Upgrade News

Calorimeter Upgrade Meeting

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Wednesday February, 11th

LOI

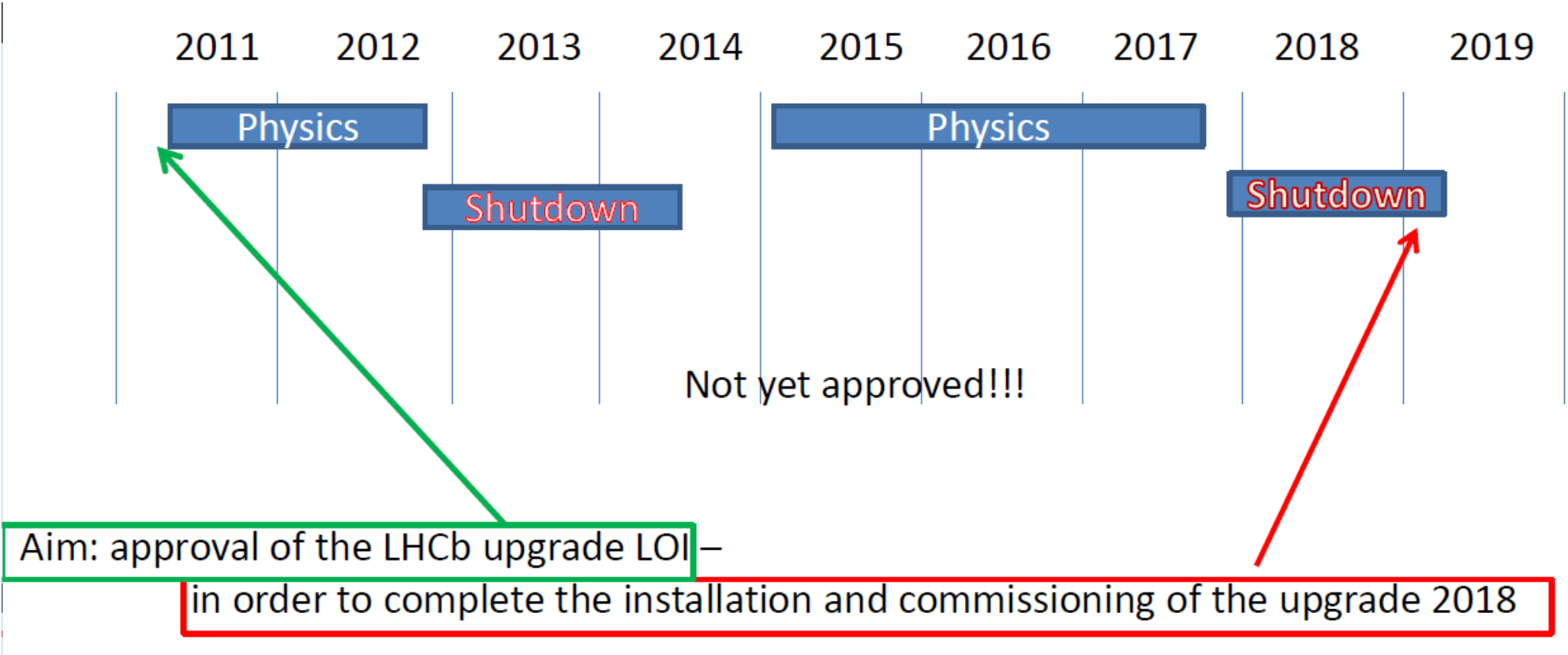
- The Letter of Intent should soon be released
  - The Physics motivations and sensitivities have been added to the detector parts
- Each section was revised by referees
  - Calo : Ken Wyllie and Ueli Straumann
    - Very fruitful comments → most of them have been included into the section
- TB on February 3rd → No major problem identified whatever the LOI section
- I sent the latest version to Ken and the contributors. Got few remarks from
  - Jacques
  - Ken / Sheldon
  - David

That have been included in the final document. You can find it on

https://lbtwiki.cern.ch/bin/view/CALO/CaloUpgrade

- I will send it this afternoon to Sheldon

Upgrade - planning



- Short term planning
  - On February 13rd, the LOI should be released to the collaboration
  - On February 28th, the LHCb upgrade LOI is submitted to the LHCC
  - First recommendations/comments from the LHCC by the summer ???

Electronics and next calo upgrade meeting

- Yesterday we had nice (dense) talks in the Electronics meeting
  - TFC
  - DAQ
- The next general electronics meeting will be mostly devoted to
    - Power supplies
    - DC-DC converters
    - Regulators
  - We need to exchange information to prepare a list of our needs
    - per board (DC-DC converters, regulator)
    - on the full system scale (power supplies)
      - The purpose is to re-use the maximum of the hardware we already have
  - We met Georges Blanchot yesterday → may provide some DC-DC for analog/digital
    - We should be able to do some tests with our prototypes
- The discussion concerning the TFC/TELL40 yesterday showed that we should probably try to have clearer ideas on the design for the calo
    - Need to define it more precisely for the next meeting (schematics of the system)
    - Need also to define more precisely the Low Level Trigger path (Cyril)
  - This is something that we could put at the agenda of our next meeting in April

News

- A first set of data has been produced (Gauss)
  - Luminosity : **2x10^{33}** cm^{-2}s^{-1}
  - Calorimeter includes SPD/PRS
    - Did not dare yet to remove them (trigger effect)
    - Propose : We should try to have a sample without the SPD/PRS
      - The effect of having less matter in from of the ECAL for reconstruction ?
  - **Linked to the decision on the PS/SPD**
  - Most of the sub-detectors started to work on the simulations for the upgrade
  - We should find people in the calorimeter group to work on simulations !

- SPD/PRS
  - Marginally improves trigger
    - As an effect on offline reconstruction (10-20% ↑ eff(γ))
  - More matter in front of the ECAL/HCAL
  - Other groups may wish to use the SPD/PRS released space (TORCH?)
  - No one involved in SPD/PRS studies (simulations, feasibility, etc...)