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SRF Coordination Committee

Meeting minutes 14th May 2020

Participants:	Gilles Favre, Frank Gerigk, Torsten Koettig, Walter Venturini, Guillaume Rosaz,
	Ofelia Capatina, Mauro Taborelli, Rama Calaga, Stefano Sgobba, Giovanna Vandoni
	(minutes)
AGENDA	SRF activities restart after lockdown

BACKGROUND

With lockdown officially ending next week and activities slowly restarting on site, the aim of the meeting is to share information and understanding on SRF activities, priorities and related coordinated effort.

The list of activities presented here is bound to evolve and grow every 1-2 weeks.

SRF ACTIVITIES AFTER TO

A table of activities and related priorities is presented by Frank.

Priority 1: HiLumi and LHC operation related

Priority 2: LHC spare cavities

Priority 3: R&D: Flux lens, FRT insert preparation, (QPR) + 1/4 CM assembly

HL-LHC ACTIVITIES

FLANGES FOR RI

One set of flanges for RI was coated according to request; a further run is ready for a second, different batch. During this second run, some spare flanges of the first type will also be recoated. Initial schedule should not be affected by the lockdown and restart.

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RFD1

Concerned persons and groups already in the communication loop via Nuria and Rama: VSC, RF and CRG are involved and contacted.

RFD2

The cavity undergoes metrology starting next week, then it will be ready for BCP, to be performed beginning of June. Rama and VSC agree on this schedule.

LHC SPARE CAVITIES

NC1.2

Next steps for this cavity are dressing and welding of the helium tank on the cavity. Being standard TIG welding, the workshop is ready to do the job immediately at T0, only waiting for SRF to send in the cavity.

NC0.3

Next step for fabrication of this cavity is electron beam welding. Thierry Tardy needs 1 week to restart the equipment in the workshop, then assembly should start according to planning, T0+1 week. This planning is in perfect coherence with restart of the b.118 activities (see below), since some cleaning work is required on this cavity to prepare it for the weld.

NC0.2

Serge Forel will initially be alone in b.118. He will do the reception of the cavity and installation, then while restarting for the RFD2 crab cavity, he can proceed to stripping, while waiting for the coating bench in b.252 to be reactivated again. The HPWR pump will be needed only after the stripping, for the forthcoming SUBU. Update from the contractor for the water pump's repair is still awaited.

DIVERS

R&D CRYOLAB

The flux lens is already in the loop of the first experiments to restart in the Cryolab. The QPR set-up will restart with a shift of 2 weeks: first cooldown about mid-June. Lorena asked to take into account that if the QPR is restarted, then it will require slots of 1 full week for her, for an efficient use and not to lose helium.

QUARTER LHC CRYOMODULE

The 1/4CM assembly can restart on T0, as David is independent and will only need minor support from MME later on.

FRT

The Fast Reactive Tuner test is also largely an internal SRF activity, without need of external support.

FCC SPENDING:

In spite of fund cutting, FCC is contributing to fellows for VSC and MME. \$

A list of requests for activities related to SRF was drafted in 2019. However, only 50% of the requested budgets was actually spent. Frank asks for rapid update on each of these lines for 2020 and 2021, however he recommends to not be too ambitious, as the covid-19 crisis will considerably slow down our FCC efforts. He asks for update within 2 weeks, in order to meet with M. Benedikt and check if it will be possible to have these expenditures shifted in time.

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ROUND TABLE

TORSTEN

The Cryolab can accompany the effort on Flux lens and QPR, details to be agreed upon. Otherwise, their priority will be with LIU and HiLumi until mid-June.

GILLES

The team prepares for welding of the last LHC spare cavity, then dressing of the other one as soon as available.

GIOVANNA

Work has started on purchase of a new cryostat V6, what support can SRF get from the EN/MME design office? Ofelia states that for the moment workload is not huge, but in 2 months as activities will all be back to cruise velocity, design office slots will be less accessible.

WALTER

Machining of the first 1.3 GHz single cell from bulk is planned to start next week, according to K. Scibor.

The contract with UNIGE for sample's characterisation will come to an end on July 2020 with all requested samples measured. There is general consensus in the community on renewing the experience, with a contract amounting to 50kCHF/year for 3 years, representing ~ 150 measurements. Mauro with VSC supports it strongly.

MAURO

In the VSC prioritization, cavity coatings will not start at T0 but rather be shifted by 1 week. Surface treatments restart in b.118 with the LHC cavity stripping, at T0. B.107, mainly dedicated to cleaning, has already started with 2 persons half time. Ramp up is slow but constant in all teams.

Walter raises the concern that to our understanding all activities should undergo approval by the LS2 committee, and this also for any external intervention like the one for the pump's repair. Mauro thinks however that this is regular maintenance and should not be a LS2 matter.

GUILLAUME

Nothing to add.

OFELIA

Restart is slow in EN/MME, priority for the department is CV and HL, to respect assigned quotas. Restart priorities are then with services which cannot telework: the workshop, metallurgy, then the mechanical measurements lab. As for anyone else, priority will be on LIU and Hilumi.

RAMA

As stated, focus is now on RFD2 fabrication and RFD1 cold test. Activities are already coordinated with VSC, CRG and RF and followed by Nuria. All are normally planned and approved.

STEFANO

As Ofelia already mentioned, in the metallurgy section all non-destructive testing techniques are already covered, including by external contractor (DEKRA). Dimensional metrology will start next week with one ENTC. Ultrasonic testing starts again next week, resuming also work by a 2nd ENTC. Computed tomography should also be back soon, metallography and metallurgy have already restarted with one staff technician. Everywhere there is an ENTC, his activities go back to 100% to fulfil contract conditions. There will be a huge workload upon restart due to accumulated delays, then slowly back to a normal pace.