P0 Issues	People	Cash Required	Time	Responsible Person	Short Project Plan	Priority	Level	Comments
SAMS	Many	Budgeted	Mid 2016	Chris	Carry on as scheduled.	**P0**	**B**	Good progress
Tracker Upgrade	Many	Budgeted	March 2016	Raoul	Carry on as scheduled.	**P0**	**B**	Good progress.
New RSS Guider	JB/SH/Mech/Elec	Budgeted. Needs some extra?	Dec 2016	Janus	Proof-of-concept hardware will be used to evaluate feasibility of current concept designs and feed into the concept evaluation review.	**P0**	**B**	Will require budgeting for SH time during 2016.
False Alarm Errors	SW team	None	6 months	Deneys	See Priority Project Review doc for a table of remaining issues under investigation.	**P0**	**C**	All high-frequency false alarms have been identified and many dealt with within their subsystems. Release of the new BMS will address most of the remaining ones.
RSS Polarimetry	SBP/Eric/ Janus	None	3 months	Steve P	Move to on-sky polarimetric commissioning in early Oct. Have enough information to make mode available for 2016-1 in the December 2015 CfP.	**P0**	**B**	Data reductions: Need KHN help. Will only develop recipes, not a pipeline within this project.
Data Pipelines	Eric/Petri/SC	SW developer	1 month + 2 years	Eric	Finalize the HRS pipeline project specification and resource budget for Nov Board. Continuation depends on decisions.	**P0**	**B**	At this stage this means primarily the HRS pipeline. Others will added later. Needs funds. “RSA HRS pipeline version” being developed by SC and a 3 month running of it is already budgeted for.
Laser Frequency Comb pilot for HRS	TechOps / Eric	Small?	1 month + 9 months	Éric	Resource plan and tech details to be drawn asap. Science projects incl reduction and	**P0**	**-**	If installed, obs are in April-June ’16 when project has to end. ED noted desire to

Laser Frequency Comb pilot for HRS	TechOps / Eric	Small?	1 month + 9 months	Éric	Resource plan and tech details to be drawn asap. Science projects incl reduction and analysis plans defined by Feb 2016.	**P0**	**-**	If installed, obs are in April-June ’16 when project has to end. ED noted desire to work extra on this.
HRS software fixes	Deneys	None	2 Months	Janus	Prioritise and address list of HRS issues.	**P0**	**C**	Started work on dropping of frames. When highest priorities (those affecting nightly science data) sorted, could lower priority depending on other projects.
BMS overhaul	PR + tech.ops.	None	5 Months	Paul R	Finish up, to be implemented early 2016, FAT testing before that	**P0**	**C**	Close to be finished.
Ground-layer AO	Steve C	None now. More for feasibility study.	1 Month + many years.	Steve C	Come up with an early “notice of intent” for a feasibility study by Nov Board. And status report of AO-related activities.	**P0**	**A**	Ultimately depends on SALT long-term strategy decisions. Before that decision need a proper feasibility study to be done, which will need funds/resources.
Finalize SALT strategy document	Lizette, Chris, Petri, et al.	None	1 month	Petri	before next Board	**P0**	**C**	Together with various people
Key Science Projects	Astro Ops	TBD	4 months	Petri	Some plan before next Board, aim at possibly submitting a larger RSA program in Jan for 2016-1	**P0**	**B**	A formal SALT Key project involves too many parties to be a SALT Ops responsibility. We can talk to other SAAO and RSA astronomers to get a larger RSA one going,

SAC Throughput	Tech.Ops	Small for clean. Large for proper solution.	6 months	Ockert	Inspect SAC to determine condition of mirrors, there is a concept to do it. Determine cost and effort of clean. And any recoat. And of longer-term replacement parts.	**P0**	**C**	Is it feasible to come up with a plan of action (or options thereof) by the board meeting? Something should definitely be done during next RSS service. Anything other than determining condition to do before?
SALT Data quality	Steve C + Christian	None	3 FTE months	Steve C	Identify the different data quality measurements that are required. Write software to log them into the database. Integrate display of the results into the SALT dashboard pages	**P0**	**B**	Formerly "detector performance monitoring". High priority, but have to do resource analysis esp. with SC time.
RSS filter mag upgrade	Eben / Keith	TBD	6 months	Keith	Draw up ECR with mock-up. Ready to install by RSS service mid-2016.	**P0**	**C**	Deal with humidity and straylight, along with stability.
P1 Issues	**People**	**Cash Required**	**Time**	**Responsible Person**	**Short Project Plan**	**Priority**		**Comments**
RSS Throughput	OS + drafter	Small (+R1.7 M)	1 month (+18 months)	Ockert	1. Schedule annual RSS take down for mid-2016, clean optics and replace fluid as per SOP. 2. Replace RSS Collimator Triplet and Doublet	**P1**	**C**	For 2: Proposal was made. Not budgeted. Try again when?
RSS Fabry-Perot	Ted+ERC+Keith+Eben	None	1 month	Ted / Encarni	Align FP etalons, commission dual etalon mode by start of 2015-2.	**P1**	**C**	LR/MR calibrated. MR deteriorated. HR not yet commissioned.
Short term S/W Fixes	JB, DM, AK, SH	None	TBD	Janus	Several payload system upgrades, PCON	**P1**	**C**	See Priority Project Review document for

					workflow improvements etc.			a more detailed list of issues. Progress will depend on S/W team's resources.
Light Pollution	CC + SAAO management	R50k	ongoing	Chris	o Implement a checklist for Site standby personnel to follow-up and switch- off sources of light pollution o Procure the list of required blinds and curtains in hostel and Rec Center o Decide how residents could be compensated for making their houses more light tight	**P1**	**B**	This issue clearly needs coordination with SAAO side and some clear policies in place. See Priority Project Review document for more details.
Unstable FIF Guider Cable wrap	JB + OS	R500k ?	TBD	Ockert	build a (line replaceable) spare FIF guider to enable to swap the unit when faulty.	**P1**	**C**	Draw up ECR
Non-sidereal tracking	SW + Astro team	None	TBD	Deneys	Commission non-sidereal observing modes.	**P1**	**B**	Treat at "P1.5". Functionality exists, need to test and de-bug. Only 1-2 programs need it per semester, but potentially high visibility ones, and maybe more interest if offered. S/W resource planning key.
RSS NIR integration	Tech + Astro team	TBD	TBD	Martin, Paul	Prepare for NIR arm commissioning.	**P1**	**B**	For the time being attending meetings, keeping track of issues, preparing for anything which needs long-term preparation.

								Instrument coming in early 2017?
Shutter sealing	Tech Ops	TBD	TBD	Eben	Weigh risks of delaying. Then decide on best timing.	**P1**	**C**	Should treat as asset renewal.
Laser Cutter Upgrade	JPK + Tech Ops	TBD	TBD	Paul K. + Jonathan	Feasibility and costing study for either outsourcing the laser cutter or modernizing it. Continue proper maintenance of the current one while it is used.	**g**		High risk. If the cutter fails, we lose MOS mode.
P2 Issues	**People**	**Cash Required**	**Time**	**Responsible Person**	**Short Project Plan**	**Priority**		**Comments**
Seeing Monitor	JPK + SC	R30k	3 months	Paul	Check the current hardware and service the mount. Clean-up and improve the current software. Install a hard limit switch on the mount.	**P2**	**B**	Working, but no major overhaul yet. Add DIMM tower eventually. Important, but not crucial for Ops. Budget for new hardware – get specifics for budget prop.
Night time Tech. Support Response	CC + tech.standby	None (but TOIL increases)	ongoing	Chris	Standby people to be at hand for one hour after night operations have commenced	**P2**	**B**	Look at various options re. management of overtime and TOIL.
Long Term Payload H/W	EW+JL+ES	pre-study required	2016	Eben	Identify all unreliable and/or end-of-life and or obsolete hardware in the payload, and design modifications.	**P2**	**C**	See Priority Project Review document for a more detailed list of issues.
Flatfield Calibrations	AK+PV+ast.ops	None	6 months	Alexei	Come up with a basic study to be able to discuss the way forward. What is	**P2**	**B**	Need to start from gathering info on various previous efforts, reports and

					necessary and why?			opinions.
Optical Performance Monitoring	Tech Ops +?	Small?	24 months	Ockert (?)	Develop methods and hardware to measure the optical performance of sub-systems of the telescope and instruments	**P2**	**B**	This was on DOD to-do. Needs new driver. Ockert, are you on, or are there other suggestions?
Long Term Telescope S/W	JB + all SW	Small-Medium	12-24 months	Janus	DDS; Linux on Payload; PCON; etc.	**P2**	**C**	See Priority Project Review document for a more detailed list
Dome Seeing Investigation	OS + JPK + SC	R70-90k	5-7 FTE months	Ockert	TBD	**P2**	**B**	Will become more important when SAMS is running. Conditioning needs more power, long term solution needs to be investigated.
OCS	JB / AK / SH / ERC	None	6-12 months	Janus	Develop updated OCS user interface and workflow at the telescope to automate operations to a much larger degree. See Priority Project Review doc for more details.	**P2**	**B**	There have been no resources to move this along.
Scheduling and Statistics Tools	JPK / PV / ERC / SC / CH SAs as needed	None	6-18 months (+ ongoing)	Petri	Analyse data stored in various SALT databases to improve short and long term decision making in the running of SALT, including helping PIs and TACs. Regularly run Semester simulations, and others for specific purposes.	**P2**	**B**	Combined this item with previous “SDB/FT/Stats”. Promised bits of Scheduling and Fault Tracker etc. done. Continued development work through 2016.
Stray Light	Keith / Brent	None	1 month (+ ongoing)	Brent	Get analysis of last 4 months of data. Put in	**P2**	**C**	Level verified. Checks standardised. Now

Stray Light	Keith / Brent	None	1 month (+ ongoing)	Brent	Get analysis of last 4 months of data. Put in database, make sure regular checks are made, discuss fixes with Keith.	**P2**	**C**	Level verified. Checks standardised. Now needs on going monitoring and reporting. Target of straylight is readout noise level.
RSS filter mag upgrade	Eben / Keith	TBD	6 months	Keith	Draw up ECR with mock-up. Ready to install by RSS service mid-2016.	**P2**	**C**	Deal with humidity and straylight, along with stability.
DoD spectrograph (STGS)	Ockert / Janus	TBD	TBD	OS / JB	Keep communication open with the relevant SAAO project. Get specs and rough ideas to the SAs to start discussing interest for SALT.	**P2**	**A**	An existing project for the 1.9m. Unsure at the moment what is the interest for SALT. Ultimately a SALT long-term strategy question, but needs specifics to be able to decide.
Repair MR etalon	Ted + Tech.Ops.	R500k (?)	TBD	Ted	Cost the repair and improvements first. Then assess situation and plan.	**P2**	**B**	MR is now out.
P3 Issues	**People**	**Cash Required**	**Time**	**Responsible Person**	**Short Project Plan**	**Priority**		**Comment**
Unstable RSS Mechanics	KB, EW, WL, MW, ES	None ?	2 months	Keith	Fix / replace RSS filter, grating, and slit masks mechanisms	**P3**	**C**	What will be done during RSS take down in 2016??
Humidity Control Study	OS + ?	R70-90k	5-7 EFT months	Ockert	Perform experiment outside dome with black plate to establish dT due to radiation soon. Longer term implementation of any fixes.	**P3**	**B**	Could potentially gain significant science time if RH limit smaller. But how safe would it be? Important, but just no resources right now. Could raise the experiment part to P0

Structure Cable Wrap Study	RvdB	R400k	2016 June	RvdB	Re-design.	**P3**	**B**	Current one needs daily pushing
Salticam guidance and focus	JB + OS + Astro Ops	TBD	TBD	Janus ?	Define real science needs first, to weigh against resources needed.	**P3**	**B**	Will become an issue with SAMS running. A large project if going for it. On the back-burner right now.
Smart focal planes	many	large	long	TBD	Feasibility study	**P3**	**A**	Longer term project, needs strategic decision.
Fully/partially steerable SALT	many	larger	long	TBD	Feasibility study	**P3**	**A**	10yr scale project, needs strategic decision
1000 fibre instrument	many	even larger	long	TBD	Feasibility study	**P3**	**A**	10yr scale project, needs strategic decision

Priorities, rough guide line:

P0 – **Extremely high priority, should have priority with all resources.**

P1 – **High priority, to be done when not taking resources from P0 projects.**

P2 – **Moderate priority, to be done whenever not taking resources from P0-2 projects; this level also includes those in a steady-state requiring e.g. monitoring or slower long-term develoment.**

P3 – **Projects identified as important to do (or study) eventually, but which are on the back burner for the time being.**

Note on "Level".

The issue needs to be tackled to be able to operate at a level of:

C – **Continuing** SALT as is, a level where we maintain operations as we have for the past 2-3 years.

B – **Basic** level still, but performing as originally designed.

A – **Advanced**, where SALT would be operating at the next level, needs design changes. Strategic planning would need to decide what that is.