ALICE Management Board, Thursday 26th of March 2020
https://indico.cern.ch/event/849382/
VIDYO only meeting

Participants: Harald Appelshaeuser, Federico Antinori, Pietro Antonioli, Roberta Arnaldi, Alberto Baldisseri, Marielle Chartrier, David Chinellato, Andrea Dainese, Barbara Erazmus, David Evans, Alessandra Fantoni, Martino Gagliardi, Jan Fiete Grosse-Oetringhaus, Taku Gunji, Yuri Kharlov, Jochen Klein, Alex Kluge, Volker Lindenstruth, Constantin Loizides, Vito Manzari, Silvia Masciocchi, Massimo Masera, Dariusz Miskowiec, Andreas Morsch, Luciano Musa, Ken Oyama, Yvonne Pachmayer, Stefano Piano, Mateusz Ploskon, Werner Riegler, Kai Schweda, David Silvermyr, Johanna Stachel, Adriana Telesca, Raphael Tieulent, Wladyslaw Trzaska, Fernando Flor, Marco Van Leeuwen, Pierre Vande Vyvre, Daicui Zhou

Absent: Vladislav Manko (excused), Antonino Zichichi (excused), Pierre Vande Vyvre (excused)

Approval of the Minutes
The minutes of the Management Board (MB) meeting held on 20th of February, 2020 are approved.

Introduction – Luciano Musa

An update on India contribution to TPC CRU has been presented. An agreement on an amendment of TPC Upgrade MoU (ALICE-MoU-Add#41) between CERN Director of Research and Chairman of Atomic Energy Commission of India has been reached on 20th of March. The amendment awaiting signatures states that the contribution towards the Common Read-Out Unit (CRU) under Work Package 6 can be done either by way of an in-kind contribution to the ALICE upgrade or by way of a financial contribution of 2000 kCHF to CERN as stated in Annex 5 for the procurement of the CRUs following CERN's procurement procedures.

Amid concerns of the ALICE-INDIA National Coordinator concerning the future funding for ALICE activities (including M&O-A payment) ALICE Spokesperson will continue discussions with CERN's directorate and the funding agencies in India to clarify the situation.

Despite efforts from ALICE Spokesperson and Computing Resource Coordination the ALICE-Japan GRID site (Tier-2) will be (temporarily) shutdown on March 31st 2020. This is a consequence of retirement of Toru Sugitate, the current site manager. ALICE-Japan Collaboration (information provided by Ken Oyama, ALICE-Japan Coordinator) is searching for a successor of T. Sugitate, but suitable solution has not been found until now. In the meantime, the leasing contract (with a commercial company) of the Tier-2 hardware (including maintenance) will be manged by Kenta Shigaki and the Hiroshima University pledged funding to cover the cost of the contract till end of 2021 (~10M JPY/year). While the restart of the Hiroshima Tier-2 is planned by the summer of 2020 (with a new site administrator) the Tsukuba University is in a start-up phase of another Tier-2 center (of smaller capacity though). Moreover, the groups in Japan pursue new funding opportunities

that can secure the operations of ALICE-Japan computing sites in the years to come. First outcomes of such applications are expected in the summer of 2020.

Computing resource coordinator, Stefano Piano, resonated with the general understanding that the shutdown of ALICE-Japan computing is highly regrettable. In particular, since the ramp-up time for a site's restart is significant (timescale of months), ALICE-Japan will likely miss on the computing obligations for 2020, but also because of the Hiroshima site being one of the only two sites across Asia. Having that, ALICE-Japan Coordinator expects that pending the new funding ALICE-Japan their contributions to ALICE computing may likely exceed their pledges in the years to come.

Computing coordination assured that the data located at the Tier-2 in Japan was redistributed to other sites in time for the site's shutdown.

In general, the MB expressed their concern over the situation and the disappointing outcome of the transition to the new administration of the site. For the future, Spokesperson and MB recommend to signal upcoming issues well in advance - in many cases ALICE may be in position to provide assistance (in negotiations, help in obtaining or providing workforce or financial aid) to mitigate the unfavourable circumstances and their consequences in a timely manner.

The Management Board expressed its appreciation and gratitude to Toru Sugitate for setting up the site in 2009, for managing it so successfully throughout the years and making it the reference for the ALICE grid in Asia.

An update on the expectation of modifications to the LS 2, Run 3 and LS 3 schedule vis- à-vis the COVID-19 pandemic has been presented. Note, some of those considerations have been already given by Technical Coordination during the Technical Board (earlier in the day – https://indico.cern.ch/event/849397). Although it is premature to make reliable predictions, CERN Directorate asked experiment management on Wednesday 24th March, to develop a plan based on the following assumptions of a two-stage return to nominal operations:

- Stage 1 (mid-June): small fraction of personnel returns to work on CERN site;
- Stage 2 (September): return to 100% of the personnel on CERN site.

In response to CERN Management's query, the Technical Coordinator, in coordination with the Project Leaders, will develop such a plan taking into account the volatility of predictions but foremost the safety of the personnel vis-à-vis the rationale and complexity of the commissioning and installation tasks.

Concerning the timing of the LHC startup, commissioning with beam and eventual physics running with proton and ion beams it is rather clear that 2021 schedule will be strongly revised – in particular, a reasonable expectation is that the heavy-ion run in 2021 may not take place at all. Given this developments ALICE Spokesperson and Technical Coordination take initiative to review the experiment's commitments and scheduling - including milestones and procurement plans. Further review of the LHC schedule with CERN directorate, accelerator management, and the leadership of the experiments (including overall plan for LS 3), is scheduled for 8th of June.

An update on the preparations of the European Strategy for Particle Physics has been presented. On 20th of March a draft strategy document has been presented by the Secretary of the European Strategy Group to the Council for feedback. Unfortunately, as per last week's Council session the special open session of the Council in Budapest planned for May 2020 has

been cancelled thus the formal approval will not take place as scheduled. However, the meeting of May will still be used to converge to a final document for approval in June.

Report from Technical Coordination – Werner Riegler

Information on the current technical status of the experiment was well received. In particular, it was noted that CERN operates in a "Christmas-like" shutdown mode. Namely, the FLP farm, the vertical slice, and a few computing installations of some sub-detectors are ON and remotely accessible; also, the LV for detectors in the cavern is not locked out, the DSS is ON and people can perform some remote testing. Moreover, a daily inspection round at P2, Bat. 167 (ITS), MFT Lab. etc. ensures that things are under control. Access to CERN can be exceptionally granted for emergency interventions (contact TC). There is a permanent guard at P2 and the survey cameras are on. The site is 'safe'.

In response to the preliminary idea of 'small' activities at the CERN site restarting as of June, before the full re-opening of CERN in September (discussed above by the Spokesperson) the technical coordination together with the relevant groups/people is detailing the installation and commissioning plans. In that context the LS 2 master plan has been shown – clearly indicating the substantial complexity of the remaining installation tasks – likely exceeding a scenario for limited operations at CERN.

A list highlighting the progress on a number of activities discussed at the Technical Board has been presented. In particular, the progress on the CTP board production where the resolution of the production issues has been achieved and a good progress on production and continuing firmware activities has been made. However, the board testing logistics still needs a resolution. Given the present reconstruction software performance, an affordable EPN farm needed for 50 kHz Pb-Pb ALICE operation seems to be within reach. A significant progress on GPU software powered by collaboration between ALICE and AMD has been made. However, the definition of the PDP reference software and schedule in view of EPN PRR has to be sorted out – as impacted by the current situation of CERN operating mode. Also, a 'full chain' detector readout has been established (e. g. TOF) and an overall good progress in many areas of the `vertical slice` has been made. Now, an essential focus turns to the O2 software integration.

Report from Physics Coordination – Andrea Dainese

Information on the rotation of PAG Coordinators has been well received. Less than 15 (out of 44) remaining coordinators are in office for more than the recommended two-year period. Physics Coordination continues the effort to reduce this number.

Physics results approval sessions will be held as planned under the assumption that LHCP and Hard Probes conferences will remain with their original schedule but will take place online instead of as in-person meetings. Should any of the conferences move to the autumn

for the new results the PC will encourage the analyzers to produce a paper before the conference rather than approving a preliminary result.

The outcome of considerations for the Run 3 Pb-Pb collision energy points to a preference for the larger centre-of-mass energy. This provided the LHC magnet training for pp collisions will yield a decision to settle for a higher energy of the collisions for the upcoming campaigns. The arguments that prevailed were: the higher achievable luminosity at a higher c. m. energy and likely the higher energy will be closer to the Run 4 setting what in turn would enable merging of the statistics in majority of the physics results. Moreover, comparisons with the lower-*s* would still be possible with reasonable (non-cancelling) uncertainties while merging data of Run 2 and Run 3 is likely discouraged because of differences in the instrumentation resulting in complicated (likely unresolvable) systematic effects rendering any such exercise impractical.

An update on the extended high-energy pp physics programme has been discussed. The working proposal at present aims at collection of about 200/pb with full magnetic field setting of the solenoid (e. g. 11 months at 1 MHz interaction rate and assumed 50% LHC efficiency), with event selection after asynchronous reconstruction and about 3/pb minimum-bias with “low field” setting (enabling low-mass di-electron spectrum analysis). Discussions of the implementation with the help from Trigger Coordination of such a scenario has begun this week (Tuesday). At the same time the note outlining the strategy is being finalized with sections pertaining to operational costs (including electricity, gases, maintenance) and resources (including computing and shift staffing) as well as estimations of the radiation load on the detectors. The aim is to circulate a mature draft by the end of April. It is noted that two versions of the document regarding the costs will exist – i. e. LHCC will likely need a breakdown of the cost and this documentation will be private to the collaboration, while a public note will likely describe the overall cost without explicitly detailing its elements.

Report from Service Work Board – Kai Schweda

The report from the SWB has been acknowledged. The current accounting results in an expected service work of 0.25 FTE per M&O-A member. The planning of the service work will be adjusted for the delay in startup. Service work tasks are made available to all ALICE members by August 1, 2020.

Accounting of the service work credited in terms of outreach activities has been discussed. Only the outreach activities officially recognized by ALICE will be credited. Therefore, it is essential that any of such activities are presented to and discussed with the SWB. It was reiterated that every activity proposed to be credited needs to be scrutinized by the SWB to ensure an effective operation of ALICE.

Concerning the assignment process of the service work the project leaders will remain with a possibility of assigning a particularly sensitive service work to selected collaboration members. Members of the MB recognized the complexity of the mechanics of the assignments and pointed out to the arbitration role of SWB in all, including the problematic cases.

It has been noted that while at present, experimental shifts and on-call shifts are treated separately from service work, the SWB is considering merging experimental shifts and on-call shifts into the service work to allow more flexibility for teams or clusters to fulfill their respective allocations.

The timeline of establishing the service work remains as proposed earlier:

- June 10 – finalization of the document & distribution of the list of service work to MB;
- June 18 – endorsement of the service work document by MB;
- June 19 – expose to collaboration (web site);
  July 10 – presentation of the final document at Collaboration Board.

Information from Resource Coordinator - focus on upcoming RRBs – Adriana Telesca

A detailed rundown of ALICE finances with the focus on the upcoming (27-29 April) review LHC Resources Review Boards has been well received. The main points from the report:

- Maintenance and Operation Category A 2019 book closing shows (Budget – Payments) surplus of 136 kCHF (3%) and (Budget – Total expenditure) is negative at -105 kCHF; 4 MCHF was received for 2019 and 410 kCHF in advance contributions for 2020; current cash balance is at -248 kCHF; outstanding contributions amount to 1.2 MCHF; there is 5.1 MCHF cash available on the Online Computing Replacement Fund with a plan to spend 3.6 MCHF in 2020.
- Maintenance and Operation Category A 2021 budget request and 2022-2024 estimates have been presented showing 6.983 MCHF for 2021 grand total.
- Evolution of ALICE M&O-A Total w/o Power was discussed - assumption from 2022 on are 11 months computing farm operation at 1MW, 8 months full magnet operation, exchange rate 1 EUR = 1.1 CHF; decision on p-p programme from 2022 on is pending. For 2021 M&O-A demands a lower budget request excluding power; however, a higher power budget request is made.
- 2020 M&O-A expenditure will be closely monitored given the current stop of the activities due to COVID-19.
- Overall M&O-B cumulative balance has decreased.
- ALICE Upgrade expenditure up to the end of 2019 reached 43 MCHF and the Common Fund for the Upgrade contributions received 98% of all contributions.

AOB

The issue of the announced discontinuation of the subsistence payments by CERN to personnel who left CERN/local area due to the laboratory closure has been discussed in detail. The unfortunate cancellation will affect a large number of people also in other LHC Collaborations and non-LHC-related personnel. Directorate and HR of CERN have been made aware of the damage such action will cause as all of the experiments have protested. CERN is determined to develop a strategy for a compensation mechanism and an appropriate regulation that would enable the payments to continue. The matter, however, will require a legal solution that is currently not obvious but is being sought for. This has become a constant

first item on the agenda of the nowadays daily meetings of the spokespersons of the experiments with the Research Director and the EP department chair.

Spokesperson announced that the Research Director would like to address the Collaboration Board at the CB meeting (in view of COVID-19, CERN closure, but also the subsistence support). MB recommended to allocate 30 min. prior to the CB meeting allowing more discussion on the present situation at CERN.