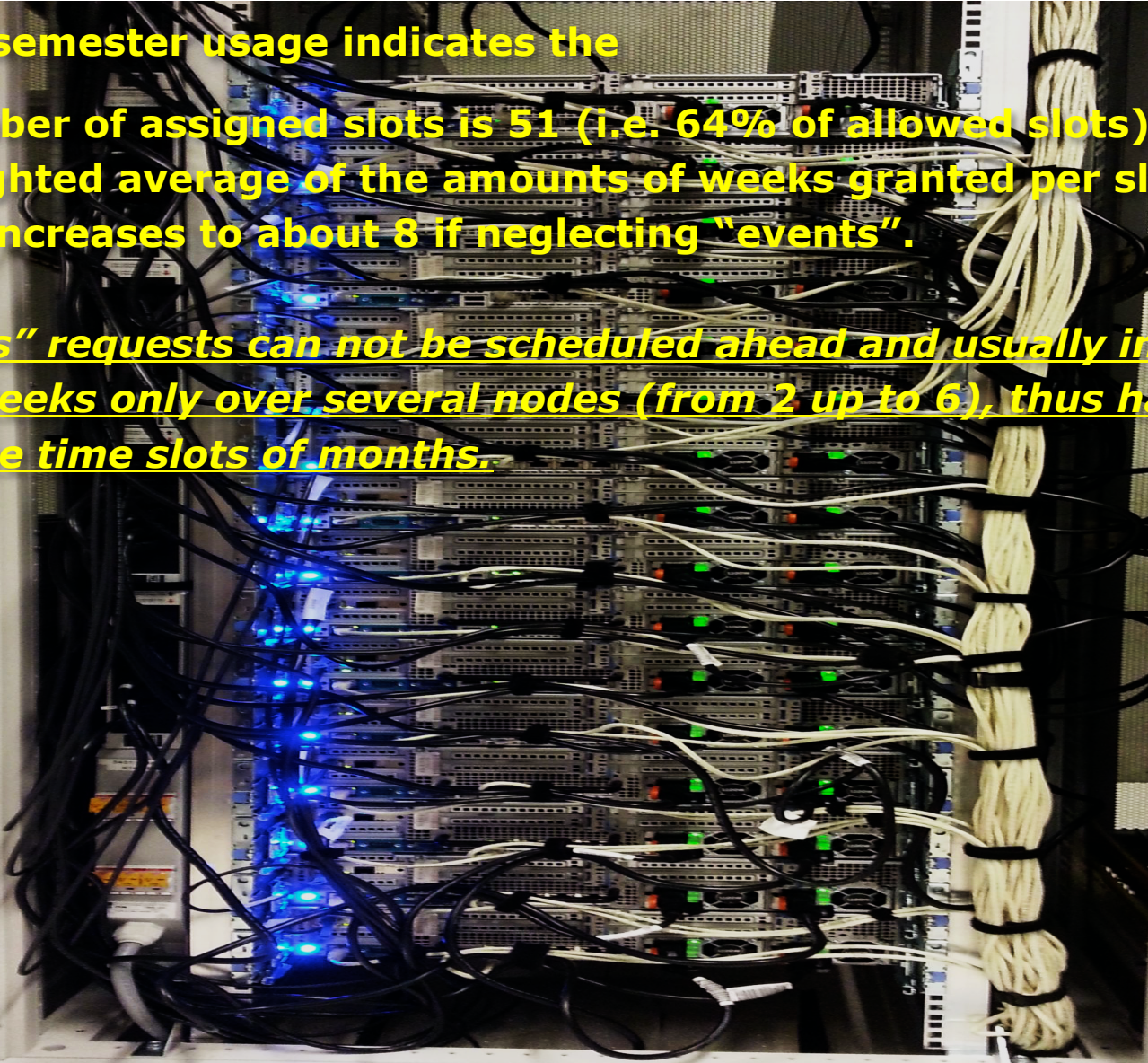


# PROPOSED POLICY vs CURRENT USAGE

➤ Current semester usage indicates the

- Number of assigned slots is 51 (i.e. 64% of allowed slots).
- Weighted average of the amounts of weeks granted per slot is about 5 but increases to about 8 if neglecting "events".

"Events" requests can not be scheduled ahead and usually imply access for 2 weeks only over several nodes (from 2 up to 6), thus hardly fitting with the time slots of months.



# PROPOSED POLICY vs CURRENT USAGE

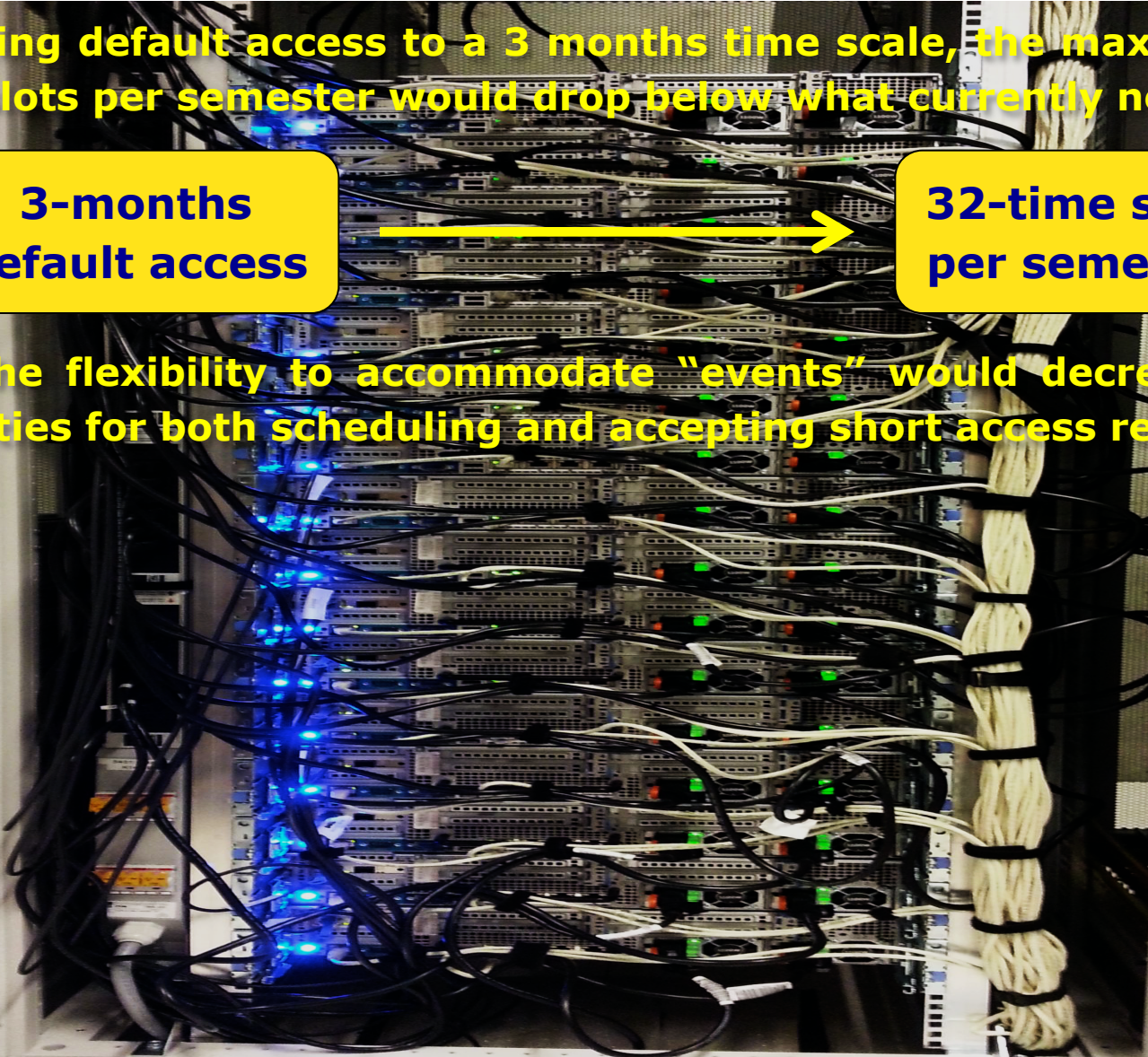
➤ If changing default access to a 3 months time scale, the maximum number of time slots per semester would drop below what currently needed!

**3-months  
default access**



**32-time slots  
per semester**

Also, the flexibility to accommodate "events" would decrease, implying difficulties for both scheduling and accepting short access requests.

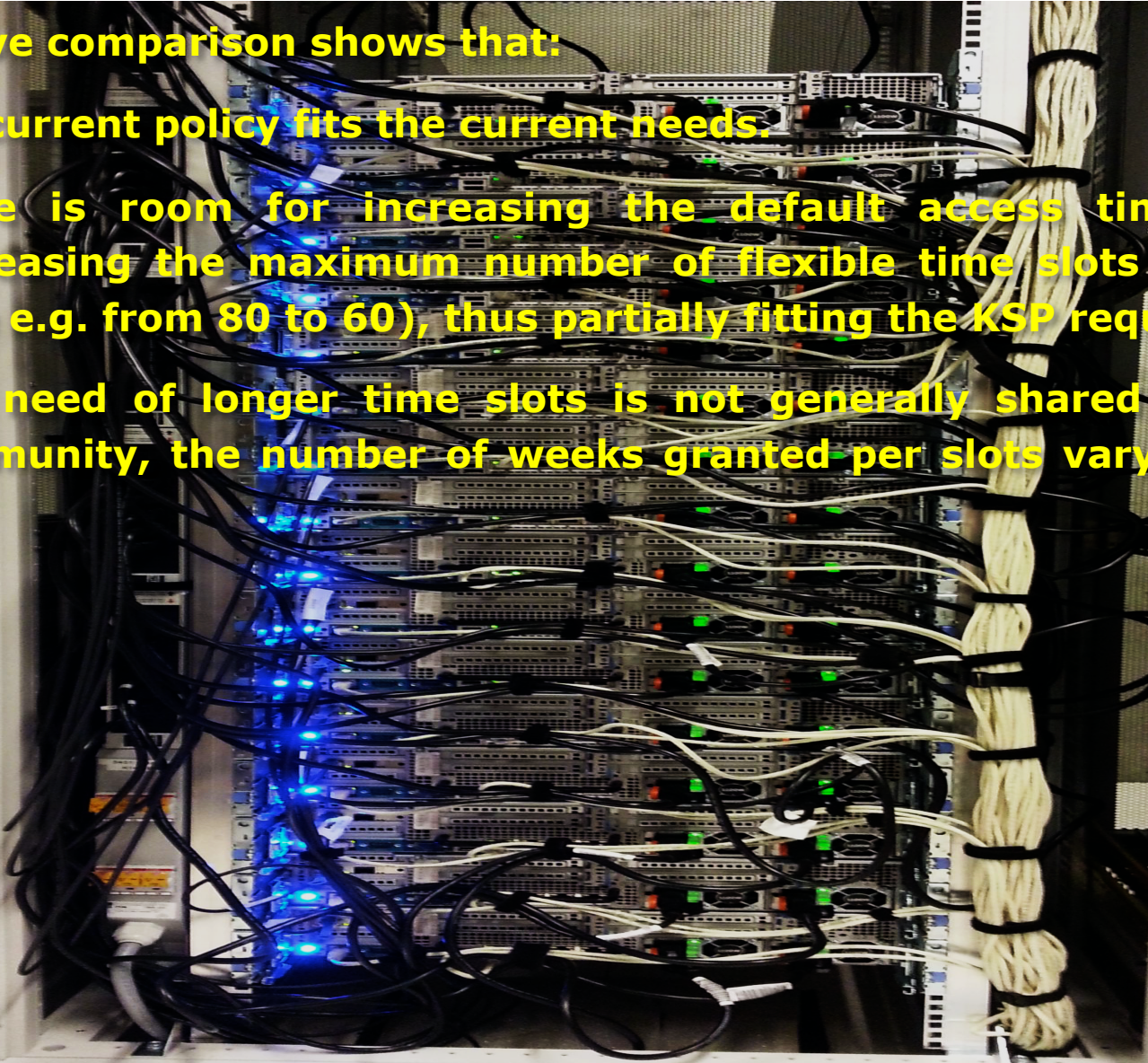




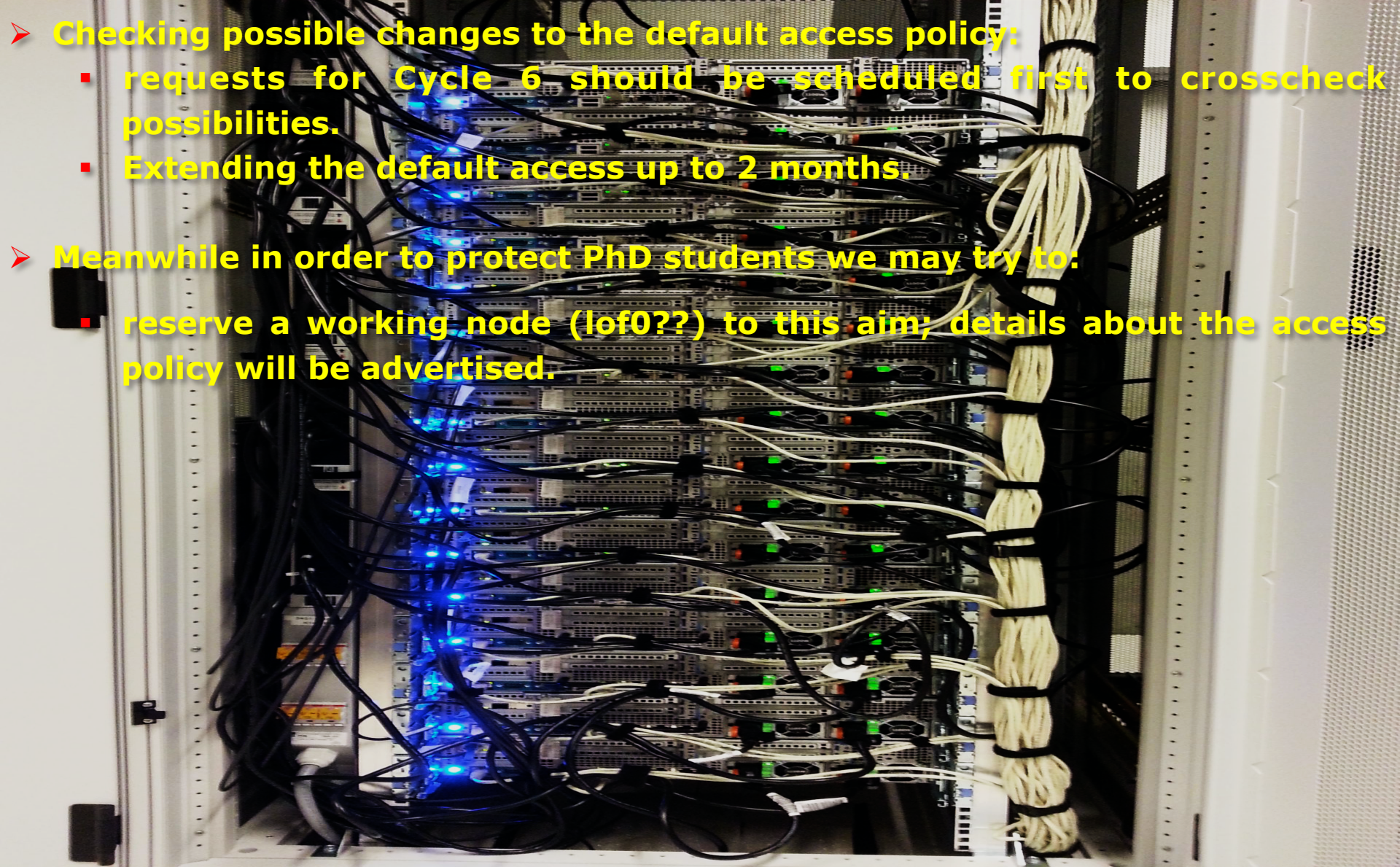
# LESSONS FROM CURRENT USAGE

➤ The above comparison shows that:

- the current policy fits the current needs.
- there is room for increasing the default access time scale, i.e. decreasing the maximum number of flexible time slots per semester (like e.g. from 80 to 60), thus partially fitting the KSP request.
- The need of longer time slots is not generally shared among users community, the number of weeks granted per slots varying from 1 to 23.



# FUTURE OPTIONS

- 
- **Checking possible changes to the default access policy:**
    - requests for Cycle 6 should be scheduled first to crosscheck possibilities.
    - Extending the default access up to 2 months.
  - **Meanwhile in order to protect PhD students we may try to:**
    - reserve a working node (lof0??) to this aim; details about the access policy will be advertised.

# FUTURE OPTIONS

➤ Nevertheless a planning of the cluster access and usage by users is fundamental for exploiting the granted computing power:

- users access request should indicate:

- A brief explanation of why access to CEP3 is required (e.g., you do not have access to suitable computing resources elsewhere).

- Project to be worked on (i.e. commissioning, cycle or archived data).

- List of collaborators (if any) who should also have access.

- Description of the kind of processing for which CEP3 access is requested.

- General description of the data to be processed (e.g. data size).

- Estimated processing time required.