GSI – Protocol	**Nr.: 20190514, 14:00 – 15:30**
Machine Meeting (MM)	**Chair:** M. Bai
Distribution	Machine coordinators and their deputies, departments leaders accelerator, participants, Management board
Participants	S. Reimann, D. Severin, U. Weinrich, A. Adonin, M. Steck, F. Herfurth, P. Gerhard, G. Schreiber, M: Schwickert, L. Groening, P. Spiller

Important: **I = Information** **D = Decision** **AI = Action Item**	**Confidentiality Notice** **It is requested not to scatter the protocols over the predetermined distribution circle or leave them on the publicly available printers.**

1	**Agenda**	

	Approval of meeting minutes
	• Follow-up of action items: 15mins
	• Status update
	  ○ Engineering run planning: SR
	  ○ HSI RFQ x-ray test results: PG	

2	**Update**	

	Followup
	• **Risk registration: all MK deliver ASAP by May 21, 2019**
	• Achieved Beam parameters of GSI Accelerator facilities: Lars
	  ○ presentation from Lars: https://indico.gsi.de/event/8907/contribution/0/material/slides/0.pdf
	  ○ details see the Discussion section
	• Confirmed the presentation by R. Steinhagen and R. Bär on the topic of Analog signal digitization of GSI facilities project status, May 28, 2019: RB/RS: Confirmed	

	Physics programs: https://indico.gsi.de/event/8907/contribution/3 Daniel showed requests of various physics programs from HADES, NuSTAR, storage rings, BioPhysics/ESA, MAT and Plasma Physics. The desired ion species are: 238U, 208Pb, 124Xe, 206Pb, etc Daniel also confirmed that he clarified with Paolo Giubellino that R3B doesn't need physics data taking time during engineering rum	D. Severin
	Operations (OPE): https://indico.gsi.de/event/8907/contribution/10 Shutdown ongoing	S. Reimann
	Ion Sources status report: **https://indico.gsi.de/event/8907/contribution/4** Most of the works, shutdown activities, preparation for engineering run as well as other planned developments on track Aleksey did point out that the intensity of 238U5+ can be lower than 238U4+ during the discussion of accelerating 238U5+ instead of 238U4+ in	A.Adonin

	case HSI RFQ conditioning takes longer and doesn't reach required 8.4 v at the end of engineering run. In addition, it is not yet known the reliability of operating source for U5+ over a long period. These will be tested and clarified prior to the engineering run	
	SIS18 status report: https://indico.gsi.de/event/8907/contribution/7 Most of the works, shutdown activities, preparation for engineering run as well as other planned developments on track	P. Spiller
	UNILAC status report: https://indico.gsi.de/event/8907/contribution/6# Most shutdown works including FOS ongoing.	P. Gerhard G. Schreiber
	HEST status report: http://indico.gsi.de/event/8907/contribution/11 Shutdown-Work ongoing. Most are routine Maintenance. In particular, --Mini CBM (diagnostic upgrade): good progress (components are ready, smaller delay for installation). Question is **control system integration?** --HADES beamline upgrade (chambers) only on hold at the moment. Requires if high intensity pion beam time is planned for 2020 --TS1MU1 is followed by SIS18 team	S. Reimann
	FRS status report: https://indico.gsi.de/event/8907/contribution/2/material/slides/0.pdf	C.Scheidenberg
	ESR status report: Shutdown work started. No major issues. Key is the FAIR controls deliver storage ring mode on time to allow engineering run goal is achieved	M. Steck
	CRYRING@ESR status report: The scheduled June beam time had to be cancelled due to no support of Vacuum control expert which is absolutely required for the bake out of the extraction section. To establish extracted beam for fixed target experiment was the original goal of the beam time in June	F. Herfurth
	CW-LINAC demo: https://indico.gsi.de/event/8907/contribution/9 All preparation work for cw-linac advanced demo are ongoing. No major issues at the moment	W. Barth
	COMM systems: **ACO:** https://indico.gsi.de/event/8907/contribution/5	R. Baer
	BI:	M. Schwickert
3	**Discussion**	**All**

	• Achieved Beam parameters of GSI Accelerator facilities: Lars
	  ○ Discussions on what's this for
	  ▪ To inform our top management closely informed with our performance
	  ▪ To keep track of our development/performace in a systematic and transparent way so that our users can plan accordingly
	  ▪ THIS IS NOT for us to BRAG or to SHOW OFF	

	○ Giving the diversity of GSI facility operation modes, we agreed at the moment ▪ First to collect the data we have so far. As for the ion species, we start with the most popular one, Ar was mentioned, and 238U28+, the benchmark ion for FAIR ▪ For storage rings, we will first start with the highest intensity stored. Even though this is the very limited part of many aspects of ESR beams, we will further improve as we gather more experience ○ Lars already emailed all MKs for providing their side of feedbacks, and we appreciate the timely response from all MKs • HSI RFQ x-ray test results ○ Peter Gerhard shared a preliminary HSI RFQ conditioning/commissioning plan ○ No x-ray results were presented ○ It was reminded and echoed that the HSI RFQ conditioning has to be carried out carefully. Force it to go to the uranium nominal voltage within limited time could potentially damage the electrodes ○ It is understood that reaching 7volts at the end of 2019 is relatively safe to expect. Reaching 8.4 volts for U4+ may not be fully in reach. For this matter, we should look into the possibility of U5+ • Engineering run plan ○ Stephan shared a preliminary plan https://indico.gsi.de/event/8907/contribution/10/material/slides/0.pdf ○ Key discussion points: what's the choice of ions in addition to Uranium. Ar was proposed, and Pb was also mentioned ○ All MKs are asked to propose what he or she would like to achieve during the engineering run for another round of discussion • new AIP for mid term ○ Mei has triggered the thoughts on improvement planning for mid-term.	
4	**Open Action items**	
	• Risk registration list: for each item, the MKS are asked to provide the following information: ○ technical name of the system or component ○ probability of the failure and its impact including duration of loss of operation as well as financial loss if applicable ○ counter measure including involved budget if possible S. Wielsch list is available at https://indico.gsi.de/event/8626/contribution/0 • **Status: inputs from UNILAC and OPE** • Achieved Beam parameters of GSI Accelerator facilities • Installation of cryo interface that will block the use of HLI should be planned to avoid in Nov. to avoid impact on the Engineering run plan	All MKs L. Groening W. Barth

	• Invite the spill cavity expert P. Husmann to give a brief report on the commissioning plan of the spill cavity • ~~Confirm the presentation by R. Steinhagen and R. Bär on the topic of Analog signal digitization of GSI facilities project status, May 28, 2019 (TBC)~~ • **new: communication of updated overview list of ACC activities to machine coordinators and other colleagues** ○ this will be upgraded to the latest technique of sharing files safely as soon as GSI IT allows. R. Bär will keep us informed. • ~~Technical limitation of GSI existing facilities~~ Done, and thanks!	J. Stadlmann RB/RS All MKs All MKs
	Any other business	

	• Next Machine Meeting: May 21, 2019. status update, 14:00—15:30
	  ○ Approval of meeting minutes: 5mins
	  ○ Follow-up of action items: 15mins
	  ○ Status update	