Daily Meeting Minutes

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# 2019-06-16

Attendees: Hartmut, Jochen, Paolo, Michael, Ivan, Antoine, Artem, Luciano R., Dimitra, Tatiana, Matteo, Johan, Gianluca, Arild, Antonello

* Half-Layer 0: running normally
* Half-Layer 2:
  + **TODO** [Paolo] Set the Vmax and Imax values in the A3009 channels for the Power Boards for L2\_00 to L2\_09 + RUs L2 and L6
  + **TODO** [Antoine, Matteo] connect the patch cords and test
  + **TODO** [Matteo] update the firmware
  + **TODO** [Paolo] address and review settings of CAEN channels for HL2 Top, test DC the supply channels and verify specifically the logic of interlock
* Half-Layer 6:
  + Set the Vmax and Imax values in the A3009 channels for the Power Boards of L6\_00 to L6\_11
  + **TODO** [Bilal] Inspect the patch cord L6\_00 to L6\_11 and L2\_00 to L2\_09 [L2 done, L6 pending]
  + Power Board calibration to be done [Michael, Matteo], offsets produced by Matteo, to be integrated by Michael (first subrack HL6 PP1-O7)
* DCS:
  + Sasha installed a new software on the PLC
  + Found that a second software could have sent the keep alives
  + Ramp-time of the CAEN system is not settable from ICEcontrols: received new software, need to integrate it [Hartmut]
  + Michael has implemented most of the changes to the safety, can potentially test tomorrow
* Stave CC insulation:
  + Now at 16 staves insulated, no damages so far
* QC:
  + No major news: crashes understood
* Services:
  + Replacement of the interlock cabling
    - Started cabling the second half
  + IB HB cables are under preparation
  + White smoke from A3486 for Service Power, when all A3009B modules were on, assuming transient behavior, improved the cabling, todo: increase the voltage, see logbook
  + **TODO** [Hartmut]: Send A3486 modules for revision
  + **TODO** [Gianluca]: Smoke safety?
* Installation:
  + Next installation on Monday, need to decide the quantity
* Readout Units: boards from NIKHEF arrived
* Power Boards:
* AOB: **Please clean-up after installation / interventions!** (and when you find something messy)

# 2019-06-15

Attendees: *Dimitra, Tatiana, Hartmut, Michael, Ivan, Paolo, Antoine, Johan, Matteo, Luciano, Sasha, Bilal, Arild, Zhaozhong*

* Half-Layer 0:
  + Took traces of the bad runs (snapshots of the registers), to be analysed
  + Prepared tools to take the snapshots
* Half-Layer 2:
  + **TODO** [Paolo] Set the Vmax and Imax values in the A3009 channels for the Power Boards of L6\_00 to L6\_11 and for L2\_00 to L2\_09
  + **TODO** [Paolo] address and review settings of CAEN channels for HL2 Top, test DC the supply channels and verify specifically the logic of interlock
* Half-Layer 6:
  + **TODO** [Paolo] Qualify correct DC operation of Power Units for L6\_00 to L6\_11
  + **TODO** [Bilal] Inspect the patch cord L6\_00 to L6\_11 and L2\_00 to L2\_09 [L2 done, L6 pending
* DCS:
  + Paolo, Ivan tested the PLC, issue not reproduced
  + Michael implementing the things discussed on Friday
  + Jochen checking the document on the control and monitoring
  + Unchanged: Ramp-time of the CAEN system is not settable from ICEcontrols [Hartmut], they are working on it and need a few days more for that
  + Power Board calibration to be done [Michael, Matteo]
* Stave CC insulation:
  + Last week about 2 Staves per day, CCs were already unfolded, not the case anymore
* QC:
  + Updated the settings for the data sampling (3-12x faster)
  + Zhaozhong studying the speed
  + Still crashing after one day
* Services:
  + Replacement of the interlock cabling
    - Currently labeling and fixing the cables
    - **TODO** [Paolo] Changing from series wiring to parallel wiring
    - **Next step** [Johan]: complete the testing of the wiring
  + Optical patch cords should arrive today or tomorrow
  + Routing the PCB for the environment sensor readout ongoing
  + Preparing data cables for L6 bottom
  + **TODO** [Antoine]: prepare data cables for IB HB
* Installation: Only testing this week
* Readout Units:
  + Waiting for parts to be delivered
  + Need torque wrench for the CP installation on the Readout Unit
  + Enough Boards for IB HB, 40 boards on the way, in line with our needs
* Power Boards: no news

# 2019-06-14

Attendees: *Artem, Jonghan, Paolo, Michael, IvanAC, Gianluca, Markus, Arild, Bilal, Shabaz, Antoine, Corrado, Hartmut*

* Half-Layer 0:
  + No report
* Half-Layer 2:
  + No updates (No IvanR, Antonello, Miko)
  + HL2-0 (L2\_00-L2\_11) PP3-PP2 connections power and data ready and cooling connected, HL2 Top is connected to PP1 and cooling [Antoine]
  + **TODO**, Michael, Paolo: address and review settings of CAEN channels for HL2 Top, test DC the supply channels and verify specifically the logic of interlock
  + **TODO** [Hartmut, Paolo] Set the Vmax and Imax values in the A3009 channels for the Power Boards of L6\_00 to L6\_11 and for L2\_00 to L2\_09
  + **TODO** [Paolo] Qualify correct DC operation of Power Units for L6\_00 to L6\_11
* Half-Layer 6:
  + Update on DCS issues: after yesterday evening the constant slow down disappeared. There are still sporadic issues of randomly loosing connections are observed, Michael is working on this.
  + Interlock tests done by Felix and Michael this morning. Feature list compiled and being worked on by Michael. Issue with PLC was observed, PLC did not react to the stopping of the heart beat in one situation when it was expected to do. Notified to Sasha. To test again.
  + Extended monitoring of RU-PU planned over the week-end, to test the stability of the communication and study the overall performance and stability.
  + Analyze the transient waveforms taken with the load [TODO Gianluca]
* Stave CC insulation:
  + Advancing regularly, nothing to mention (Antoine)
* DCS:
  + Power Board and RU ramp times have to be set to 5V/s 400V/s in the CAEN system [DONE after the meeting by Hartmut, logged]
  + Unchanged: Ramp-time of the CAEN system is not settable from ICEcontrols [Hartmut], they are working on it and need a few days more for that
  + Power Board calibration to be done [Michael, Matteo]
* QC:
  + Markus: QC was updated this morning, expected to solve the sporadic issue of the GUI becoming unreachable. Shifters asked to report to Markus if it still happens.
  + No results of timing studies, no updates on performance (Miko and Zhaozhong absent). TODO [Zhaozhong] Check if the timing improves when sending vectors of events to QC instead of few events => DONE
  + Markus is on call next week
  + Issues need to be sent to Markus and Ivan via email
  + Main objective for next week: generally working towards a more complete QC, short term goal remains performance optimization
* Services:
  + Replacement of the interlock cabling
    - Cable testing done
    - Waiting for small cable ties (Antoine will give some to Shahbaz after the meeting)
    - Possible switching on Monday following completion of cabling
  + Routing the PCB for the environment sensor readout ongoing
  + Optical patch cords were blocked by TNT in Germany, now in Geneva, expected for Monday at CERN.
* Installation [Corrado]
  + Half Layer 5 Bottom: removed 11 staves for reworking of cross cables
  + Half Layer 4 Bottom (currently being integrated): installed 4 staves, one damaged during test phase, connector of the FPC, the FPC detached from the 3D piece. Stave has been removed. ***Follow-up to be decided***. 3 staves currently on HL4 Bottom.
  + New HL 6 Bottom (being currently integrated): dismounted one Stave because of a problem with a plastic tube. 11 Staves currently mounted on HL6 Bottom
  + Environment sensors on HL6 Top verified, they are all working [Paolo]
* Readout electronics:
  + Assembly process on hold, ordered missing mechanical components [Gianluca, Bilal, Johan]
  + Investigation on the power-up issue progressing and root causes localized in GBTx controller module [Matteo]. Resetting the boards after power up is required.
  + 4 RUs for that were aside for in-depth verification are OK [Arild], they can be re-tested in Lab 1
* Power Boards
  + Need to replace the PBs in the IB test
* AOB:
  + PHOS Module will arrive Tuesday 18, keep the hall free for that day
  + Time of the meeting on Monday to be confirmed, most probable time is 16:00

# 2019-06-13

Attendees: Miko, Jonghan, Artem, Matteo, Paolo, Michael, Ivan, Gianluca, Markus, Arild, Johan, Bilal, Shabaz, Antonello, Corrado

* Half-Layer 0:
  + Reduced run length from 10min to 5min in order be able to process the data via QC
* Half-Layer 2:
  + HL2-1 connected and being tested [Ivan]
  + Connect HL2-0 to the service until end of this week [Antoine]
* Half-Layer 6:
  + Blocked by DCS issues
  + Replaced Power Board and Read Units in PP1-O7
  + Interlock tests done yesterday by Ivan and Michael, the ones with Felix still pending
  + Analyze the transient waveforms taken with the load [Gianluca]
* Stave CC insulation:
  + Progresses as expected
* DCS:
  + Transactions slowed down from 16ms to 100ms: issue appeared this morning; will open a ticket at latest tonight; no software changes [Ivan, Michael]
  + Power Board and RU ramp times have to be set to 5V/s 400V/s in the CAEN system [Hartmut]
  + Ramp-time of the CAEN system is not settable from ICEcontrols [Hartmut]: they need a few days more for that
  + Power Board calibration [Michael, Matteo]
* QC:
  + Separate versions for fake-hit rate and threshold scans, handled by a single script [Zhaozhong]
  + Currently running only on fake-hit rate runs
  + Issues need to be sent to Markus and Ivan via email
  + Who’s the expert to call next week: Markus
* Services:
  + Routing the PCB for the environment sensor readout
  + Replacement of the interlock cabling
    - Almost ready to be plugged
    - Cable test pending
    - Waiting for small cable ties
    - Preparing all in a clean way before doing the switch => Monday?
  + Sleeves have arrived
  + Not enough optical patch cords for simultaneous operation of HL2 and HL6, was shipped early June => NO NEWS
* Installation
  + Installed 6 OL staves today
  + 4 ML staves installed
  + Deinstalled 1 stave from HL5 top, de-installing ~12 more tomorrow
  + Environment sensors on HL6 currently under verification
  + Add print outs of the naming scheme next to the racks [Gianluca], printed need to put them to the wall
* Readout electronics:
  + Assembly process on hold, ordered missing components
  + Bug in the PA3 software prevented initial firmware installation, software fixed but to be verified [Matteo]
  + Investigation on the power-up issue [Matteo]
  + Enough RUs at CERN to complete the Half-IB
* Power Boards
  + New shipment arrived
  + Need to replace the PBs in the IB test
* AOB:
  + 167/R-001 needs to be liberated tomorrow (check after the meeting)

# 2019-06-12

Attendees:

* Half-Layer 0:
  + Found an injection of an FF character into the data, debugging ongoing [Jo]
* Half-Layer 2:
  + Connect HL2 to the service until end of this week [Antoine]
* Half-Layer 6:
  + Test fishy cable for L6-23-lower on another PB, issue is intermittent, need to take the cable out, same behavior on another power unit; replacement cable in place, broken one cannot be taken out easily [Hartmut, Paolo] => DONE
  + Two readout units lost communication with the new bit file, still working with the old firmware, to be investigated: initialization issue, SCA reset can get it to live; should add reset of the FPGA via SCA to the power-up sequence; mitigated for the moment [Matteo, Bergen] => DONE
  + No crashes in ALFRED since yesterday evening [STILL TRUE]
  + Measurement of the transients and checking the behavior of the output after the interlock fired; no potential problem spotted, plenty of waveforms to be analyzed; 40s for capacitor discharged without soft ramp down; no voltage to detector after 250ms [Paolo, Hartmut]
* DCS:
  + Preparing the interlock code [Ivan, Michael], refinement ongoing
  + Test the interlock with Felix tomorrow after the DCS meeting [Ivan, Michael, Felix] => Prepared but then the slow down issue came up
  + Implement the power down sequence [Ivan, Michael] => DONE
  + Ramp-time of the CAEN system is not settable from ICEcontrols [Hartmut]: they need a few days more for that
  + Power Board calibration [Michael, Matteo] => NOT DONE
* QC:
  + Ready for the fake-hit rate runs
  + Code changes need for threshold scan needed
  + Once a week the GUI crashes, need faster support => need our own GUI? [Markus]
* Services:
  + Powering is not safety compliant [Gianluca] => NOT DONE
  + Improve the cabling of the fan units [Gianluca, Harmut] => NOT DONE
  + Safety of computer installation in the rack [Gianluca] => NOT DONE
  + Work on environmental sensors started [Johan] => will send out the orders
  + Replacement of the cabling of the interlock:
    - Started the cabling [Johan, Shabaz]
    - Swap can be done this Friday for the first half
  + Waiting for the sleeve for the data cables (expected end of this week), cannot prepare anything in addition to HL2 and HL6 => Sleeves have arrived via second supplier, will start preparing the cables next week => ARRIVED
  + Not enough optical patch cords for simultaneous operation of HL2 and HL6, was shipped early June => NO NEWS
* Assembly:
  + Installed 6 OL staves today [Corrado]
  + Installation planned for Thursday both morning and afternoon [Corrado]
  + Disassembly of Layer 6 on Friday
  + Service Barrel of L6 bottom still being repaired
  + Add print outs of the naming scheme next to the racks [Gianluca] => NOT DONE
  + Test the environment sensors on the second HL6 [Paolo] => NOT DONE
  + IMPORTANT: avoid hitting, touching etc. of the frame holding HL2
* Stave CC insulation [Antoine]
  + Progressing as expected
  + Petra could to the aging test (piece of CP + Kapton + tape needed) [Corrado, Antoine]
* Readout electronics:
  + Finalizing 20 more RUs at the moment [Bilal, Johan, Piero] => 13 units are done, need more components [Piero]
  + 7 boards are to be retested for the moment
  + 3 boards need to be sent for rework
* Power Boards:
  + Received shipment notifications for incoming boards this morning
  + Shipping out 13 PBs to be reworked to Berkeley => DONE
  + Replace non-working PB #16 in HL6 subrack PP1-O7 [Matteo, Gianluca, Hartmut, Paolo] => DONE
  + Need to replace the PBs in the IB test
* AOB:
  + Friday’s meeting will be held by Gianluca

# 2019-06-11

Attendees: Hartmut, Jonghan, Artem, Ivan, Miko, Johan, Matteo, Antoine, Paolo, Bilal, Shabaz, Corrado, Arild, Michael, Gianluca, Luciano

* Half-Layer 0:
  + Test with global clock on the RUs [Matteo], bit file loaded, but busy with other activities => DONE
* Half-Layer 2:
  + Take decision on hotspots: Luciano is for leaving the layer like it is, decision taken
  + Install HL2 in the CYSS tomorrow [Antoine, Jaap] => DONE
* Half-Layer 6:
  + Managed to reproduce the issue leading to loss of control with the Power Board which could only be resolved by a power cycle the Power Board; cause not understood; could be interleaving of the WB transactions with T checking => certain I2C instructions bring the PB into a stall state [Issues fixed];  
    Three PBs tested with the load, fourth PB doesn’t work with the cable
  + Test fishy cable for L6-23-lower on another PB [Hartmut, Paolo]
  + Two readout units lost communication with the new bit file, still working with the old firmware, to be investigated [Matteo]
  + Matteo found firmware issues in the temperature module, Jo preparing the fixes; they’re not causing the issue [Done]
  + No crashes in ALFRED since yesterday evening [STILL TRUE]
  + Coordinating with Hartmut and Paolo to run the HL6 at the same time
  + Measurement of the transients and checking the behavior of the output after the interlock fired [Paolo, Hartmut, Gianluca]
* DCS:
  + Preparing the interlock code [Ivan, Michael]
  + Implement the power down sequence [Ivan, Michael]
  + Ramp-time of the CAEN system is not settable from ICEcontrols [Hartmut] => no news
* QC:
  + Not used by the shifters at the moment, Zhaozhong looking into it [Miko, Zhaozhong]
  + Luciano in favor of having the clustering in the QC soon
* Services:
  + Powering is not safety compliant [Gianluca] => NOT DONE
  + Improve the cabling of the fan units [Gianluca, Harmut]
  + Safety of computer installation in the rack [Gianluca] => NOT DONE
  + Work on environmental sensors started [Johan] => will send out the orders
  + Replacement of the cabling of the interlock:
    - Material is almost complete available
    - Will complete prepare the new wiring in place before we plug it to have a fast change to the new wiring until Friday [Johan]
    - Need to find a time slot early next week for the interlock switch [Felix]
  + Waiting for the sleeve for the data cables (expected end of this week), cannot prepare anything in addition to HL2 and HL6
  + Not enough optical patch cords for simultaneous operation of HL2 and HL6, was shipped early June
* Assembly:
  + Installed 6 OL staves today [Corrado]
  + Installation planned for Tuesday, Thursday and Friday afternoon [Corrado]
  + Service Barrel of L6 bottom still being repaired
  + Add print outs of the naming scheme next to the racks [Gianluca] => NOT DONE
  + Test the environment sensors on the second HL6 [Paolo]
* Stave CC insulation [Antoine]
  + Reworked two OL HS on Friday
  + Reworked one complete OL stave today
  + Started to rework one ML stave
  + Aiming for a rate of two per day
  + 4 persons operational, 5th person will be trained next week
  + Petra could to the aging test (piece of CP + Kapton + tape needed) [Corrado]
* Readout electronics:
  + CRUs expected in two weeks from now the earliest
  + Finalizing 20 more RUs at the moment [Bilal, Johan]
  + 40 more RUs are on the way from NIKHEF
* Power Boards:
  + Shipping out PBs to be reworked to Berkeley
  + Need to replace the PBs in the IB test
* Cooling:
  + Reservoir pressure was lower by 50 mbar, HL6 set points are now at 0.95 bar
  + Need to check with OB63 behaves differently [Felix]
* AOB:
  + Tomorrow we meet at 17:00
  + Friday’s meeting will be held by Gianluca

# 2019-06-07

Attendees: Markus, Ivan, Hartmut, Michael, Matteo, Svetlana, Artem, Zhaozhong, Paolow, Miko, Corrado, Gianluca, Antoine, Luciano

* Half-Layer 0:
  + Test with global clock on the RUs [Matteo]
* Half-Layer 2:
  + Take decision on hotspots [Antonello]
* Half-Layer 6:
  + Managed to reproduce the issue leading to loss of control with the Power Board which could only be resolved by a power cycle the Power Board; cause not understood; could be interleaving of the WB transactions with T checking => certain I2C instructions bring the PB into a stall state
  + Difficult to reproduce in Python
  + Matteo found firmware issues in the temperature module, Jo preparing the fixes; they’re not causing the issue
  + No crashes in ALFRED since yesterday evening
  + Coordinating with Harmut and Paolo to run the HL6 at the same time
* DCS:
  + Fix the temperature module issue with the RU interplay
* QC:
  + Added another state for the status of reading the files
  + Need to adapt shift instructions
  + Need to start to use it
* Services:
  + Set back-bias maximum currents
    - Define the current [Gianluca, Felix] => DONE
    - Setting the power supplies [Hartmut, Paolo] => DONE
  + Powering is not safety compliant [Gianluca] => NOT DONE
  + Power Board for L2 need to be set to IB mode [Gianluca] => DONE
  + Safety of computer installation in the rack [Gianluca] => NOT DONE
  + Work on environmental sensors started [Johan] => will send out the orders
* Assembly:
  + Installation planned for Tuesday, Thursday and Friday afternoon [Corrado]
  + Need to one half-layer to the dry assembly area to have more space for installation [Corrado] => DONE
  + Ask for second cleaning in the clean room [Corrado] => DONE
  + Service Barrel of L6 bottom should be ready [ONGOING]
  + Add print outs of the naming scheme next to the racks [Gianluca] => NOT DONE
* Readout electronics:
  + No news on the CRUs, still have to contact Alex [Gianluca] => DONE
  + Still running on the local clock on the RUs
* Cooling: no news

# 2019-06-06

Attendees: Antonello, Ivan, Hartmut, Markus, Gianluca, Johan, Paolo, Michael, Matteo, Miko, Svetlana, Zhaozhong, Artem

* Half-Layer 0:
  + Intervention on cooling loop interlock intervention tomorrow at 9:00 about 30min [Paolo, Felix] => DONE
  + Intervention on CRU at the same time [Ivan, Miko, Matteo] => DONE
  + Intervention to change back to 1.2 Gbps [Matteo, Miko] => DONE
  + Intervention after lunch (13:30) to go to global clock on RU [Matteo]
    - Bit file uploaded
    - Not tested yet, can load on demand and test
    - Not tested as priority to debugging of the Temperature module in the RU
* Half-Layer 2:
  + 4 staves need potentially replaced (hot spots in the threshold map), took radioactive source data, analyzing now  
    => Miko’s recommendation is not to replace them
    - Higher threshold confirmed
    - Small number of pixels (less 1024 affected)
    - Taking additional data which can be clusterised
    - Will take decision on Tuesday
  + Need to take a general discussion on the usage of such staves
    - If we don’t replace tomorrow
    - If we replace Tuesday
* Half-Layer 6:
  + Because of the DCS still in the same status
* QC:
  + Userfriendliness improved [Zhaozhong]
  + Shifter instructions improved [Markus]
  + Found problems in the comparison of the decoders [Miko, Zhaozhong], asked Ruben to patch it => Implemented this feature and comparison is successful
  + Old layouts were removed from the web interfaces [Zhaozhong]
* DCS:
  + Found a bug, but needs to be analyzed
    - Configuration file parsing error
  + Ramp-time of the CAEN system is not setable from ICEcontrols [Hartmut] => no news
  + Power-down sequences to be implemented (correct display of the status) [Michael] => post-poneds
  + Interlock intervention with super capacitors, what are the effects [NEED TO ASSIGN MANPOWER] => Gianluca and Paolo assigned
* Services:
  + Set back-bias maximum currents
    - Define the current [Gianluca, Felix] => NOT DONE
    - Setting the power supplies [Hartmut, Paolo]
  + Trunk cable installation done yesterday [Matteo, Gianluca]
  + Powering is not safety compliant [Gianluca]
  + Power Board for L2 need to be set to IB mode [Gianluca] => DONE
  + Safety of computer installation in the rack [Gianluca]
  + Order for interlock components send [Johan]
  + Work on environmental sensors started [Johan] => will send out the orders
* Assembly:
  + Environment sensors being glued today to HL6
* Readout electronics:
  + No news on the CRUs, still have to contact Alex
  + Still running on the local clock on the RUs
* Cooling:
  + Changing the IB rack interlock removing everything but IB00, IB01, IB10, IB11, IB20 and IB21 from the input

# 2019-06-05

Attendees: Artem, Miko, Paolo, Corrado, Matteo, Michael, Antoine, Franck, Johan, Markus, Jochen, Ivan, Gianluca, Hartmut, Marc, Svetlana, Sylvain

* Half-Layer 2
  + We can add layer 1 on top of Layer 2 in the CYSS => need to change the stave now
  + Need to find replacement stave (waiting for answer from Ivan Ravasenga)
  + Testing the cooling for layer 2
  + All data and power cables are in place, need to be connected
  + Power Boards and Readout Units are in place, need to be connected to the cooling [Antoine]
  + Missing: fibers
  + Optical patch cords expected tomorrow or Friday (enough for temporary testing)
  + Dip switches and Jumpers on RUs were corrected
* Half-Layer 6
  + One power cable to be replaced => do additional test and in case replace the cable [Jochen]
  + PA3 on all boards updated, jumpers set correctly
  + CRU updated 3.1
  + Other activities delayed by ALF FRED => shift all by one day
* QC
  + One layout with basic information for shifters, still working on user-friendliness [Zhaozhong]
  + Need to verify the decoding [Zhaozhong, Miko]
* DCS
  + Fixed issue with the configuration
  + Installed latest version and it is running as a service now
  + Stress test pending (crate testing + simultaneous powering of RUs)
  + Occasionally RU FIFOs go out of sync (when reading while there is now data in the FIFO); data in FIFO will get a tag, which is implemented by Jo; does not affect the temperatures but voltages and currents
  + Hardware interlock is set to 10s in the watchdog
  + Still an issue in the Power Unit initialization
* Services
  + Optical equipment should be in place by the end of this week [Gianluca]
  + Ordered extra optical equipment for rack 3 and 4 [Gianluca]
  + Protection for fibers [Gianluca]
  + Trigger equipment still being procured [Piero]
  + Wiring of interlock started, material ordered [Johan]
  + Environmental sensors PP2 to EMLB, discussion tomorrow at 10:00 in 23/R-20 [Johan]
* Assembly
  + Environmental sensors in HL6 will be glued this afternoon
  + Second Half-Layer 4 on track for next week (including cover)
* Readout electronics
  + All ok for HL2 and HL6 in terms of RUs
  + New CRUs expected next week at CERN, need to be tested after arrival
  + Gianluca will ask Alex about the CRUs
* Cooling
  + Two interlocks caused today
    - Misunderstanding in one case
    - All channels are in the interlock, even if not used for the detector
    - All interventions need to be scheduled from now on in this meeting
    - Log book entries are missing
    - Cooling intervention at 9:00
* Phone not working in case of network problems 🡪 Go to general announcement
* Need to find a way for expert communication [Felix]
* USE THE LOGBOOK

# 2019-06-04

Attendees: Artem, Svetlana, Paolo, Hartmut, Gianluca, Johan, Arild, Matteo, Jochen, Michael, Zhaozhong, Markus, Ivan, Miko, Antoine, Franck, Corrado

Status

* Half-Layer 2
  + One stave needs to be replaced, waiting for Ivan’s histograms
* Half-Layer 6
  + See above under 2019-06-03
* QC
  + Implementation with the pipes (incl. compressed data) is working
  + Will clean up the histograms and give documentation [tomorrow, Markus, Zhaozhong]
* DCS
  + Debug FRED stability issue [Ivan, Michael, Hartmut and Paolo]
  + Watchdog behavior [Ivan, Michael, Jochen]
* Services [Antoine, Gianluca]
  + Optical terminal plate for HL2 and trunks have to connected [Antoine]
  + Patch cords have been ordered
  + Testing the second rack of HL6 [Hartmut, Paolo]
* Assembly [Corrado]
  + Environment sensor will be installed today and tomorrow
  + Outer Barrel staves can be installed
  + Second Half-Layer 4 for next week
* Readout electronics
  + Jo tested last night the new CRU firmware
  + Matteo will test the new CRU firmware on flpits1 starting from 17:00 [Matteo]
  + Tests on flpits0 tomorrow during lunchtime [Matteo]
  + Need to update the bit files of the PA3s (not urgent but should done before the layer will be powered on [Arild]

# 2019-06-03 (from TC meeting)

* Half-Layer 2
  + Electronics rack completed
  + Cabling prepared
    - Data cables between PP1-PP2 and PP2-PP3
    - PU and RU in place
    - Next step: place Detector in the Service Barrel
* Half-Layer 6
  + Finalization of DCS communication with multiple RU/PUs simultaneously today (Matteo + Michael) [done]
  + Interlock setup after the TC meeting (Paolo) [done]
  + Testing of the full sub rack with the load tomorrow morning (Paolo + Hartmut) [ongoing] => [half-way through, FRED unstable, issues with board 16 and 23 => takes longer, tomorrow morning as well]
  + Testing of the DCS and its safety mechanisms tomorrow afternoon (Paolo, Hartmut, Michael, Matteo, Jochen, Ivan) => tomorrow afternoon because dependencies, discussions ongoing
  + Switching on staves on Wednesday morning (Jochen, Matteo, Michael, Ivan) => after the safety test
  + Operation of up to 4 staves at a time (limited by amount of values that can be polled in 2s)
  + Do we run over night on Wednesday? Need to decide at latest tomorrow during the daily meeting!
* ALF/CRU version hot fix => seems stable, need access to the repository
* Readout.exe issues =>
  + one reported, not seen as bug as the packets are dropped and this is ok from their point of view => need to give feedback that this is not ok for us
  + super pages order not ok with LZ4 => should have been addressed